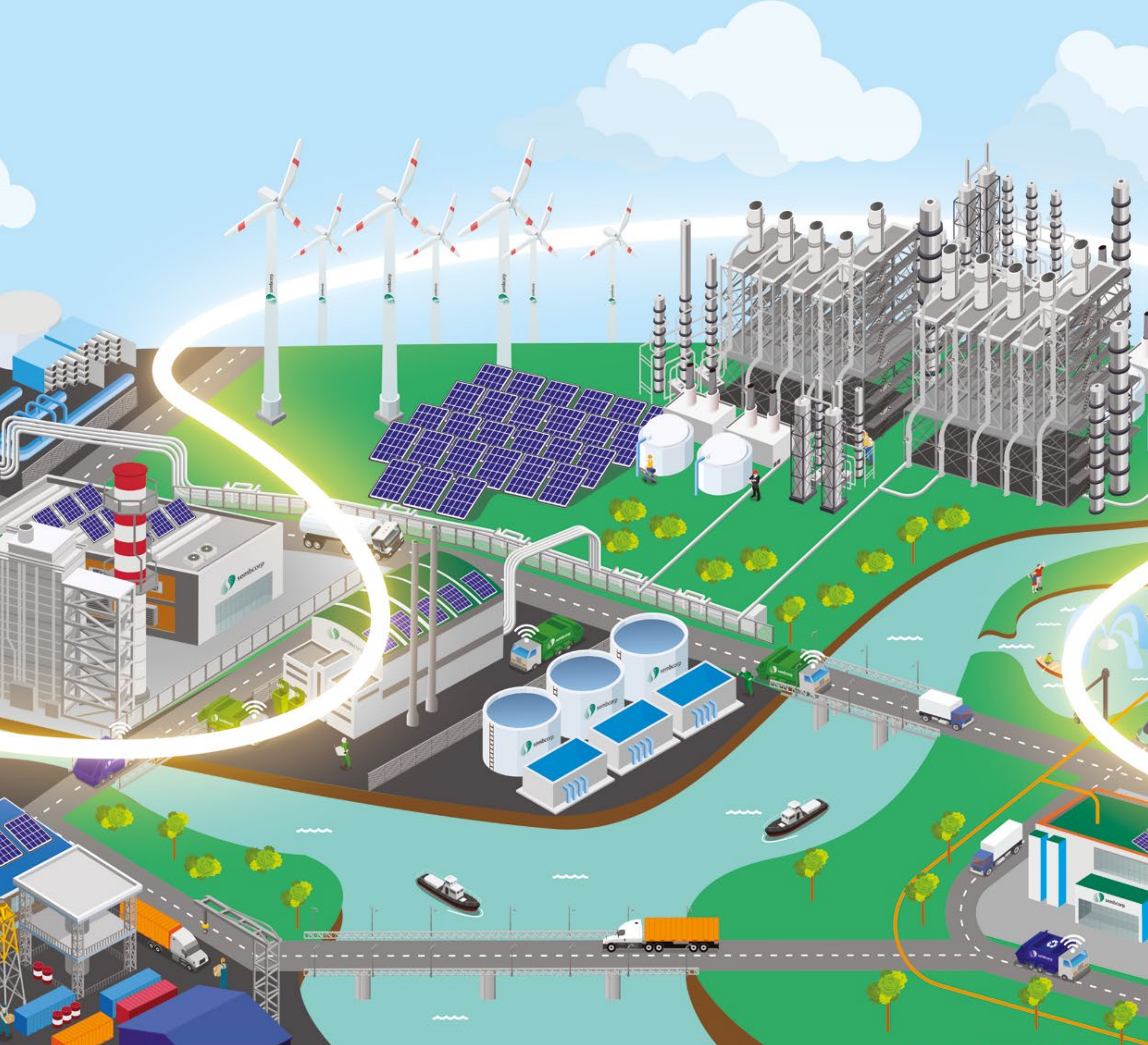
Integrated Solutions for a Sustainable Future

Sembcorp Industries Annual Report 2019



Integrated Solutions for a Sustainable Future

As a diversified energy, marine and urban player, Sembcorp is uniquely positioned to provide integrated solutions to meet our stakeholders' needs. Leveraging technology and digital innovation, we draw on our deep understanding across our businesses and global track record to provide a suite of integrated energy and urban solutions that support the energy transition and sustainable development.

Energy
An integrated energy player poised to benefit from the global energy transition with a balanced energy portfolio of over 12,600MW of power and over 8.6 million m³/day of water and wastewater treatment capacity

Marine
A leading industry player providing innovative engineering solutions to the global offshore, marine and energy industries, drawing on more than 50 years of experience

Urban
A leading Asian developer with a strong track record in transforming raw land into sustainable urban developments, delivering the economic engine to support growth

Marine

- Rigs & floaters
- Repairs & upgrades
- Offshore platforms
- Specialised shipbuilding

Integrated End-to-end (Energy & Environmental) Enterprise Solutions

Energy Solutions

Gas

- Pipeline gas & LNG importation, marketing and optimisation
- Regasification infrastructure development

Centralised Power Generation

- Utility-scale power generation
- Utility-scale combined heat and power
- Cogeneration and tri-generation (power, cooling and heating solutions)

Renewables & Storage

- Utility-scale ground-mounted and floating solar power generation
- Commercial & Industrial rooftop solar power generation
- Utility-scale wind power generation
- Energy storage systems

Merchant & Retail

- Market optimisation of assets
- Flexibility services
- Energy trading & origination
- Hedging services

Distributed Energy Solutions

- Distributed energy generation
- Grid ancillary services
- Demand response
- Electricity retail (including green attributes such as RECs & CERs)
- Energy optimisation and efficiency
- Microgrids
- Urban mobility solutions
- Virtual power plant (VPP)

Environmental Solutions

Water and Wastewater Management

- Closed loop industrial water management
- Industrial wastewater treatment & reclamation
- Zero liquid discharge
- Seawater desalination
- Municipal wastewater treatment & reclamation
- Potable and industrial water treatment & supply

Solid Waste Management

- Waste management & logistics
- Recycling services
- Waste-to-resource
- Public cleaning

Urban Development Types & Urban Solutions

- Integrated townships
- Industrial parks
- High-tech parks
- Business hubs
- Logistics warehouses
- Residential developments
- Industry positioning & investment promotion
- Master planning & urban design
- Infrastructure & land development
- Asset, facilities & operational management

Group FY2019 Highlights

	2018	2019	Change	2019
Turnover	11,689	9,618	▼18%	S$9,618m (US$7,107m)
EBITDA	1,279	1,535	▲20%	S$1,535m (US$1,134m)
Profit from Operations	841	749	▼11%	S$749m (US$553m)
Net Profit	347	247	▼29%	S$247m (US$183m)
Return on Equity	5.1	3.5	▼31%	3.5%
Total Dividend	4.0	5.0	▲25%	5.0 cents per ordinary share

Energy 100%*

	2018	2019	Change	2019
Turnover	6,536	6,138	▼6%	S$6,138m (US$4,536m)
Profit from Operations	820	717	▼13%	S$717m (US$530m)
Net Profit	312	195	▼38%	S$195m (US$144m)

Marine 61%*

	2018	2019	Change	2019
Turnover	4,888	2,883	▼41%	S$2,883m (US$2,130m)
Profit / (Loss) from Operations	(60)	(143)	▼138%	(S$143m) (US$106m)
Net Profit / (Loss)	(48)	(85)	▼77%	(S$85m) (US$63m)

Urban 100%*

	2018	2019	Change	2019
Turnover	5	280	▲>100%	S$280m (US$207m)
Profit from Operations	94	177	▲88%	S$177m (US$131m)
Net Profit	86	117	▲36%	S$117m (US$86m)

Greenhouse gas emissions intensity
0.54 tCO_2e/MWh

Emissions avoided through our renewable energy generation
>3.9 million tCO_2e

Wastewater treated and reclaimed for industrial water use
~74 million m^3

m: million m^3: cubic metres MWh: megawatt hour tCO_2e: tonnes of carbon dioxide equivalent

* Shareholding as at December 31, 2019

Chairman and CEO's Statement

Neil McGregor
Group President & CEO *(left)*

Ang Kong Hua
Chairman *(right)*

Now more than ever, the transformation journey we began two years ago to reposition ourselves as an integrated energy and urban player has proven critical.

Dear Fellow Shareholders,

2019 marked the end of a significant decade for the global energy transition with the effects of climate change being felt more acutely than ever worldwide. In line with calls for urgent climate action, we have entered an energy transition of unprecedented scale and velocity.

Transformation

The transition to a sustainable future has inevitably brought significant risks and business model disruptions. Yet this critical period of change also presents opportunity.

As a diversified company, Sembcorp is uniquely positioned to deliver solutions to support this shift. With Singapore as our home base, we are also well-placed to serve markets in Asia where population growth is driving rising demand for sustainable solutions that enable rapid industrialisation, urbanisation and electrification. From renewable energy, water management and waste-to-resource, to greener engineering solutions and eco-friendly integrated townships, our businesses have a real capacity to make a change for a more sustainable world.

Now more than ever, the transformation journey we began two years ago to reposition ourselves as an integrated energy and urban player has proven critical. Though competition remains intense, market conditions difficult, and our businesses faced another challenging year, we believe that our strategy is sound.

The task at hand requires us to act simultaneously on many fronts. We must manage our portfolio for performance, deepen our digital capabilities, step up sustainability efforts and green our portfolio while forging a dynamic organisation with the right capabilities and culture. The challenges of building forward-looking and competitive businesses are real, but we are making progress and working hard to continue to lift performance. While the journey will take time, we are confident that we are on the right path.

For more on our value creation process, please refer to pages 8 and 9.

2019 in Review

2019 was a challenging year for the Group. While the Urban business delivered record profits, with the continuing downturn in the offshore and marine sector, our Marine business made a net loss for the year. In addition, despite improved underlying profits, our Energy business recorded material impairments in the fourth quarter of 2019.

Group turnover in 2019 was S$9.6 billion, compared to S$11.7 billion the year before. Group net profit was S$247 million compared to S$347 million in 2018. Excluding exceptional items, underlying Group net profit grew 17% to S$395 million.

Underlying profits for the Energy business increased 12% from S$321 million in 2018 to S$360 million in 2019, owing to better performance from our overseas markets including profit growth in India where the thermal energy business turned around to profitability. Our global energy portfolio is more than 12,600MW. Over 900MW of new capacity was completed in 2019, including the completion of our gas-fired power project in Bangladesh and the first 60MW of our 120MW battery energy storage system in the UK.

While the business made progress in growing its underlying net profit, including exceptional items, Energy net profit was S$195 million in 2019 compared to S$312 million the year before as net divestment gains of S$86 million was offset mainly by impairments amounting to S$245 million. An impairment charge of S$158 million was made for UK Power Reserve assets based on its expected value-in-use. Performance of the flexible generation business in the UK has been impacted by a combination of economic and industry factors including an increase in energy capacity, reduction in underlying demand and moderated grid volatility. The business also saw a S$64 million impairment arising from the sale of its non-core Chilean water business, and a S$23 million impairment in China for its wastewater treatment assets.

Our Urban business posted another year of record net profits which grew 36% to S$117 million, driven mainly by profit recognition from its *Riverside Grandeur* development in China. In 2019, the business secured a healthy net orderbook of 423 hectares and an additional 900 hectares of saleable land in Vietnam for future growth.

The Marine business posted a net loss of S$85 million to the Group in 2019 compared to a loss of S$48 million in 2018, due to slow orders and intense competition in a protracted industry downturn. Nevertheless, Sembcorp Marine secured a total of S$1.5 billion worth of new contracts in 2019, compared to S$1.2 billion the year before. Approximately S$530 million of the new

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In 2019, we continued deepening our bench strength and investing in our workforce to build an agile, values-based and performance-led organisation.

orders in 2019 were related to greener solutions including gas and renewable energy projects.

In June 2019, the Group announced a S$2 billion subordinated loan to our subsidiary, Sembcorp Marine, whose current financial performance and position have been affected by the prolonged downturn in the offshore and marine sector. While the sector is showing signs of recovery, this is expected to be gradual. Although the loan has weighed on the speed of progress of the Group's growth strategy, we believe that this financing strengthens a key subsidiary and better positions the Group for the long-term.

In view of the Group's improved underlying profits, the board proposes a final dividend of 3 cents per ordinary share for 2019, subject to shareholders' approval. Together with the interim dividend paid out in September 2019, this brings our total dividend to 5 cents per ordinary share.

For more on the performance of the Group and our businesses, please refer to pages 12 to 43.

Making Strategic Progress

We made progress on several fronts over the past year as our strategy continued to take shape.

Unlocking Value

We remain committed to maintaining a disciplined approach to capital management, optimising our portfolio and undertaking systematic capital recycling to strengthen our balance sheet. Since the start of 2018, we have unlocked cash proceeds of S$600 million, exceeding our S$500 million target.

Building Capabilities

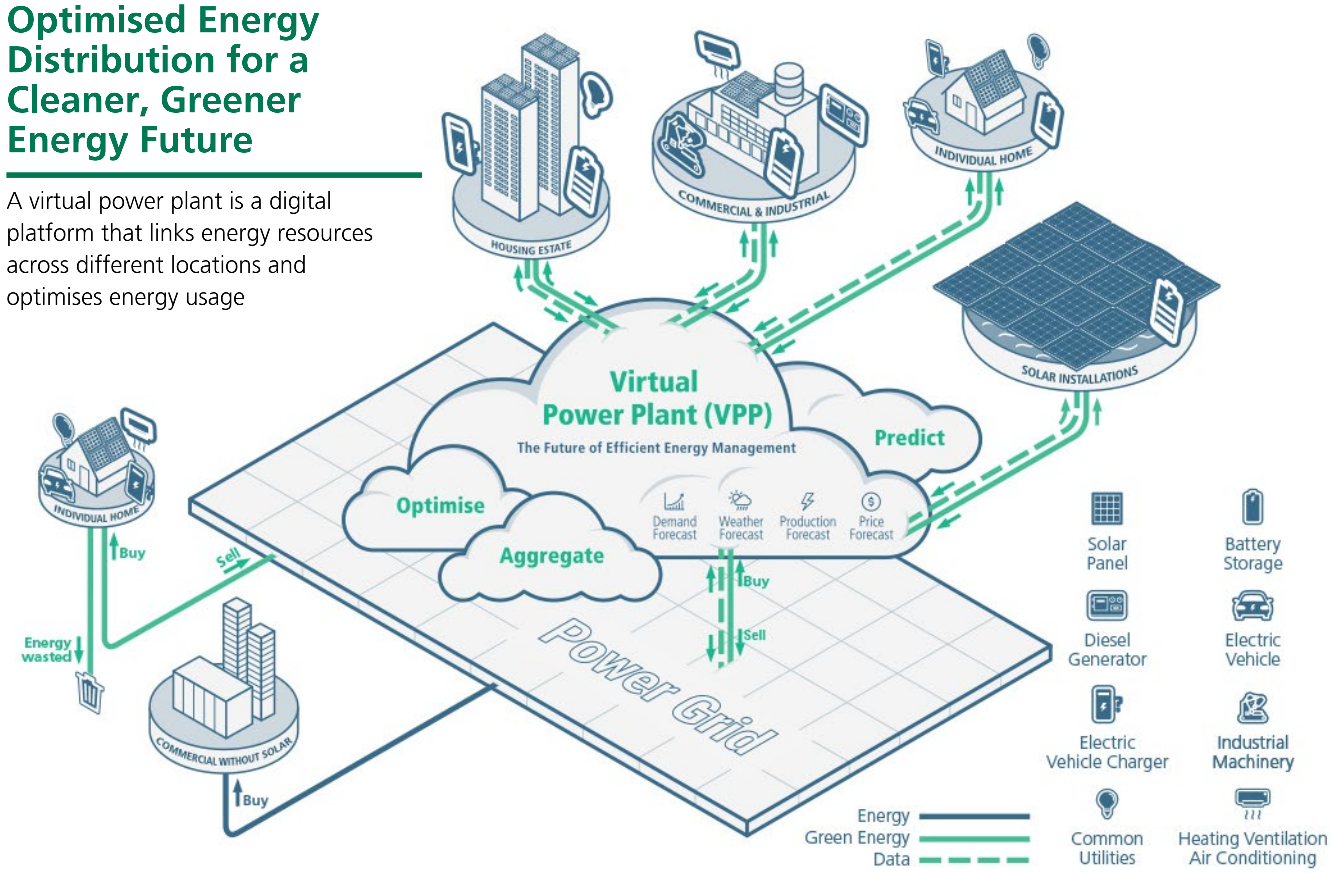
Building a dynamic organisation with the right people and capabilities is foundational to our strategy and growth. In 2019, we continued deepening our bench strength and investing in our workforce to build an agile, values-based and performance-led organisation. This included a concerted push to strengthen our capabilities in digital solutions and applications as well as in merchant businesses.

Exemplifying this thrust, we are in partnership with the Energy Market Authority and Nanyang Technological University to develop Singapore's first virtual power plant. Using real-time information from various distributed energy resources, the system will help optimise power output and allow seamless integration of cleaner energy sources like solar into the national grid.

While we furthered efforts to maintain effective risk management and governance, we recognise that we can and need to do better. Last year, we suffered two fatalities concerning our contractors in India. We are deeply saddened by the loss, and are working closely with our stakeholders across the Group to further improve safety and prevent injuries. In addition, we deeply regret that the criminal and illegal activities of some former employees of a joint venture company in Nanjing, China, had caused the illegal discharge of off-specification wastewater for a period prior to early 2017. Sembcorp remains

Optimised Energy Distribution for a Cleaner, Greener Energy Future

A virtual power plant is a digital platform that links energy resources across different locations and optimises energy usage



committed to responsible operations and compliance with legal and regulatory requirements, and under no circumstances do we condone such actions and behaviours. We have strengthened our processes and in 2019, continued with the roll out of an Integrated Assurance Framework, which sets out three lines of defence for a multi-layered approach to governance, oversight and risk management. Group-wide programmes were also adopted to enhance health, safety, security and environmental measures, as well as embed a values-based culture founded on integrity.

Reshaping Our Portfolio

Supporting a Renewables Future

A key ambition in our transformation journey has been to play our part in supporting a low-carbon future through renewables. In 2018, we set out to double our renewables capacity from our 2017 baseline to approximately 4,000MW by 2022, with the aim of becoming one of the region's leading renewable energy players. Today, we have grown our renewables capacity to 2,600MW and are one of Singapore's largest home-grown renewable energy players, operating an international portfolio of wind and solar assets. In addition to greening our portfolio, we are actively seeking to drive the adoption of renewables by partnering industry leaders to lead the charge together.

In key growth markets such as India, which is one of the world's largest producers of renewable energy, we have an established track record and now have the highest renewables capacity under self-operations for an independent power producer in the country. We also operate the UK's largest distributed energy portfolio which includes small-scale, fast-ramping power generation assets. In addition, we are developing a 120MW battery energy storage system, one of the largest in Europe, to address the intermittency of renewables.

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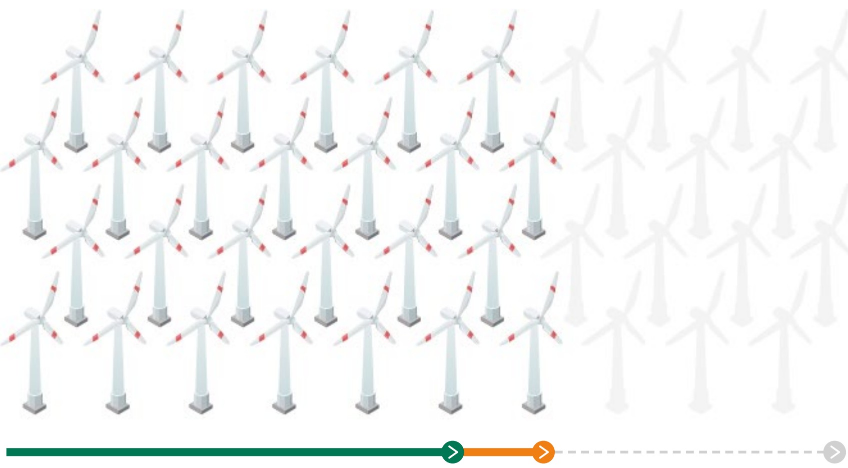
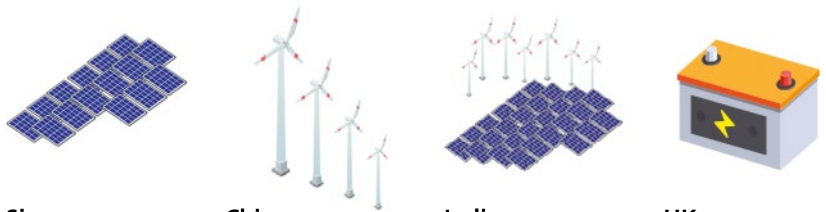
Reshaping Our Portfolio

Offering a suite of solutions to support a renewables future



Note: Capacity refers to total gross installed capacity of facilities in operation and under development

Renewable Energy Portfolio



Singapore
A leading solar energy player in Singapore

- 180MWp of solar capacity
- One of the largest solar players in Singapore

China
Growing renewable energy contribution

- 725MW of wind power projects

India
Providing renewable power to support India's growth

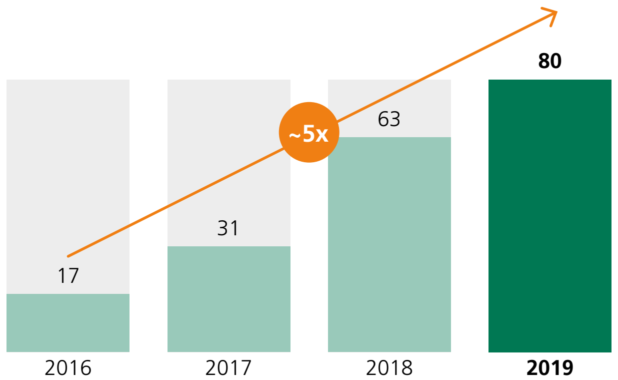
- Over 1,700MW of wind and solar power projects across seven states
- Highest renewables capacity under self-operations

UK
Developing one of Europe's largest battery energy storage systems

- A 120MW portfolio (60MW under construction) representing one of Europe's largest battery energy storage systems

Growing Profit Contribution

Renewable Energy Net Profit
(S$ million)



Five-fold
increase in renewable energy net profit from 2016

Since 2016, net profit from our renewables business has increased nearly five-fold to S$80 million.

Providing Integrated Solutions
In the push for sustainable solutions, renewable power is just one part of the answer. Managing energy, water and waste together is vital to addressing complex environmental challenges. This concept of holistic resource management started with our pioneering work on Jurong Island, Singapore's energy and chemical industrial hub, and has been the mainstay of our business over the last 25 years.

As a centralised utilities provider, our integrated offerings have shown the benefits of a circular economy, and how holistic resource management of energy, water and waste can help companies do more with less. Today, we are leveraging synergies across our businesses to provide integrated solutions to customers from different sectors.

In 2019, we made some headway in capturing opportunities on this front. For example, in Vietnam, we set up a joint venture with Becamex IDC Corporation and Vietnam Singapore Industrial Park JV Co (VSIP) to provide smart energy and sustainable solutions. The tripartite partnership aims to deliver a range of energy and utilities solutions such as renewable energy, waste-to-energy, wastewater treatment and water recycling to VSIP and Becamex facilities. This partnership in Vietnam signals the untapped growth potential for sustainable solutions in the region.

Driven by a Clear Purpose

At Sembcorp, we are driven by a clear purpose. At the heart of all that we do is our passion to play our part in creating a sustainable future. Our businesses are centred on providing energy and innovative solutions that support development and create value for our stakeholders and communities. Our ambitions are focused on enabling a low-carbon and circular economy, empowering our people and communities, and embedding responsible business practices.

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Doing right, doing good and doing well. This is what success will look like for Sembcorp, and this is the future we are confident of achieving in partnership with our customers, governments, communities, and shareholders.

For more on sustainability at Sembcorp, please refer to pages 54 to 82.

A Note of Thanks and Welcome

Our sincere thanks to you, our shareholders, for your trust and support as we continue our transformation journey. Our thanks also to all our employees for their dedication and hard work.

On behalf of the management and board, we would also like to thank Margaret Lui, who will be retiring from the board at our forthcoming annual general meeting. A director of the Group since 2010, Mrs Lui has made a great contribution to the board. Her wise counsel and valuable insights will be missed. We would also like to extend a warm welcome to Nagi Hamiyeh, who joined our board as non-executive and non-independent director on March 3, 2020. Mr Hamiyeh is Joint Head of Temasek's Investment Group as well as the Head of Portfolio Development at Temasek.

In a world of rapid change and disruption, the road ahead is not without its challenges. Driven by our purpose and passion to play our part in creating a sustainable future, we are confident that the actions we are taking will make for a strong Sembcorp that will deliver value and growth to our stakeholders and communities for generations to come.

Ang Kong Hua
Chairman
March 4, 2020

Neil McGregor
Group President & CEO
March 4, 2020

Our Value Creation Process

Our Inputs

Financial Capital
e.g. cash flow from operations, internal funds and external short-term and long-term financing

Human Capital
e.g. people with deep knowledge and strong capabilities, and employees who embody the Sembcorp culture

Social and Relationship Capital
e.g. relationships with stakeholders, and Sembcorp's brand and values

Manufactured Capital
e.g. energy, water and other facilities, and shipyards

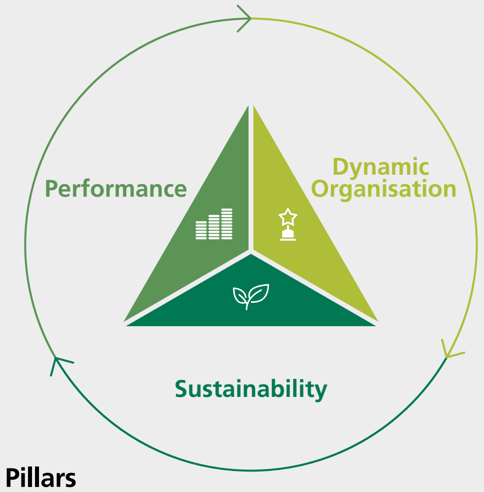
Intellectual Capital
e.g. intellectual property, technologies and proprietary solutions, group-wide policies and frameworks, and standardised systems and processes

Natural Capital
e.g. thermal energy resources (such as natural gas and coal), renewable energy resources (such as wind and solar) and land

Our Purpose, Strategy and Ambitions

Our Purpose

Sembcorp's purpose and passion is to do good and play our part in creating a sustainable future. We deliver energy and innovative solutions that support development and create value – for our stakeholders and communities.



Our Strategic Pillars

Performance
- Disciplined capital allocation
- Systematic capital recycling
- Active management and optimisation of assets
- Strong business models

Sustainability
- Aligned with and contributing to the United Nations Sustainable Development Goals
- Participation in the low-carbon and circular economy
- Management of environmental, social and governance risks and opportunities

Dynamic Organisation
- A scalable global operating model
- Capability development and process excellence
- Technology and digitalisation
- Dynamic high performance culture with integrity at our core

Our Sustainability Ambitions

Enabling a Low-carbon and Circular Economy
- Climate Change
- Resource Management
- Local Environmental Protection

Read more on pages 59 to 67

Empowering Our People and Communities
- Health and Safety
- People
- Community

Read more on pages 68 to 75

Embedding Responsible Business Practices
- Corporate Governance
- Ethical Business and Compliance
- Risk Management

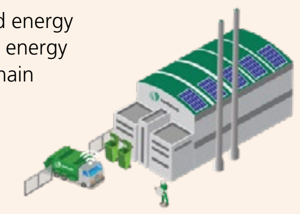
Read more on pages 76 to 82

Our Businesses and the Value We Create

Energy
- Gas & Power
- Renewables & Environment
- Merchant & Retail

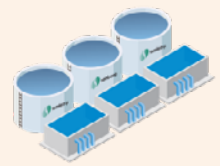
Providing integrated energy solutions across the energy and utilities value chain

Read more on pages 26 to 31



>12,600MW in power capacity, including 2,600MW of renewable power capacity, supplying electricity in nine countries

>3.9 million tCO_2e emissions avoided through our renewable energy generation

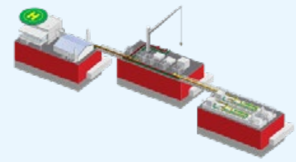


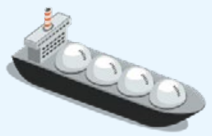
>8.6 million m^3/day in water & wastewater treatment capacity, serving the needs of industrial and municipal customers

Marine
- Rigs & Floaters
- Repairs & Upgrades
- Offshore Platforms
- Specialised Shipbuilding

Offering innovative engineering solutions across the offshore, marine and energy value chain

Read more on pages 32 to 37





280 vessels repaired and upgraded in 2019

Strategically located shipyards and facilities in **Singapore, Indonesia, Norway, the UK and Brazil**

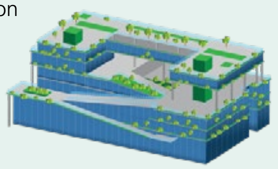
>50 years of experience in providing quality solutions to customers

Urban
- Industrial Parks
- High-tech Parks
- Business Hubs
- Residential Space
- Commercial Space

13 projects in Vietnam, China and Indonesia

Delivering the economic engine to support industrialisation and urbanisation

Read more on pages 38 to 43



>1,000 tenants comprising multinationals and leading local enterprises

US$34 billion in direct investments attracted to its projects

Our Stakeholders

- Customers
- Employees
- Financial Institutions
- Governments and Regulators
- Shareholders and the Investment Community
- Communities
- Contractors, Suppliers, Trade Unions and Industry Partners

Operating and Financial Review

Group Financial Review

Group Financial Highlights

	2019	2018	Change (%)
For the Year *(S$ million)*			
Turnover	**9,618**	11,689	(18)
EBITDA	**1,535**	1,279	20
Profit from operations	**749**	841	(11)
– Earnings before interest and tax	**565**	667	(15)
– Share of results: Associates & JVs, net of tax	**184**	174	6
Profit before tax	**295**	420	(30)
Net profit	**247**	347	(29)
Economic value added	**(498)**	(401)	(24)
Return on total assets *(%)*	**3.5**	3.6	(3)
Return on equity *(%)*	**3.5**	5.1	(31)
Capital Position *(S$ million)*			
Owners' funds	**6,070**	5,987	1
Total assets	**23,252**	23,321	*
Net debt	**9,033**	8,807	3
Operating cash flow	**977**	739	32
Free cash flow	**1,352**	656	106
Capital expenditure and equity investment	**1,187**	2,009	(41)
Total debt-to-capitalisation ratio	**0.58**	0.57	2
Total debt-to-capitalisation ratio (less cash and cash equivalents)	**0.48**	0.47	2
Interest cover *(times)*	**2.6**	2.5	4
Shareholder Returns			
Net assets per share *(S$)*	**3.85**	3.80	1
Earnings per share *(cents)*	**11.81**	16.98	(30)
Ordinary dividends per share *(cents)*	**5.0**	4.0	25
Payout ratio *(%)*	**42.3**	23.6	79
Last traded share price *(S$)*	**2.29**	2.54	(10)
Total shareholder returns *(%)*	**(8.4)**	(14.9)	44

* Less than 1%

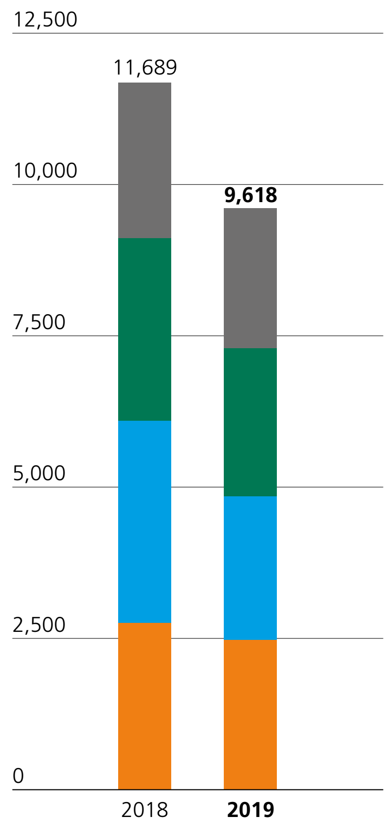
Notes

1. Our EBITDA definition excludes major non-cash items such as the effects of fair value adjustments, re-measurements, impairments and write-offs
2. Financial figures for the years 2017, 2018 and 2019 are presented in accordance with the Singapore Financial Reporting Standards (International) (SFRS(I)), while figures prior to 2017 were prepared in accordance with the Financial Reporting Standards in Singapore (FRS)

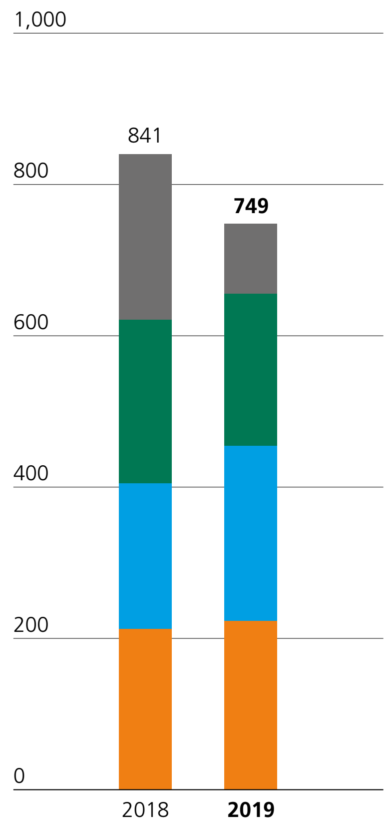
Group Quarterly Performance *(S$ million)*

	2019					2018				
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total
Turnover	**2,480**	**2,371**	**2,450**	**2,317**	**9,618**	2,758	3,343	3,022	2,566	11,689
EBITDA	**349**	**356**	**340**	**490**	**1,535**	286	268	370	355	1,279
Profit from operations	**223**	**232**	**201**	**93**	**749**	213	192	217	219	841
– Earnings before interest and tax	**178**	**178**	**160**	**49**	**565**	171	137	180	179	667
– Share of results: Associates & JVs, net of tax	**45**	**54**	**41**	**44**	**184**	42	55	37	40	174
Profit / (Loss) before tax	**115**	**118**	**84**	**(22)**	**295**	116	89	119	96	420
Net profit / (loss)	**93**	**98**	**71**	**(15)**	**247**	77	82	82	106	347
Earnings per share *(cents)*	**4.69**	**4.99**	**3.47**	**(1.34)**	**11.81**	3.64	3.94	3.98	5.42	16.98

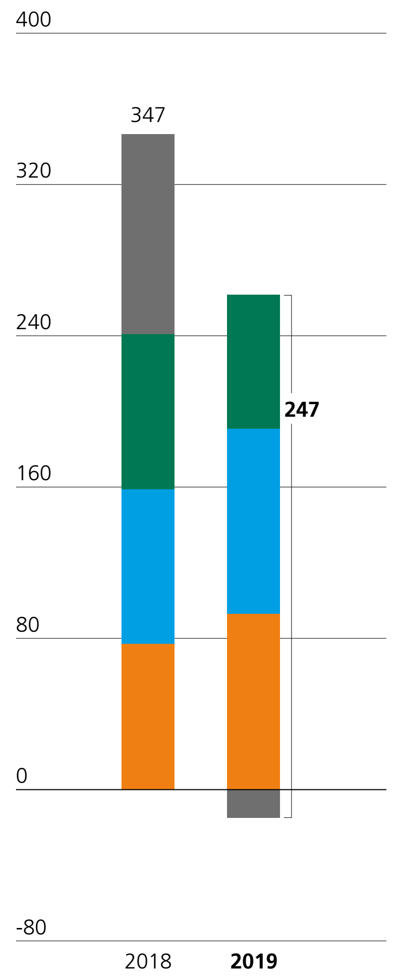
Turnover *(S$ million)*



Profit from Operations *(S$ million)*



Net Profit *(S$ million)*



First quarter · Second quarter · Third quarter · Fourth quarter

Group Financial Review

Five-year Financial Performance Profile

2019
Sembcorp posted a net profit of S$247 million and turnover of S$9,618 million in 2019, compared to S$347 million and S$11,689 million respectively in 2018. Excluding exceptional items, net profit grew 17% to S$395 million.

The Group recorded exceptional items totalling negative S$148 million in 2019. The Energy business accounted for negative S$165 million of the exceptional items. This was offset by a S$3 million goodwill adjustment from the Marine business and S$14 million of divestment gain from the Other Businesses segment. In 2018, Group exceptional items amounted to S$8 million, comprising divestment gains of S$17 million from the Urban business and Other Businesses segment, offset by negative S$9 million from the Energy business.

In 2019, the Energy business contributed a net profit of S$195 million to the Group, compared to S$312 million in 2018. Net profit, before exceptional items, was S$360 million, up 12% from S$321 million in 2018, with overseas markets performing better. China contributed a net profit of S$106 million, a 22% growth from the year before, due primarily to new renewable wind power capacity coming into operation and higher plant load factor at the Chongqing Songzao power plant. India posted a net profit of S$100 million in 2019, an increase from S$47 million in 2018. This was due to higher contribution from its thermal power plants, as well as improved operating performance by its renewable energy assets on better wind resources and new capacity addition. It also benefitted from one-off insurance and vendor settlements. The better performance in the UK was driven by the recognition of revenue from the capacity market, which resumed in 4Q2019.

Exceptional items recorded by the Energy business in 2019 amounted to a negative S$165 million. This comprised impairments of S$245 million and S$7 million of additional provision for potential fines and claims at Sembcorp Nanjing SUIWU in China, offset by net gains of S$86 million from the divestment of businesses and assets. There was also a S$1 million revision on purchase price allocation for a solar project in Singapore.

Amid challenging market conditions, the Marine business turned in a net loss of S$85 million to the Group in 2019, compared to a net loss of S$48 million in 2018. The loss recorded in 2019 was mainly due to accelerated depreciation for the Tanjong Kling yard and continued low overall business volume, partly offset by profits from the repairs and upgrade business, which saw a rise in profits on improved margins and better product mix.

The Urban business delivered another year of record profits in 2019. Net profit grew 36% to S$117 million in 2019 compared to S$86 million in 2018, driven by profit recognition from the successful completion and handover of *Riverside Grandeur*, a wholly-owned residential development in China.

Return on equity for the Group was 3.5% and earnings per share amounted to 11.81 cents.

2018
Sembcorp recorded net profit of S$347 million and turnover of S$11,689 million in 2018. Compared to 2017, turnover, in accordance with SFRS(I), was S$2,663 million or 30% higher, while net profit was S$36 million or 9% lower. 2017 net profit, in accordance with SFRS(I), was S$383 million compared to the previously reported net profit of S$231 million.

In 2018, the Energy business contributed net profit of S$312 million to the Group, compared to S$140 million in 2017. Net profit, before exceptional items, was S$321 million, up 23% compared to S$261 million in 2017, with Singapore, China and India being the main contributors. The India energy business posted a net profit of S$47 million in 2018 compared to a loss of S$58 million in 2017. China's operations benefitted from a higher plant load factor at Chongqing Songzao power plant and a full year's contribution from Changzhi Total Water Management Plant, which commenced operations in September 2017. However, the increase in 2018 net profit was partially offset by provisions made for the delayed start-up of the Sembcorp Myingyan Independent Power Plant in Myanmar and losses at UK Power Reserve (UKPR).

Exceptional losses recorded by the business in 2018 amounted to S$9 million, lower than the 2017 exceptional losses of S$121 million. 2018 exceptional items comprised S$23 million of divestment gains recognised from the sale of various businesses, S$25 million of additional provision for potential fines and claims at an overseas water business, and a non-cash S$7 million expensing of capitalised cost at UKPR upon refinancing in December.

The Marine business reported a loss of S$48 million in 2018, compared to a net profit in 2017 of S$157 million, in accordance with SFRS(I). 2017 previously reported net profit was S$7 million. The business' loss in 2018 was mainly due to loss from the sale of a semi-submersible rig and continued low overall business volume. This was partially offset by margin recognition from newly secured production floater projects and delivery of rigs. 2017 net profit was higher due to the net positive effects of contract terminations, which arose from entitlement to down payments on termination of five rig contracts and a one-off gain on disposal of its equity stake in Cosco Shipyard Group.

Meanwhile, the Urban business continued to deliver good performance with steady contributions from Vietnam and China. 2018 net profit was S$86 million, slightly higher than net profit of S$83 million in 2017.

Return on equity for the Group was 5.1% and earnings per share amounted to 16.98 cents.

2017
The 2017 review is based on reported financials prepared under FRS.

Sembcorp posted net profit of S$231 million and turnover of S$8,346 million in 2017, compared to S$395 million and S$7,907 million respectively in 2016.

In 2017, the Energy business contributed S$140 million in net profit to the Group, compared to S$348 million in 2016. Excluding exceptional items, the business delivered net profit of S$261 million. Singapore operations continued to perform well, mitigating the weak performance of our second thermal power plant in India, and the absence of contribution from the Yangcheng power project in China following the expiry of its cooperative joint venture agreement. Singapore operations were also the largest contributor to the Energy business' net profit before exceptional items.

Exceptional losses recorded by the business in 2017 amounted to S$121 million. These included a provision of S$25 million for potential fines and claims at an overseas water business, impairment charges of S$56 million mainly relating to assets and investments in Singapore, as well as S$39 million in refinancing cost incurred for our second thermal power plant in India.

The exceptional gain recorded by the business in 2016 amounted to S$3 million, comprising S$34 million from a gain on divestment of a municipal water operation in Yancheng, China, less S$31 million in refinancing cost for our first thermal power plant in India.

The Marine business' net profit contribution to the Group was S$7 million in 2017, compared to S$48 million in 2016. The business' lower net profit in 2017 was mainly due to lower overall business volume, especially in rigs & floaters and offshore platforms, which impacted the absorption of overhead costs, and additional cost accruals for floater projects which are pending finalisation with the customers, partially offset by divestment gains and a lower share of losses from associates and joint ventures.

Meanwhile, the Urban business reported a net profit of S$83 million, up from S$33 million in 2016. The business' strong performance was driven by higher contributions from all its operating markets and, in particular, higher sales in China.

Return on equity for the Group was 3.2% and earnings per share amounted to 10.51 cents.

2016
Sembcorp posted net profit of S$395 million and turnover of S$7,907 million in 2016, compared to S$549 million and S$9,545 million respectively in 2015.

In 2016, the Energy business contributed S$348 million in net profit to the Group. 63% of this net profit was generated by overseas operations. Excluding exceptional items, the business delivered profit growth of 4% over 2015, backed by record profit in China of S$125 million. Exceptional gain recorded by the business in 2016 amounted to S$3 million, comprising S$34 million from a divestment gain on the sale of a municipal water operation in Yancheng, China, less S$31 million total refinancing cost for our first thermal power plant in India. Exceptional gain recorded by the business in 2015 amounted to S$370 million, comprising divestment gains of S$426 million from the sale of a waste management joint venture in Australia and municipal water operations in Bournemouth, the UK and Zhumadian, China, less S$56 million comprising S$31 million from the exit of the chemical feedstock business and impairment of assets in Singapore (net of settlement amounts from customers) and S$24 million in net allowance for doubtful debts in China.

The Marine business' net profit contribution to the Group was S$48 million in 2016, compared to a net loss of S$176 million in 2015. The business' net loss in 2015 was mainly due to write-downs of inventory and work-in-progress and provisions for foreseeable losses for rig building projects. Meanwhile, the Urban business reported net profit of S$33 million, comparable to the previous year.

2015
Sembcorp posted net profit of S$549 million and turnover of S$9,545 million for 2015, compared to S$801 million and S$10,895 million in 2014 respectively.

In 2015, the Energy business delivered 72% growth in net profit to S$701 million compared to S$408 million in 2014. This increase was underpinned by growth from its overseas operations as well as gains from the sale of its Australian waste management joint venture and municipal water operations in Bournemouth, the UK and Zhumadian, China.

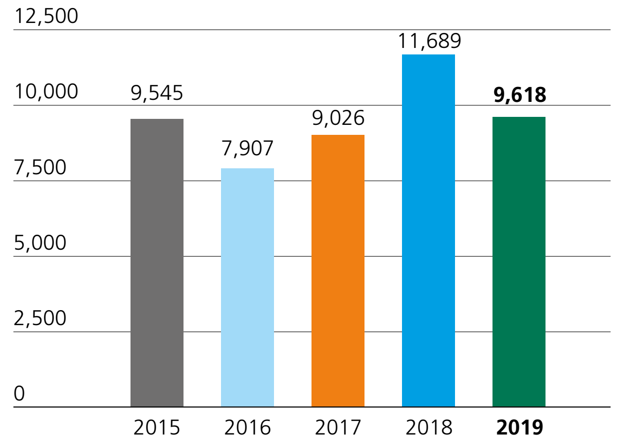
Meanwhile, at the Sembcorp Industries level, the Marine business incurred net loss of S$176 million in 2015 compared to net profit of S$340 million in 2014. The Urban business posted net profit of S$34 million compared to S$44 million in 2014.

Group Financial Review

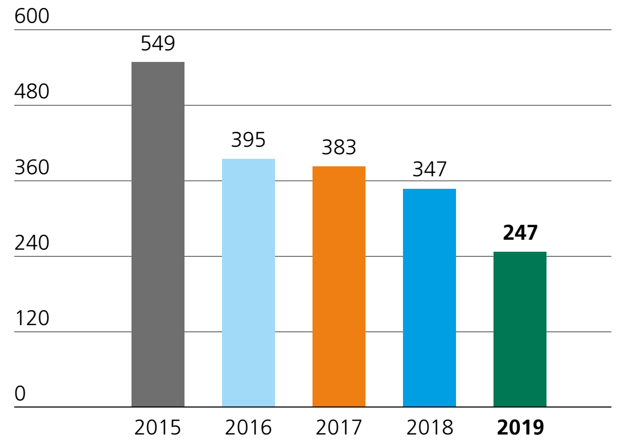
Five-year Financials

	2019	2018	2017	2016	2015
For the Year *(S$ million)*					
Turnover	**9,618**	11,689	9,026	7,907	9,545
EBITDA	**1,535**	1,279	1,523	1,315	1,720
Profit from operations	**749**	841	1,084	909	631
– Earnings before interest and tax	**565**	667	920	784	625
– Share of results: Associates & JVs, net of tax	**184**	174	164	125	6
Profit before tax	**295**	420	611	537	426
Net profit	**247**	347	383	395	549
At Year End *(S$ million)*					
Property, plant and equipment and investment properties	**11,867**	11,782	11,249	11,287	8,706
Right-of-use assets	**464**	–	–	–	–
Other non-current assets	**4,826**	5,215	4,004	3,379	3,602
Net current assets	**83**	748	2,159	1,609	1,661
Non-current liabilities	**(9,361)**	(9,807)	(9,238)	(8,112)	(5,926)
Net assets	**7,879**	7,938	8,174	8,163	8,043
Share capital and reserves (including perpetual securities)	**6,871**	6,788	6,944	6,702	6,433
Non-controlling interests	**1,008**	1,150	1,230	1,461	1,610
Total equity	**7,879**	7,938	8,174	8,163	8,043
Per Share					
Earnings *(cents)*	**11.81**	16.98	19.06	19.92	29.17
Net assets *(S$)*	**3.85**	3.80	3.88	3.75	3.60
Ordinary dividends *(cents)*	**5.0**	4.0	5.0	8.0	11.0
Financial Ratios					
Return on equity *(%)*	**3.5**	5.1	5.8	6.2	9.4
Return on total assets *(%)*	**3.5**	3.6	4.4	4.0	3.7
Interest cover *(times)*	**2.6**	2.5	2.9	3.3	7.2
Total debt-to-capitalisation ratio	**0.58**	0.57	0.55	0.53	0.46
Total debt-to-capitalisation ratio (less cash and cash equivalents)	**0.48**	0.47	0.40	0.42	0.35

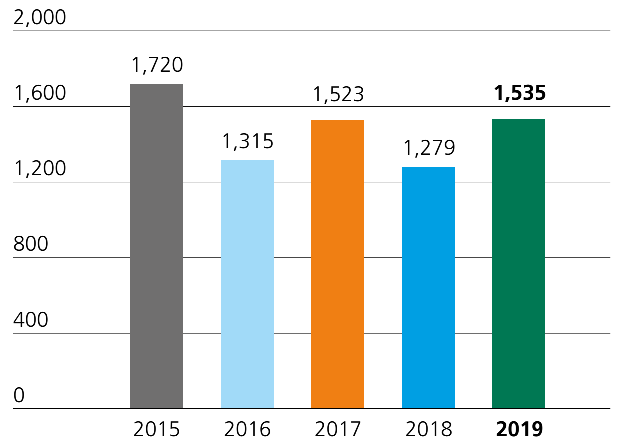
Turnover *(S$ million)*



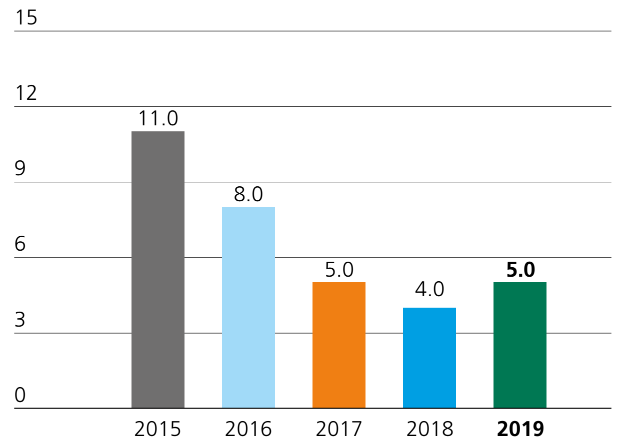
Net Profit *(S$ million)*



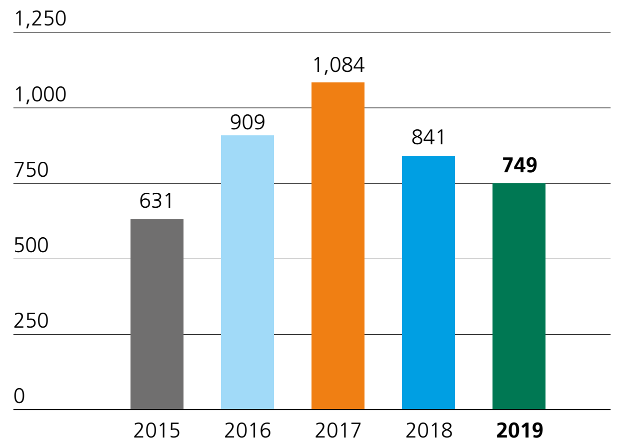
EBITDA *(S$ million)*



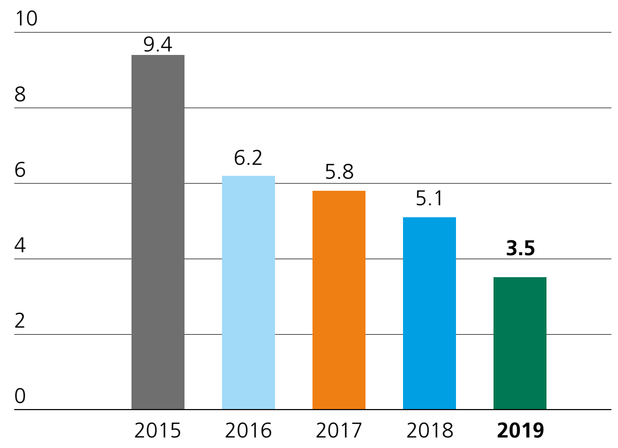
Ordinary Dividends Per Share *(cents)*



Profit from Operations *(S$ million)*



Return on Equity *(%)*



Group Financial Review

Review by Business *(S$ million)*

	2019	%	2018	%	2017	%	2016	%	2015	%
Turnover										
Energy	**6,138**	64	6,536	56	5,697	63	4,111	52	4,227	44
Marine	**2,883**	30	4,888	42	3,035	34	3,544	45	4,968	52
Urban	**280**	3	5	*	8	*	7	*	8	*
Others / Corporate	**317**	3	260	2	286	3	245	3	342	4
	9,618	100	11,689	100	9,026	100	7,907	100	9,545	100
Profit from Operations										
Energy	**717**	96	820	98	650	60	737	81	948	150
Marine	**(143)**	(19)	(60)	(7)	350	32	171	19	(342)	(54)
Urban	**177**	23	94	11	90	9	38	4	38	6
Others / Corporate	**(2)**	*	(13)	(2)	(6)	(1)	(37)	(4)	(13)	(2)
	749	100	841	100	1,084	100	909	100	631	100
Net Profit										
Energy	**195**	79	312	90	140	36	348	88	701	128
Marine	**(85)**	(34)	(48)	(14)	157	41	48	12	(176)	(32)
Urban	**117**	47	86	25	83	22	33	9	34	6
Others / Corporate	**20**	8	(3)	(1)	3	1	(34)	(9)	(10)	(2)
	247	100	347	100	383	100	395	100	549	100

* Less than 1%

Overview

Sembcorp posted a net profit of S$247 million and turnover of S$9,618 million in 2019, compared to S$347 million and S$11,689 million in 2018, respectively. Net profit before exceptional items in 2019 was S$395 million, an improvement of 17% from S$339 million in 2018.

Turnover

The Group achieved turnover of S$9,618 million, with the Energy and Marine businesses contributing 94% of total turnover. The Urban business delivered a turnover of S$280 million, on recognition of the sale of *Riverside Grandeur* in Nanjing, China, a residential development wholly-owned by Sembcorp.

The Energy business recorded a turnover of S$6,138 million, 6% lower compared to 2018. The decline was due to lower gas sales, planned major maintenance for power generation assets, lower turnover from the solid waste management business in Singapore and shutdown of one thermal power unit in India during 1Q2019, partially offset by higher turnover from the UK. The absence of contribution from divested assets in Singapore and South Africa also accounted for the decline in turnover. The Marine business recorded a turnover of S$2,883 million in 2019 compared to S$4,888 million in 2018, due to lower revenue recognition from rigs and floaters and offshore platform projects mitigated by higher repair and upgrade revenue.

Net Profit

The Group recorded net profit of S$247 million in 2019 compared to S$347 million in 2018, while profit from operations (PFO) was S$749 million compared to S$841 million in 2018. Excluding exceptional items, net profit and PFO for 2019 improved to S$395 million and S$907 million respectively, compared to S$339 million and S$825 million in 2018.

In 2019, the Energy business contributed S$195 million in net profit to the Group, compared to S$312 million in 2018. Excluding exceptional items, the business delivered net profit of S$360 million, a 12% growth over S$321 million in 2018. The improvement was mainly due to our operations in India, which posted a net profit of S$100 million in 2019. This was more than double the net profit of S$47 million in 2018 due to higher contribution from its thermal power plants, as well as improved operating performance by its renewable energy assets arising from better wind resources and new capacity addition. It also benefitted from one-off insurance and vendor settlements. In Southeast Asia (excluding Singapore), the better performance was driven by contribution from the Myingyan power plant in Myanmar, which commenced operations in October 2018. Contribution from Myanmar in 2019 was also boosted by one-off income comprising mainly liquidated damages and vendor settlement income. The better performance in UK was driven by the recognition of revenue from the capacity market, which resumed in 4Q2019.

Exceptional items recorded by the Energy business in 2019 amounted to a negative S$165 million. This comprised impairments of S$245 million and S$7 million of additional provision for potential fines and claims at Sembcorp Nanjing Suiwu in China, offset by net gains of S$86 million from the divestment of businesses and assets. There was also a S$1 million revision on purchase price allocation for a solar project in Singapore.

Amid challenging market conditions, the Marine business turned in a net loss of S$85 million to the Group in 2019, compared to a net loss of S$48 million in 2018. The loss recorded in 2019 was mainly due to accelerated depreciation for the Tanjong Kling yard and continued low overall business volume, partly offset by profits from the repairs and upgrade business, which saw a rise in profits on improved margins and better product mix.

The Urban business delivered another year of record profit in 2019. Net profit grew 36% to S$117 million in 2019 compared to S$86 million the year before, driven by profit recognition from the successful completion and handover of *Riverside Grandeur*, a wholly-owned residential development in China.

Cash Flow and Liquidity

As at December 31, 2019, the Group's cash and cash equivalents stood at S$1,740 million.

Net cash from operating activities before changes in working capital stood at S$1,455 million, while net cash from operating activities was S$977 million. The changes in working capital were mainly due to the sale of *Riverside Grandeur* residential development by the Urban business and Marine's working capital for ongoing projects, offset by receipts from completed projects.

Net cash used in investing activities was S$451 million, mainly for the purchase of property, plant and equipment, and net investments in other financial assets, partially offset by dividend and interest received.

Net cash used in financing activities was S$692 million, mainly for interest payment and acquisition of non-controlling interests of two businesses in the Energy business segment.

Performance Scorecard

Financial Indicators *(S$ million)*

	2019	2018	Change (%)
Turnover	**9,618**	11,689	(18)
EBITDA	**1,535**	1,279	20
Profit from operations	**749**	841	(11)
– Earnings before interest and tax	**565**	667	(15)
– Share of results: Associates & JVs, net of tax	**184**	174	6
Profit before tax	**295**	420	(30)
Net profit	**247**	347	(29)
Earnings per share *(cents)*	**11.81**	16.98	(30)
Return on equity *(%)*	**3.5**	5.1	(31)

Financial Position

Group shareholders' funds increased to S$6,070 million as at December 31, 2019, from S$5,987 million as at December 31, 2018.

Property, plant and equipment and investment property – net of depreciation, impairment, reclassification to assets held for sale and deconsolidation of subsidiaries upon disposal, increased in 2019. This was mainly attributable to additions from the Marine and Energy businesses, namely new renewable energy assets in India and Singapore, as well as additions in the UK. The increase also included the ongoing construction of the Urban business' commercial property in Nanjing, China.

Right-of-use-assets arose from the recognition of land and building leases with the adoption of SFRS(I) 16 on leases.

Other non-current assets decreased in 2019. This was due mainly to the reclassification of trade and other receivables due within 12 months to current, impairment of intangible assets in the Energy business and divestment of an associate of the Marine business.

Net current assets reduced mainly because of the higher interest-bearing borrowings due within 12 months, offset by the net increase in assets due to revenue and cost recognition of the residential property, *Riverside Grandeur*, upon handover of the units in December 2019.

Group Financial Review

Turnover *(S$ million)*

	2019	2018
Energy	**6,138**	6,536
Marine	**2,883**	4,888
Urban	**280**	5
Others / Corporate	**317**	260
	9,618	11,689

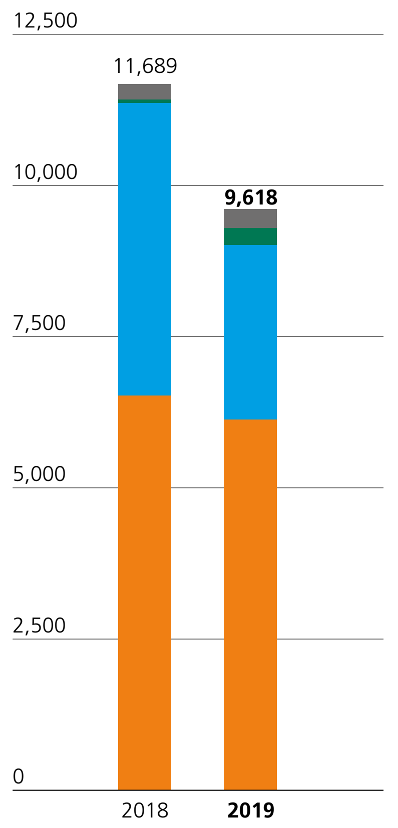
Profit from Operations *(S$ million)*

	2019	2018
Energy	**717**	820
Marine	**(143)**	(60)
Urban	**177**	94
Others / Corporate	**(2)**	(13)
	749	841

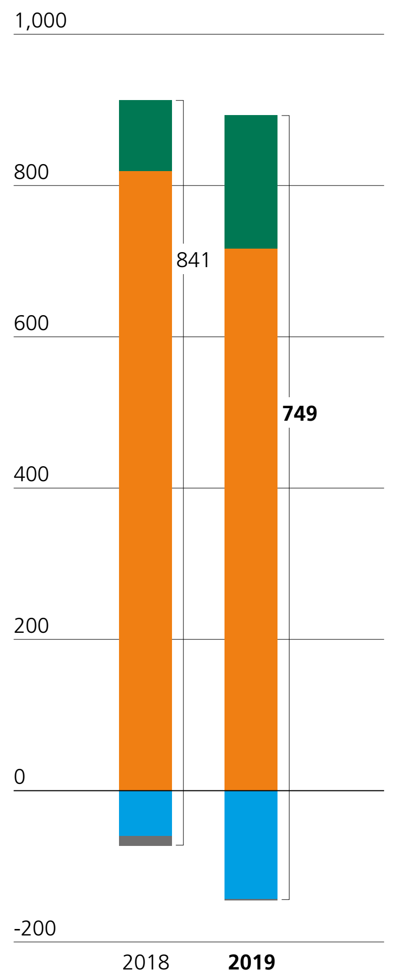
Net Profit *(S$ million)*

	2019	2018
Energy	**195**	312
Marine	**(85)**	(48)
Urban	**117**	86
Others / Corporate	**20**	(3)
	247	347

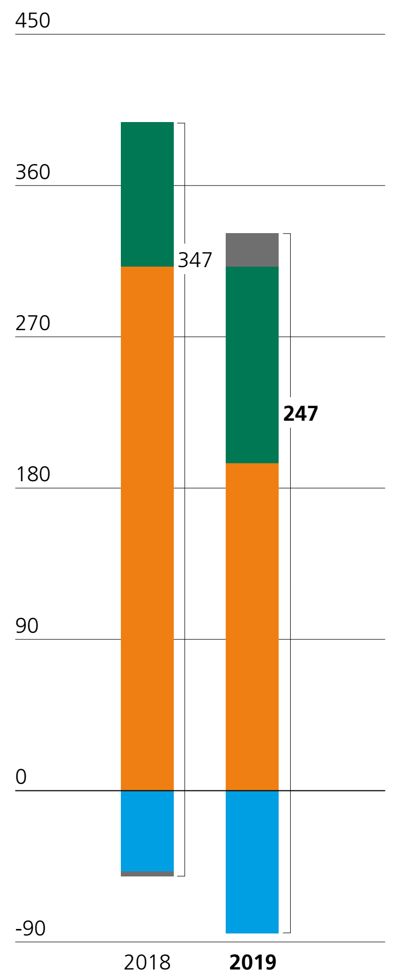
Turnover *(S$ million)*



Profit from Operations *(S$ million)*



Net Profit *(S$ million)*



Non-current liabilities decreased in 2019 mainly due to the reclassification of borrowing due within 12 months to current liabilities, offset by the recognition of lease liabilities with the adoption of SFRS(I) 16, and a reduction of deferred tax liabilities as the temporary tax difference reversed.

Shareholder Returns

In 2019, return on equity for the Group was 3.5% and earnings per share amounted to 11.81 cents. Subject to approval by shareholders at the next annual general meeting, a final dividend of 3.0 cents per ordinary share has been proposed for the financial year ending December 31, 2019. Together with an interim dividend of 2.0 cents per ordinary share paid in September 2019, this brings our total dividend for the year to 5.0 cents per ordinary share.

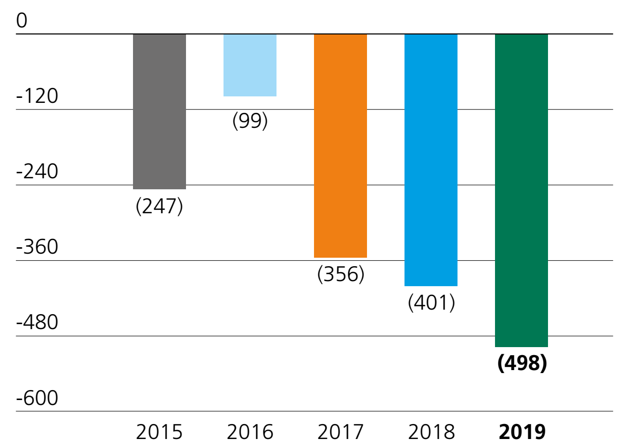
Economic Value Added

Economic value added (EVA) was negative in 2019. This was mainly due to continued low business volume in the Marine business, as well as new investments and capacities added in the last two years that have yet to achieve EVA breakeven.

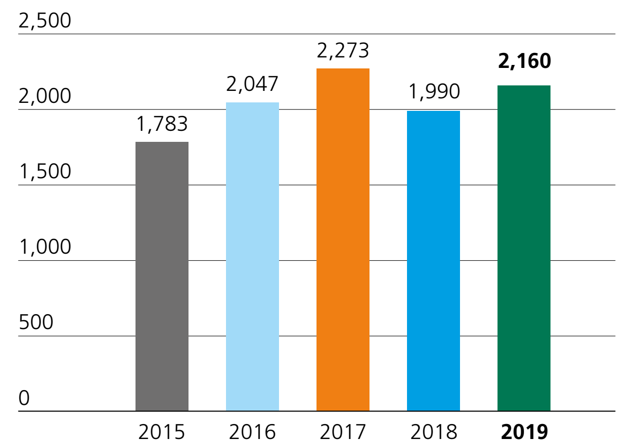
Value Added and Productivity Data

In 2019, the Group's total value added was S$2,723 million. This was absorbed by employees in wages, salaries and benefits of S$820 million, by governments in income and other taxes of S$233 million and by providers of capital in interest, dividends and distribution of S$693 million, leaving a balance of S$977 million reinvested in business.

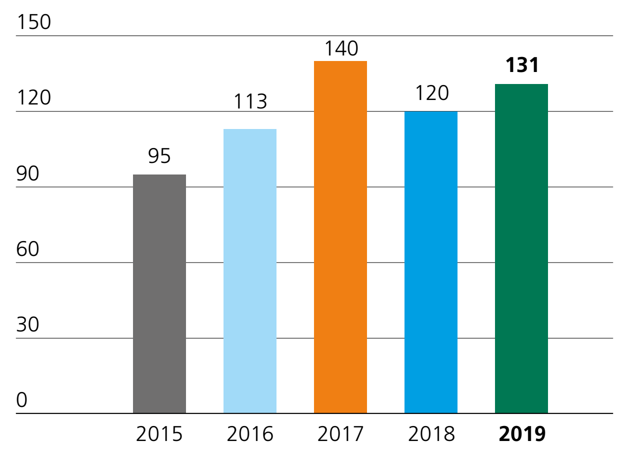
Economic Value Added *(S$ million)*



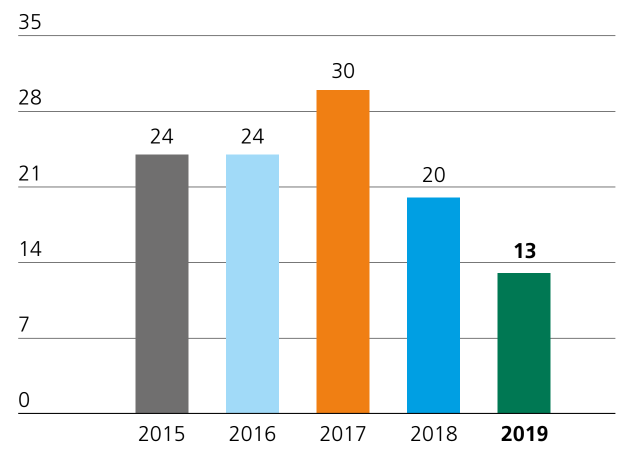
Gross Value Added *(S$ million)*



Value Added Per Employee *(S$ thousands)*



Profit After Tax Per Employee *(S$ thousands)*



Value Added Statement *(S$ million)*

	2019	2018	2017	2016	2015
Value Added from					
Turnover	**9,618**	11,689	9,026	7,907	9,545
Less: Bought in materials and services	**(7,458)**	(9,699)	(6,753)	(5,860)	(7,762)
Gross value added	**2,160**	1,990	2,273	2,047	1,783
Investment, interest and other income	**526**	328	421	536	985
Share of results of associates and joint ventures, net of tax	**184**	174	164	125	6
Other non-operating expenses	**(147)**	(93)	(229)	(491)	(631)
	2,723	2,399	2,629	2,217	2,143
Distribution					
To employees in wages, salaries and benefits	**820**	759	807	800	832
To governments in income and other taxes	**233**	149	104	119	137
To providers of capital in:					
Interest on borrowings	**586**	508	527	402	238
Dividends to owners	**71**	71	125	179	285
Profit attributable to perpetual securities holders	**36**	43	43	39	28
	1,746	1,530	1,606	1,539	1,520
Retained in Business					
Depreciation and amortisation	**682**	595	571	454	405
Deferred tax expense / (credit)	**(91)**	(7)	65	32	(106)
Retained profits	**140**	232	215	178	236
Non-controlling interests	**(30)**	(15)	110	42	(94)
	701	805	961	706	441
Other non-operating expenses / (income)	**276**	64	62	(28)	182
	977	869	1,023	678	623
Total Distribution	**2,723**	2,399	2,629	2,217	2,143

Productivity Data

	2019	2018	2017	2016	2015
Average staff strength	**16,482**	16,578	16,288	18,072	18,676
Employment costs *(S$ million)*	**820**	759	807	800	832
Profit after tax per employee *(S$'000)*	**13**	20	30	24	24
Value added *(S$ million)*	**2,160**	1,990	2,273	2,047	1,783
Value added per employee *(S$'000)*	**131**	120	140	113	95
Value added per dollar employment costs *(S$)*	**2.63**	2.62	2.82	2.56	2.14
Value added per dollar investment in property, plant and equipment *(S$)*	**0.13**	0.12	0.15	0.14	0.15
Value added per dollar sales *(S$)*	**0.22**	0.17	0.25	0.26	0.19

The figures above reflect data for core businesses only

Amendments to SFRS(I)

SFRS(I) 16	Leases
SFRS(I) INT 23	Uncertainty over Income Tax Treatments
Amendments to SFRS(I) 9	Prepayment Features with Negative Compensation
Amendments to SFRS(I) 1-28	Long-term Interests in Associates and Joint Ventures
Amendments to SFRS(I) 3	Business Combinations
Amendments to SFRS(I) 11	Joint Arrangements
Amendments to SFRS(I) 1-12	Income Taxes
Amendments to SFRS(I) 1-23	Borrowing Costs
Amendments to SFRS(I) 1-19	Plan Amendment, Curtailment or Settlement
Amendments to SFRS(I) 7 and SFRS(I) 9	Interest Rate Benchmark Reform

Critical Accounting Policies

Sembcorp's financial statements are prepared in accordance with Singapore Financial Reporting Standards (International) (SFRS(I)) and International Financial Reporting Standards (IFRS).

With effect from January 1, 2019, the Group has applied the following SFRS(I)s, interpretations of SFRS(I) and requirements of SFRS(I), set out in the table above.

The adoption of the above standards does not have any significant impact on the financial statements except for SFRS(I) 16.

The Group had earlier adopted amendments to SFRS(I) 7 and SFRS(I) 9 on interest rate benchmark reform (IRBR). The amendments provide temporary relief from applying specific hedge accounting requirements to hedge relationships directly affected by IRBR and have the effect that IRBR should not generally cause hedge accounting to terminate.

Note: All references to SFRS(I) and IFRS are referred to as SFRS(I) unless otherwise specified

Financial Risk Management

The Group's activities expose us to a variety of financial risks, including changes in interest rates, foreign exchange rates and commodity prices, as well as credit risk.

For details on the management of these risks, please refer to page 81.

Treasury Management

Sembcorp Financial Services (SFS), the Group's wholly-owned treasury vehicle, manages the Group's financing activities and our treasury activities in Singapore. SFS also oversees financing and treasury activities outside of Singapore together with the respective business units. In addition, SFS on-lends funds borrowed by it to businesses within the Group, where appropriate.

SFS and its overseas treasury units actively manage cash within the Group by setting up cash pooling structures in various countries where appropriate, to receive surplus funds from businesses and lend to those with funding requirements. It also actively manages the Group's excess cash using a number of financial institutions, and closely tracks developments in the global banking sector. Such proactive cash management continues to be an efficient and cost-effective way of managing the Group's cash and meeting our funding requirements.

Facilities

As at December 31, 2019, the Group's total credit facilities, including our multi-currency debt issuance programme, amounted to S$20,458 million (2018#: S$19,531 million). This comprised borrowing facilities of S$17,011 million (2018#: S$15,815 million) and trade-related facilities of S$3,447 million (2018#: S$3,716 million), including but not limited to bank guarantees, letters of credit, bid bonds and performance bonds.

Borrowings and Perpetual Securities

The Group aims to align the structure and maturity profile of our debt book with the commercial profile of our core assets, while continuing our focus on maintaining adequate liquidity for our businesses. We continue to build on our banking relationships to ensure that we are able to secure funding on competitive terms, as and when commercially viable and strategically attractive opportunities arise.

In 2019, SFS has refinanced the £200 million bridge facility for Sembcorp Energy UK (SEUK) with a £300 million five-year term loan. The Group also established S$600 million of revolving credit facility of four to five years in part to refinance the S$850 million revolving credit facilities maturing in 1Q2020.

In July 2019, the Group issued S$1,500 million of five-year unlisted bonds to partially fund a subordinated loan facility to Sembcorp Marine of S$2,000 million.

As at December 31, 2019, the Group's gross borrowings amounted to S$10,800 million (2018: S$10,732 million). Compared to 2018, the increase of S$68 million in gross borrowings was mainly due to the SEUK term loan, which was £100 million higher than the £200 million bridging loan facility, and netted off by the amortisation of other loans. The Group's interest cover increased from 2.5 times in 2018 to 2.6 times in 2019. The Group remains committed to ensuring a diversified funding base and optimising the cost of funding while working towards maintaining prudent financial ratios. We also aim to maintain an efficient and optimal mix of committed and uncommitted facilities.

Of the overall debt portfolio in 2019, 64% (2018: 54%) constituted fixed rate debt that was not exposed to interest rate fluctuations. We continue to actively monitor and manage the fixed and floating rate mix of our debt portfolio.

Restated due to reclassification of banking facilities

Financing and Treasury Highlights *(S$ million)*

	2019	2018#	2017
Source of Funding			
Cash and cash equivalents	**1,767**	1,925	2,687
Borrowing facilities (including multi-currency debt issuance programme)			
Committed borrowing facilities	**13,478**	12,195	11,807
Less: Amount drawn down	**(11,317)**	(10,449)	(9,821)
Unutilised committed borrowing facilities	**2,161**	1,746	1,986
Uncommitted borrowing facilities	**3,533**	3,620	5,359
Less: Amount drawn down	**(283)**	(1,083)	(1,027)
Unutilised uncommitted borrowing facilities	**3,250**	2,537	4,332
Total unutilised borrowing facilities	**5,411**	4,283	6,318
Trade-related facilities			
Facilities available	**3,447**	3,716	3,929
Less: Amount used	**(1,352)**	(1,604)	(2,206)
Unutilised trade-related facilities	**2,095**	2,112	1,723
Funding Profile			
Maturity profile			
Due within one year	**2,643**	1,862	1,572
Due between one to five years	**5,532**	5,803	5,204
Due after five years	**2,625**	3,067	3,072
	10,800	10,732	9,848
Debt mix			
Fixed rate debt	**6,914**	5,754	4,469
Floating rate debt	**3,886**	4,978	5,379
	10,800	10,732	9,848

Restated due to reclassification of banking facilities

Financing and Treasury Highlights *(S$ million)*

	2019	2018	2017
Debt Ratios			
Interest cover ratio			
Earnings before interest, tax, depreciation and amortisation	**1,535**	1,279	1,523
Interest on borrowings	**586**	508	527
Interest cover (times)	**2.6**	2.5	2.9

	2019	D/C ratio	2018#	D/C ratio	2017	D/C ratio
Debt / capitalisation (D/C) ratios						
Sembcorp Industries corporate debt	**4,263**	**0.23**	2,788	0.15	2,484	0.14
Sembcorp Industries project finance debt	**3,636**	**0.19**	3,714	0.20	3,264	0.18
Sembcorp Marine debt	**2,901**	**0.16**	4,230	0.23	4,100	0.23
Sembcorp Industries Group gross debt	**10,800**	**0.58**	10,732	0.57	9,848	0.55
Less: Cash and cash equivalents	**(1,767)**	**–**	(1,925)	–	(2,687)	–
Sembcorp Industries Group net debt	**9,033**	**0.48**	8,807	0.47	7,161	0.40

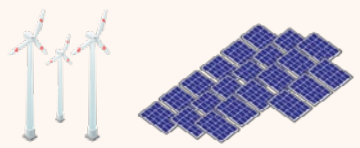
Restated due to reclassification of banking facilities

Energy

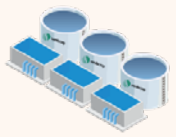
An integrated energy player poised to benefit from the global energy transition with a balanced energy portfolio of over 12,600MW of power and over 8.6 million m³/day of water and wastewater treatment capacity

Competitive Edge

- Global track record as an originator, owner or investor, operator and optimiser of thermal and renewable energy as well as water assets with strong operational, management and technical capabilities
- An integrated energy player with a solid track record in providing energy, water and on-site logistics to multiple industrial site customers with compelling value propositions across the energy and utilities value chain
- Innovative renewable energy and environmental solutions with over 2,800MW of renewables, battery storage and energy-from-waste capacity in operation and under development globally
- Reliable and competitive solutions across the gas value chain including gas sourcing and importation, gas trading and regasification infrastructure



Power Capacity
>12,600MW
including 2,600MW renewable power



Water and Wastewater Treatment Capacity
>8,600,000m³/day

Performance Scorecard

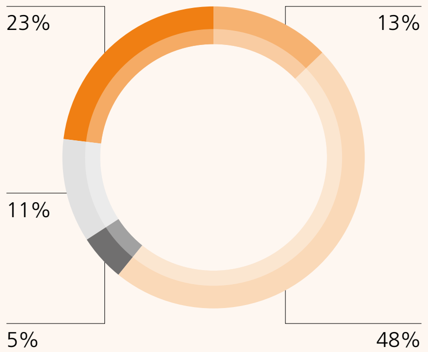
Financial Indicators *(S$ million)*

	2019	2018	Change *(%)*
Turnover	**6,170**	6,569	(6)
EBITDA	**1,309**	1,117	17
Profit from operations	**717**	820	(13)
– Earnings before interest and tax	**603**	728	(17)
– Share of results: Associates & JVs, net of tax	**114**	92	24
Net profit	**195**	312	(38)
– Net profit before exceptional items	**360**	321	12
– Exceptional items[1]	**(165)**	(9)	NM
Return on equity *(%)*	**5.3**	8.3	(36)

[1] 2019 exceptional items, totalling a negative S$165 million, comprise impairments of S$245 million and S$7 million of additional provision for potential claims at a joint venture wastewater treatment company in China offset by net divestment gains of S$86 million. The net divestment gain of S$86 million was from the sale of Vellocet Clean Energy in Australia, the Xinmin municipal water asset and Lianyungang industrial wastewater treatment asset in China, the utilities assets formerly serving Jurong Aromatics Corporation in Singapore and Wilton land lease in the UK. There was also a S$1 million revision on the purchase price allocation for a solar project in Singapore

2018 exceptional items, totalling a negative S$9 million, comprise a S$23 million gain from the divestment of waste paper recycling and medical waste operations in Singapore and municipal water operations in South Africa, offset by a S$25 million provision for potential fines and claims at a joint venture wastewater treatment company in China and a non-cash S$7 million expensing of UK Power Reserve's capitalised cost upon refinancing

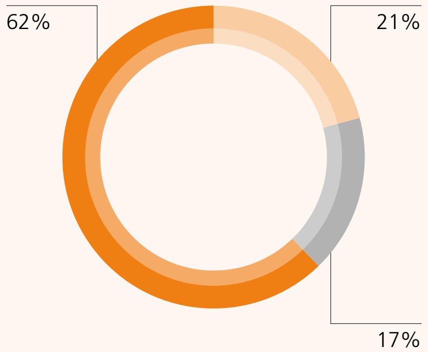
Profit from Operations* by Geography



- Singapore and rest of Southeast Asia
- China
- India
- UK
- Rest of the World

* Excluding Corporate and exceptional items

Profit from Operations* by Segment



- Gas & thermal power
- Renewable power
- Water & others

* Excluding Corporate and exceptional items

Key Developments

- Strengthened position as a provider of integrated energy solutions in Singapore with solar capacity increasing to 180MWp in 2019. Reinforced position as a major gas player with the acquisition of 30% interest in Sembcorp Gas
- Fully delivered the 250MW SECI 2 project and commissioned 227MW of SECI 3. 357MW was completed in 2019 and 120MW year-to-date in 2020, bringing total operating renewables capacity in India to 1,654MW
- Commenced operations for the first 60MW of a 120MW battery energy storage system in the UK

Looking Ahead

- **Singapore**: Rejuvenating power asset portfolio and extending customer reach for integrated energy and environmental solutions
- **Southeast Asia**: Driving growth in Vietnam and exploring renewable energy opportunities in other target markets
- **China**: Positioning for growth of the water business by leveraging proprietary technology and upgrading facilities to meet tightened environmental standards
- **India**: Continuing to focus on lifting performance, as well as maximising uptime and energy generation from renewable power assets. Remain committed to unlocking value in India – exploring IPO and other strategic options
- **UK**: Lifting performance and returns. Building capabilities to support the UK energy transition

Energy Review

Reshaping our energy portfolio

With growing emphasis on climate action, the pace of change in the energy sector has accelerated. In 2019, we made strides in reshaping our energy portfolio towards renewables and sustainable solutions and aligning our business focus to industry trends. 412MW of renewable power became operational in 2019, bringing total operating renewables capacity to over 2,300MW. The first 60MW of our battery energy storage system in the UK also started operations in October 2019. With 2,600MW of renewable power capacity in operation and under development globally, we are one of Singapore's largest home-grown renewable energy players.

Our operating thermal portfolio also grew with the completion and commencement of operations of the Sirajganj Unit 4 combined cycle gas turbine (CCGT) power plant in Bangladesh in April 2019. The Sembcorp Myingyan Independent Power Plant, the first competitively-tendered independent power plant in Myanmar, which commenced operations in October 2018 was also officially opened in March 2019.

The Energy business delivered turnover of S$6,170 million and profit from operations (PFO) of S$717 million in 2019, compared to S$6,569 million and S$820 million respectively in 2018. Net profit after exceptional items was S$195 million, compared to S$312 million in 2018. The exceptional items in 2019 comprised mainly S$245 million of impairments offset by S$86 million of net divestment gains. Excluding the exceptional items, underlying net profit grew 12% to S$360 million, compared to S$321 million in 2018. This was driven by better performance from overseas operations, mainly China and India, as well as the recognition of capacity market payments in the fourth quarter of 2019 in the United Kingdom (UK). Return on equity (ROE) for the business was 5.3%. ROE before exceptional items was 9.8%.

Operational Indicators*

	2019	2018
Power capacity *(MW)*	**12,631**	12,599
– thermal	**9,825**	9,825
– renewable & others[1]	**2,806**	2,774
Steam capacity *(tonnes per hour)*	**3,501**	4,044
Water and wastewater treatment capacity *(m^3/day)*	**8,661,145**	8,787,665

* 2018 and 2019 capacity refers to total gross installed capacity of facilities in operation and under development. 2018 figure for renewables capacity was restated for conversion of capacity in Singapore from MWp to MW

1 Others include battery storage and energy-from-waste capacity

In 2019, we commissioned the first 60MW of our 120MW battery storage system in the UK, one of the largest fleets of its kind in Europe

In 2019, net divestment gains of S$86 million were recognised. The Xinmin municipal water asset and Lianyungang industrial wastewater treatment asset in China were divested resulting in a gain of S$9 million. We completed the sale of the utilities assets formerly serving Jurong Aromatics Corporation in October, registering a gain of S$65 million. There was also a S$16 million gain from the sale of leasehold land in Teesside in the UK. A cost of S$4 million was also incurred with the divestment of our entire stake in Sembcorp Energy Australia, formerly known as Vellocet Clean Energy, in Australia.

In line with the Group's capital recycling efforts and portfolio rebalancing strategy, we signed a conditional agreement to sell our water business in Chile to Sacyr Agua, a wholly-owned subsidiary of Spanish construction and engineering service group SACYR SA in February 2020. Realisable value for the assets has been impacted by escalating operational and regulatory costs as well as the deterioration of Chile's economic, social and regulatory environment since October 2019. The business is also facing increasing uncertainty and risks in the Chilean water sector including the potential reduction of regulated returns. In addition, the Chilean peso has depreciated by approximately 10% since October 2019. Arising from the transaction, the Group booked an impairment charge of S$64 million due to the difference between the sale value and the net asset value of the business. The water business in Chile was part of the portfolio of water and wastewater assets acquired from Cascal NV in 2010. Including this sale, the overall global Cascal portfolio has to date generated cash flows in excess of the original investment and delivered an annualised return of approximately 10%.

An additional impairment of S$181 million was also made in the fourth quarter of 2019. S$158 million (net of tax) related to an impairment of UK Power Reserve (UKPR) assets. Current market conditions in the UK are challenging. The business has been impacted by a combination of economic and industry factors. The retirement of the UK's coal and older gas-fired power plants was slower than expected. In addition, there was a reduction in underlying demand. The increase in energy capacity and reduction in demand led to more competition causing lower prices and impacting the earnings of UKPR. Milder winters further moderated volatility and the absence of extreme weather and other system stress events also exacerbated the situation. While performance improved in 4Q2019 with the resumption of the capacity market, overall performance of the business remained below expectations. Flexible assets operate in the short-term markets and earnings will vary from year to year. However, considering the current challenges faced by the business including the factors outlined above, the business' future performance is now projected to be below the investment case. As part of the annual impairment testing exercise, we therefore prudently assessed the value-in-use of its assets and impaired the assets.

Sembcorp is one of Singapore's largest solar players with an additional 63MWp of solar capacity and 14 new commercial customers secured in 2019

S$23 million related to an impairment made in China for our wastewater treatment assets. New and more stringent effluent discharge standards will come into force in Jiangsu, China, with effect from January 2021. As a result, the existing facilities will not be able to meet the new standards and an impairment was taken for the relevant facilities.

Singapore

The Singapore energy operations contributed PFO of S$155 million, compared to S$224 million in 2018. The decline was mainly due to a weak power market, as well as the planned shutdown of our power generation assets in the fourth quarter of 2019 for a scheduled major maintenance. PFO was also lower due to the absence of income contribution from Tay Paper Recycling and the medical waste business, which were divested in June and September 2018, respectively, as well as the utilities facilities formerly serving Jurong Aromatics Corporation which were divested in October 2019.

With the complete nationwide roll-out of the Open Electricity Market in May 2019, Sembcorp Power has successfully entered the residential retail power segment. We continue to make headway in both residential and commercial retail power markets.

The Singapore operations further strengthened its renewable energy presence during the year, growing its total solar power portfolio to 180MWp from 117MWp at the end of 2018. In February 2020, we were also named the preferred bidder by national water agency PUB to build a 60MWp floating solar photovoltaic system on Tengeh Reservoir. We are now a key player in the Singapore solar market, providing green solutions to customers who are moving towards using clean energy to help them achieve their sustainability goals.

In addition to clean energy, we are providing our customers in Singapore with a suite of integrated solutions to support sustainable development. We are committed to supporting Singapore's move towards achieving a circular economy and becoming a zero waste nation. To boost local recycling rates as well as raise public awareness of recycling right, Sembcorp launched the '*ezi*' recycling app in November 2019. The mobile application facilitates a more convenient way of recycling through doorstep collection services.

Energy Review

Sembcorp Energy India Limited successfully commissioned 477MW of wind capacity from SECI 2 and 3 projects to date, demonstrating our leadership in project execution in India

It also offers a variety of features including educational content on recycling right.

In January 2020, we entered into a sale and purchase agreement with Veolia Environmental Services Asia to acquire a 100% equity interest in Veolia ES Singapore and the public cleaning business of Veolia ES Singapore Industrial. The businesses to be acquired hold contracts for public and commercial waste as well as recyclable collections comprising recovery and recycling, public and commercial cleaning services, and associated properties, which include a materials recovery facility. It enables us to join the dots along the entire waste management value chain from waste collection and public cleaning to materials recovery, recycling and turning waste into energy. The proposed acquisition, when completed, will help to strengthen Sembcorp's strategy of supporting sustainable development through its integrated solutions.

Rest of Southeast Asia

PFO from the Rest of Southeast Asia was S$63 million, an increase of 110% from S$30 million in 2018.

The Rest of Southeast Asia comprises power operations in Vietnam and Myanmar as well as municipal water operations in Indonesia and the Philippines. The higher PFO was driven by contribution from the Myingyan power plant in Myanmar, which commenced operations in October 2018. Contribution from Myanmar in 2019 was boosted by one-off income comprising mainly liquidated damages and vendor settlement income.

During the year, we entered the renewable energy market in Vietnam via a partnership with Becamex IDC Corporation and Vietnam Singapore Industrial Park JV Co (VSIP) to introduce a new generation of sustainable smart energy solutions to the country. The tripartite partnership aims to deliver a range of energy and utilities solutions such as renewable energy, waste-to-energy, wastewater treatment and water recycling to VSIP and Becamex facilities. The first completed project is a 51kWp rooftop solar farm atop the VSIP administrative building in Binh Duong province. Under the joint venture collaboration, Sembcorp will be developing rooftop solar facilities in other VSIP integrated townships and industrial parks as well as Becamex-owned properties in the country.

China

PFO from China grew 20%, from S$103 million in 2018 to S$124 million, driven mainly by higher contribution from our investment in wind assets. With the completion of Huanghua Huangnanpaigan and Huanghua Phase 3 wind power projects in the second half of 2018, our operational wind capacity of 725MW contributed to earnings for the full year of 2019. Operations from our thermal power plants remained stable. While earnings for Shanghai Caojing cogeneration plant was lower due to higher natural gas prices and lower tariffs, this was offset by better performance from the Chongqing Songzao supercritical coal-fired power plant which achieved higher generation and higher dark spreads. Contribution from our water operations remained steady.

India

Despite signs of a slowdown in economic growth in India, profitability for the India operations continued to improve. Net profit more than doubled to S$100 million in 2019, compared to S$47 million in 2018. PFO from India grew 18% to S$453 million.

The thermal power assets contributed PFO of S$284 million in 2019, an increase from S$228 million in 2018. The thermal assets turned in a profitable year, contributing S$47 million in net profit. Our first supercritical coal-fired power plant operated at an average plant load factor (PLF) of 80%. Unit 1 of the plant resumed operations in February 2019, after its shutdown from October 2018 to February 2019 due to a stator fault. The second supercritical coal-fired power plant operated at an average PLF of 77%. PFO improved on favourable coal costs and steady asset performance. Supply of power to Bangladesh under the 250MW long-term power purchase agreement commenced in February 2019.

The India renewables arm continued to perform well, with a PFO contribution of S$169 million and a net profit of S$53 million in 2019. Sembcorp Energy India Limited (SEIL) has demonstrated leadership in executing projects and now has the largest generating capacity amongst SECI wind project developers. In February 2020, SEIL was again the first to fully commission the SECI 2 wind power project and is slated to achieve full commissioning of the SECI 3 wind power project in 2020. We also strengthened our focus on maximising uptime and energy generation from our renewable assets, supported by our remote digital monitoring and analytics capabilities. We now have the highest renewables capacity under self-operations for an independent power provider in the country.

In June 2019, we injected new equity to support the growth of the renewable energy business. Under applicable Indian regulatory requirements, the change to the capital structure of SEIL, necessitated the withdrawal of the draft red herring prospectus earlier filed by SEIL with the Securities Exchange Board of India. In December 2019, we acquired the residual 6% stake in SEIL, making it our wholly-owned subsidiary. The acquisition allows Sembcorp to have the flexibility as sole owner to evaluate and pursue a full range of growth opportunities in the renewables segment. We remain committed to unlocking value in India and will continue to explore an IPO, as well as other strategic options.

UK

PFO from the UK was S$43 million, an improvement from S$26 million in 2018, driven by better contribution from UKPR. Contribution from Teesside operations declined due to lower generation from the Sembcorp Biomass Power Station as a result of planned maintenance in the second quarter of the year. UKPR turned in a PFO of S$18 million, compared to a loss of S$10 million in 2018. The Great Britain Capacity Market Scheme was approved by the European Commission in October 2019. We resumed the recognition of capacity market payments in the fourth quarter of 2019.

Market conditions and the regulatory environment in the UK are undergoing rapid change especially as the region moves to decarbonise. The country's coal and older power plants will inevitably be decommissioned over time, and with a growing renewables capacity, there will clearly be requirement for flexibility services. We continue to believe that there is value in UKPR's flexible assets. We are committed to turning the UKPR business around to deliver increased value. This may take some time, but we continue to believe in the long-term prospects of the business. Our strategy is to optimise the placement of capacity across markets to capture value. The UK electricity market is rapidly evolving to renewable energy generation with a legally binding target of net-zero emissions by 2050. With our portfolio of flexible assets, and the merchant and digital capabilities we are developing, we believe that we will be well-positioned to capture emerging opportunities.

Rest of the World

Operations in the Rest of the World segment include a gas-fired power plant in Bangladesh, independent water and power plants in Oman and the United Arab Emirates, as well as water assets in Chile and Panama. PFO from Rest of the World grew to S$102 million, from S$85 million in 2018. Despite the absence of contribution from our municipal water operations in South Africa which were divested in December 2018, PFO increased due to the contribution from our CCGT power plant in Bangladesh which commenced full operations in April 2019. The Sirajganj Unit 4 CCGT power plant is Bangladesh's first public-private partnership power plant backed by foreign investment. It was developed, and is owned and operated by Sembcorp North-West Power Company, a joint venture that is 71%-owned by Sembcorp Utilities and 29% by Bangladesh's state-owned North-West Power Generation Company. The plant supplies power to Bangladesh Power Development Board under a 22-year power purchase agreement. PFO from our Middle East and Americas businesses was S$50 million and S$9 million respectively in 2019.

Outlook

The world is undergoing an energy transition, from a reliance on fossil fuels to renewable energy. While these developments will offer us opportunities, changing our portfolio mix will take time as there is a need to balance the transition with the goals of energy security, environmental sustainability, affordability and accessibility. We believe that with our portfolio of assets focused on the Gas & Power, Renewables & Environment, and Merchant & Retail energy segments, we are well-placed to benefit from the energy transition.

The COVID-19 outbreak has significantly weakened near-term economic prospects. According to the International Monetary Fund, the epidemic is affecting confidence and steps to contain it are impacting economic activity. As such, global growth in 2020 is expected to dip below 2019 levels.

In 2020, underlying performance of the Energy business is expected to be lower than in 2019 due to the loss of contribution from divested assets, the absence of one-off income in Myanmar, and the potential impact arising from the COVID-19 outbreak.

The Energy business continues to focus on reshaping its portfolio towards renewables and sustainable solutions and executing its strategy to reposition accordingly.

Marine

A leading industry player providing innovative engineering solutions to the global offshore, marine and energy industries, drawing on more than 50 years of experience

Competitive Edge

- A global leader in integrated offshore, marine and energy solutions with a proven track record and more than 50 years of experience
- Able to offer diversified and innovative engineering solutions across the offshore, marine and energy value chain
- Established capabilities in rigs & floaters, repairs & upgrades, offshore platforms and specialised shipbuilding, and enhanced capabilities to serve the gas value chain
- Strategically located shipyards and facilities in Singapore, Indonesia, Norway, the United Kingdom and Brazil

Net Orderbook*

S$2.4 billion

New Contracts Secured

S$1.5 billion

Performance Scorecard

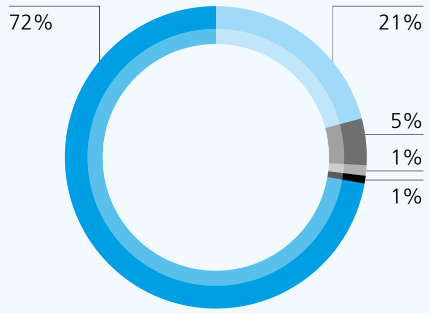
Financial Indicators *(S$ million)*

	2019	2018	Change *(%)*
Turnover	**2,883**	4,888	(41)
EBITDA	**108**	148	(27)
Profit / (Loss) from operations	**(140)**	(55)	(155)
– Earnings / (Loss) before interest and tax	**(138)**	(53)	(160)
– Share of results: Associates & JVs, net of tax	**(2)**	(2)	–
Net profit / (loss)	**(137)**	(74)	(85)
– Net profit / (loss) before exceptional items	**(142)**	(74)	(92)
– Exceptional items[1]	**5**	–	NM
Return on equity *(%)*	**(6.1)**	(3.1)	(97)

Note: Figures taken at Sembcorp Marine level

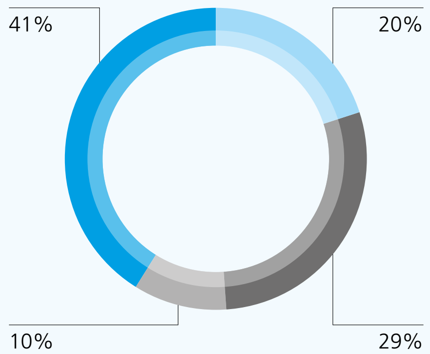
[1] 2019 exceptional item relates to negative goodwill from the fair value adjustment on the completion of valuation and final purchase price allocation for the acquisition of interests and titles to the intellectual property rights of Sevan Marine and HiLoad LNG

Turnover by Segment



- Rigs & floaters
- Repairs & upgrades
- Offshore platforms
- Specialised shipbuilding
- Other activities

Orderbook Composition*



- Floaters
- Drillships
- Offshore platforms
- Specialised shipbuilding / Refurbishment

* Excluding the Sete Brasil drillship contracts. As at December 31, 2019

Key Developments

- Secured S$1.5 billion of new contracts, of which S$530 million pertained to greener solutions
- Added new 30,000-tonne capacity gantry cranes at the Tuas Boulevard Yard which enhance the yard's value proposition as a one-stop production centre for large, heavy and complex projects
- Reached a full and final settlement on the claims under all seven drillship contracts with Sete Brasil Group

Looking Ahead

- Gearing up for the global economy's shift towards cleaner energy use, with long-term investments in innovation, technologies and expertise for developing new engineering solutions
- Growing order volume in offshore wind by raising brand awareness in market regions unfamiliar with the business' solutions and track record
- Developing new design solutions for the battery- and hydrogen fuel cell-powered ship segments

Marine Review

Challenges persist, competition remains intense
2019 was a challenging year for the Marine business with intense competition and continued low work volume.

Turnover was S$2,883 million compared to S$4,888 million in 2018. On a segmental basis, turnover for rigs & floaters was lower compared to 2018. The higher turnover in 2018 was due to revenue recognition from the delivery of seven jack-up rigs to Borr Drilling, one jack-up rig to BOT Lease and the sale of a semi-submersible rig. Revenue in 2019 was mainly contributed by higher percentage recognition from ongoing drillship and floater projects. Turnover from offshore platforms was reduced due to lower revenue recognition of the Hornsea 2 wind farm substations and Tangguh gas module projects compared to that of the Culzean platform projects in 2018. Turnover for the repairs & upgrades segment grew 27% to S$605 million due to higher revenue per vessel on an improved vessel mix.

Operational Indicators *(S$ million)*

	2019	2018
Net orderbook*	**2,436**	3,088
New contracts secured	**1,487**	1,184

* Excluding the Sete Brasil drillship contracts

Excluding the effects of the delivery of one jack-up rig to Borr Drilling in 2019 and the delivery of seven jack-up rigs to Borr Drilling, one jack-up rig to BOT Lease and the sale of a semi-submersible rig in 2018, revenue would have been S$2,670 million, an increase of 6% compared to S$2,530 million in 2018.

The Marine business recorded a loss from operations of S$140 million compared to a loss from operations of S$55 million in 2018. The business posted a net loss of S$137 million compared to a net loss of S$74 million in 2018 mainly due to the accelerated depreciation of Tanjong Kling Yard and continued low overall business volume. It was partly offset by profits from the repairs & upgrades business, which rose on improved margins and a better product mix. Return on equity for the business was a negative 6.1%.

Turnover *(S$ million)*

	2019	2018	Change (%)
Rigs & floaters	**2,069**	4,148	(50)
Repairs & upgrades	**605**	476	27
Offshore platforms	**131**	184	(29)
Specialised shipbuilding	**35**	–	NM
Other activities	**43**	80	(46)
Total	**2,883**	4,888	(41)

The construction of two high specification ultra-deepwater drillships for Transocean is based on Sembcorp Marine's proprietary Jurong Espadon 3T drillship design

Actively pursuing new orders in new and existing markets
In 2019, the business secured S$1.5 billion in new orders, despite difficult market conditions. This is an improvement over the total orders of S$1.2 billion received in 2018.

The new orders included the construction and integration of a topside and hull of a floating production unit (FPU) for Shell Offshore for the Whale field in the Gulf of Mexico. The business also secured two offshore platform projects from North Oil Company and Total E&P Danmark, valued at S$550 million for the fabrication and integration of two well-head platforms for North Oil Company and platforms and bridges for Total.

During the year, the Marine business successfully entered the highly competitive Taiwanese offshore wind sector with a project for first-time customer, Jan De Nul, to fabricate 15 jacket foundations for Formosa 2, the biggest offshore wind farm in Taiwan as well as various contracts with repeat and new customers. These included a floating production storage and offloading (FPSO) conversion with Shapoorji Pallonji and Bumi Armada, the conversion or upgrade of several floating storage and regasification unit (FSRU) or floating storage unit (FSU) projects as well as the makeover of *Asuka II* for NYK Cruises.

The business also entered into contracts worth about S$175 million for the design and construction of a liquefied natural gas (LNG) bunker vessel for Mitsui O.S.K. Lines as well as repair and modernisation works for 13 cruise ships. The LNG bunker vessel will have a capacity of 12,000m^3, making it the biggest of its kind to be constructed in Singapore.

Notable deliveries in 2019

Sleipnir, the world's largest and strongest semi-submersible crane vessel, delivered to Heerema Marine Contractors

Topside modules construction and integration for the FPSO *P-68* delivered to Petrobras, a testament to Estaleiro Jurong Aracruz's engineering, procurement, construction and commissioning capabilities

Q7000 well-intervention semi-submersible rig delivered to Helix Energy Solutions

Marine Review

At the end of 2019, net orderbook stood at S$2.4 billion, excluding the Sete Brasil drillship contracts.

The business continues to actively pursue new orders in both new and existing markets amid the challenging environment. Going into 2020, Sembcorp Marine is optimistic about its negotiations for several major projects, including the Siccar Point Cambo FPSO, for which it has concluded an exclusive front-end engineering design (FEED) using the proprietary Sevan design and will be moving into the next phase.

Settlement of all seven drillship contracts with Sete Brasil

In October 2019, Sembcorp Marine reached a full and final settlement with Sete Brasil Group on the claims under all seven drillship contracts, subject to certain conditions precedent which have since been fulfilled.

Under the settlement agreement, the titles to five of the seven drillships are retained by Sembcorp Marine, while the titles to the remaining two drillships in advanced construction stages are apportioned between the business and Sete Brasil according to the payments already received. Sembcorp Marine will terminate its arbitration proceedings against Sete Brasil Group and is in talks with a potential purchaser on the completion of two of the seven drillships.

Embracing new innovation and building future-ready capabilities

Amid the global economy's shift towards cleaner energy sources, the business recognises that the major oil and gas companies, which constitute its traditional customer base, are diversifying their product mix to include clean and renewable energy products such as offshore wind. Increasingly, Sembcorp Marine's customers are repositioning themselves as producers of energy, rather than oil or gas.

In response, the business has been gearing up for this shift with long-term investments in innovation, technologies and expertise for developing new engineering solutions. Out of the S$1.5 billion of new orders received in 2019, S$530 million of orders pertained to greener solutions such as scrubber and ballast water management system retrofits as well as gas and renewable energy projects.

Although offshore oil and gas remains Marine's key market, offshore wind is a growing sector that is opening up possibilities for the business. To grow order volume in this segment, the business will focus on enhancing its brand visibility, especially in market regions that are unfamiliar with its solutions and track record. In addition, new design solutions for the battery- and hydrogen fuel cell-powered ship segments are also being developed as the business works towards completing three zero-emission battery-powered RoPax ferries for Norled.

As the business embraces new innovation and develops future-ready capabilities, this may mean that certain functions like engineering are becoming fixed costs as the business responds to tenders and enquiries for various engineering solutions and participates in FEED and pre-FEED work requested by potential customers. As such, these investments are crucial to help boost the business' ability to cater to the increasingly complex field development needs of customers.

Innovation at Sembcorp Marine Tuas Boulevard Yard

The Marine business continued to incorporate innovation and technologies in its shipyards. Operations at Tuas Boulevard Yard have been strengthened with state-of-the-art facilities. The yard's new 30,000-tonne capacity gantry cranes will support a number of projects in 2020, including the installation of the 9,200-tonne assembled topside onto the hull of the Shell Vito FPU. The cranes will greatly enhance Tuas Boulevard Yard's value proposition as a one-stop production centre for fabricating, assembling and installing larger, heavier and more complex projects. Mega-structures can be completely integrated on-site, instead of being transported in several smaller parts for further assembly, providing a more cost-effective solution for customers.

Strengthening financial position

During the year, the Marine business obtained a S$2 billion five-year subordinated loan facility from Sembcorp Industries, of which S$1.5 billion has been drawn down to repay the business' existing borrowings. A further S$500 million is available for working capital and general corporate purposes. The facility has helped the Marine business to re-profile its debt longer-term and provided additional working capital that will help put the business in good stead to capture opportunities to anchor its future performance and growth.

The Marine business continues to focus on maintaining cost prudence, while balancing investments in innovation, capability retention and manpower development. These will enable the business to better position itself for higher-value projects in new and existing markets.

Outlook

Business activity levels remain low for all segments except for repairs and upgrades, which continues to improve, underpinned by International Maritime Organization regulations that require the installation of ballast water treatment systems and gas scrubbers.

Challenges remain, in particular supply chain disruptions due to the COVID-19 virus outbreak, which could affect the execution of Sembcorp Marine's projects. Competition remains intense for all segments of the business. Sembcorp Marine expects the trend of losses to continue into 2020.

Good progress on ongoing construction project pipeline

Rigs & Floaters

- The construction of two high specification ultra-deepwater drillships for Transocean
- The construction of topside modules for FPSO *P-71* for Petrobras
- The construction and integration of the newbuild FPSO hull and living quarters for Equinor (formerly Statoil) for the Johan Castberg field development
- The construction and integration of the hull, topsides and living quarters for Shell's Vito FPU
- The engineering, procurement, construction and integration of vessel hull, living quarters and topside modules for TechnipFMC's newbuild Karish FPSO
- The FPSO conversion project with Shapoorji Pallonji and Bumi Armada
- The construction and integration of the hull and topside of Shell's Whale FPU

Offshore Platforms

- The construction of Tangguh LNG modules
- The engineering, procurement and construction, hook-up and commissioning works of two topsides for the Hornsea 2 offshore wind farm for Ørsted Wind Power
- The fabrication of 15 jacket foundations for Formosa 2 offshore wind farm for Jan De Nul
- The fabrication and integration of two well-head platforms for North Oil Company and platforms and bridges for Total E&P Danmark

Specialised Shipbuilding

- The design and construction of three identical battery-powered RoPax ferries for Norled
- The construction of an LNG bunker vessel for Mitsui O.S.K. Lines

The Tuas Boulevard Yard enhances Sembcorp Marine's competitive edge by enabling the business to achieve greater productivity and efficiency in delivering innovative, value-added and cost-effective solutions to customers

Urban

A leading Asian developer with a strong track record in transforming raw land into sustainable urban developments, delivering the economic engine to support growth

Competitive Edge

- Proven track record with 30 years of experience in master planning, land preparation and infrastructure development to transform raw land into urban developments
- A valued partner to governments, with the ability to deliver the economic engine to support industrialisation and urbanisation by attracting local and international investments
- Significant land bank of integrated urban developments comprising industrial parks as well as business, commercial and residential space in Vietnam, China and Indonesia
- People-centric approach to urban planning, incorporating green solutions and smart technology to enhance the liveability and sustainability of the developments

Total Net Orderbook

423 hectares

Remaining Saleable Land

2,600 hectares

Performance Scorecard

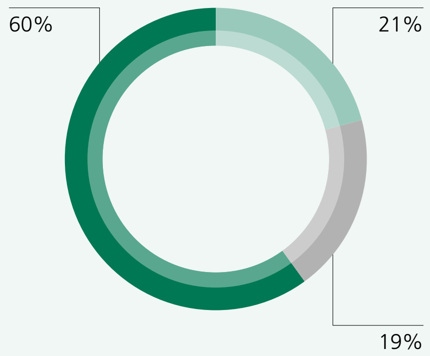
Financial Indicators *(S$ million)*

	2019	2018	Change *(%)*
Turnover[1]	**280**	5	NM
Profit from operations	**177**	94	88
– Earnings before interest and tax	**102**	*	NM
– Share of results: Associates & JVs, net of tax	**75**	94	(20)
Net profit	**117**	86	36
– Net profit before exceptional items	**117**	71	65
– Exceptional items[2]	**–**	15	(100)
Return on equity *(%)*	**11.4**	8.9	28

* Less than S$1 million

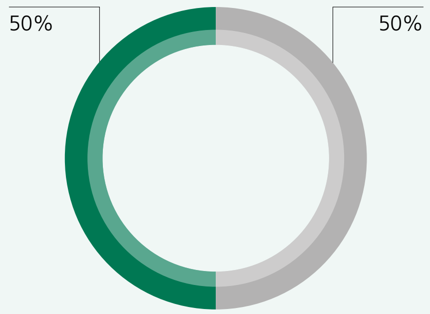
[1] Most of our Urban businesses are associates or joint ventures. Turnover reflects payment for services provided to these associates or joint ventures. For 2019, turnover included recognition from the sale of *Riverside Grandeur* in Nanjing, China, a residential development wholly-owned by Sembcorp

[2] 2018 exceptional item of S$15 million relates to the divestment gain from the sale of *Hongshan Mansion* held under Wuxi Singapore Property Investment



Remaining Saleable Land by Geography

- Vietnam
- China
- Indonesia



Remaining Saleable Land by Segment

- Industrial & business[1]
- Commercial & residential[2]

[1] Industrial & business land includes space for general and high-tech manufacturing, research and development, as well as business and technology incubators

[2] Commercial & residential land includes space for food and beverage businesses, malls, hotels, serviced apartments and modern services such as accounting and legal firms, consultancies and corporate headquarters

Key Developments

- Completed and handed over wholly-owned *Riverside Grandeur* residential development in China, driving record profits for the year
- Secured investment certificates for an additional 900 hectares of saleable land from two new VSIP developments in Bac Ninh and Binh Duong
- Phase 2 of *The Habitat Binh Duong* residential development in VSIP Binh Duong launched and sold out in 2019, with profit recognition expected in 2020. Soft launched Phase 3A in October 2019

Looking Ahead

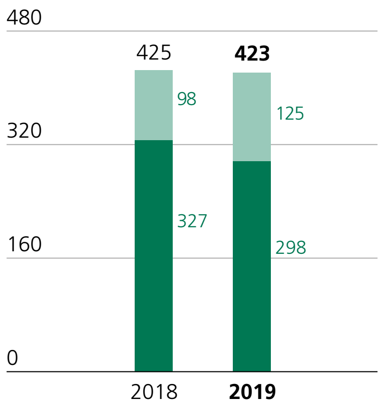
- Net orderbook of 423 hectares to be recognised as land sales over the next two to three years
- Continuing to develop new residential projects. Recognition of *The Habitat Binh Duong* Phase 2 and *Sun Casa* projects in Vietnam expected in 2020
- Replenishing land bank for future growth

Urban Review

Record financial performance from the Urban business, exceeding S$100 million in net profit
2019 was a stellar year for the Urban business, underpinned by residential sales. Profit from operations grew to S$177 million from S$94 million, while net profit increased to S$117 million from S$86 million the year before. This was driven by the recognition of profit from property development, with the successful completion and handover of *Riverside Grandeur* in Nanjing, China, as well as two residential projects at Vietnam Singapore Industrial Park (VSIP) developments in Vietnam. Return on equity for the business was 11.4%. The development properties were also recognised by the industry, receiving a record number of awards and accolades for their concept and design.

Urban's land sales activities were supported by stronger performance at our VSIP developments in Vietnam. However, there were lower land sales from our China and Indonesia projects. Land sales totalled 268 hectares compared to 307 hectares in 2018 while net orderbook remained stable at 423 hectares, comparable to 425 hectares in 2018.

Total Net Orderbook *(hectares)*



- Industrial & business[1]
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[1] Industrial & business land includes space for general and high-tech manufacturing, research and development, as well as business and technology incubators

[2] Commercial & residential land includes space for food and beverage businesses, malls, hotels, serviced apartments and modern services such as accounting and legal firms, consultancies and corporate headquarters

Operational Indicators *(hectares)*

	2019	2018
Saleable land inventory	**5,938***	5,742
Land sold (cumulative)	**2,915**	2,647
Total net orderbook	**423**	425
Remaining saleable land	**2,600**	2,670

* New saleable land added from VSIP Bac Ninh expansion
Note: Figures are based on current planned estimates

Vietnam
The VSIP integrated townships and industrial parks continued to perform well. Manufacturing activity in the country remained robust and with depleting industrial land supply in VSIP projects in the southern and northern economic corridors, manufacturers' demand for industrial land in other VSIP projects increased. Industrial land sales in the provinces of Quang Ngai and Nghe An in central Vietnam, as well as Hai Duong in northern Vietnam increased 62% over the previous year. In 2019, we secured investment certificates to develop two new VSIP projects in Binh Duong and Bac Ninh provinces which will add an additional 900 hectares of saleable industrial land to our saleable land inventory over the next two years. Prepared land from these two projects is expected to be ready for handover to customers in late 2020.

Our VSIP joint venture also launched a series of mass market homes which saw strong take-up by local buyers.

Construction of factories in VSIP Nghe An, northern central Vietnam

BelHomes, developed by VSIP Bac Ninh in Vietnam, sold out on the same day as its launch

Sun Casa in VSIP Binh Duong and *BelHomes* in VSIP Bac Ninh collectively sold 661 terraced houses and shophouses, with sales profit recognised during the year. Both residential developments and VSIP Bac Ninh received seven awards at the Vietnam Property Awards 2019, in recognition for best developments, concept and design. For the ninth year running, VSIP was voted Best Industrial / Warehouse Developer in Vietnam in the United Kingdom's Euromoney Real Estate Survey.

During the year, phase two of *The Habitat Binh Duong*, a 460-unit residential development within VSIP Binh Duong was sold out. Profit from this phase will be recognised in 2020. With the strong interest shown by homebuyers as well as investors, we have soft launched phase 3A with 247 out of 390 apartment units already taken up. The units will be handed over to buyers between 2021 and 2022.

China
Our Sino-Singapore Nanjing Eco Hi-tech Island (SNEI) project achieved another development milestone during the year. SNEI is the largest collaboration between Singapore and Nanjing. In May 2019, the joint venture celebrated its 10th anniversary and unveiled a two-pronged industry focus to drive the island's economic development.

The first focus is on artificial intelligence (AI). The joint venture will develop a China-Singapore Smart City Demonstration Zone to attract high-tech companies to undertake AI research, development and design for smart city applications that can be tested on the island before market launch. *Jiangdao Intelligent Cube*, a 106,218-square metre business park within SNEI was completed and launched to house

Sino-Singapore Nanjing Eco Hi-tech Island in China celebrated its 10th anniversary in 2019. *Jiangdao Intelligent Cube* is pictured on the right in the foreground

Fostering a pipeline of innovation at the *International Water Hub*

IWH provides laboratory space for clinical testing of new solutions

Fully equipped meeting rooms are available for networking and product launches

Designed by award-winning architecture firm Aedas, *International Water Hub* (*IWH*) is located on Sino-Singapore Nanjing Eco Hi-tech Island and overlooks Nanjing City's new Hexi central business district. The building was completed in December 2019. *IWH* was named Best Office Building in Nanjing by Yangtze Evening Post.

It will house technology companies looking to test new water and environmental technologies for the Chinese and global markets. As a business centre, *IWH* is designed to be a collaborative workspace for research scientists, technologists and academics to conduct knowledge-driven exchanges and form partnerships. This supports the commercialisation of R&D projects from the pilot phase to market readiness.

Our first wholly-owned residential development, *Riverside Grandeur*

Riverside Grandeur is a 332-unit residential complex comprising 11 apartment blocks designed by award-winning architecture firm Aedas, with interiors by Steve Leung Design Group from Hong Kong. *Riverside Grandeur* offers a luxurious waterfront living experience, overlooking the Hexi central business district on Nanjing mainland across the Yangtze River. It is Sembcorp's first wholly-owned residential development in China.

This high-end residential development leverages Sino-Singapore Nanjing Eco Hi-tech Island's unique modern eco-setting as well as its verdant landscaping. The island's landscape designer received the Outstanding Design Award for Wildlife, Biodiversity, Habitat & Enhancement by the International Federation of Landscape Architects (IFLA AAPME Awards).

Strong turnout for the official launch of *Riverside Grandeur*

Artist's impression of a unit in *Riverside Grandeur*

these companies, and has attracted companies including Tencent and iFlytek. Its second focus is on water science research and development (R&D). Sembcorp will lead the development of this industry sector with a new business centre, *International Water Hub* (*IWH*), to help international companies undertake R&D for new water solutions to tackle the global challenge of water pollution as well as attain higher standards for effluent discharge. Through a comprehensive ecosystem involving scientists, technologists, academics and investors, *IWH* will support companies by accelerating the commercialisation of new solutions for the global market. *IWH* will launch 33,800 square metres of office and retail space for lease in 2020. The development's total allocated laboratory space of 2,500 square metres has been fully taken up.

On the residential front, we completed a major development wholly-owned by Sembcorp. *Riverside Grandeur* is a 332-unit residential complex, offering panoramic city views of Nanjing's Hexi central business district on Nanjing mainland across the Yangtze River. All units were sold, with 326 units handed over to buyers, driving Urban's record net profit for the year.

Indonesia

Kendal Industrial Park (KIP) in Semarang, Central Java, saw a pick up in manufacturing interest in the second half of 2019 as the central government signalled its support for KIP to be designated the first special economic zone for industrial development on Java Island. In December 2019, KIP which is also known as *Park by the Bay*, was gazetted a special economic zone with accompanying investment incentives for manufacturing tenants. Since the gazette, we have achieved a healthy net orderbook for industrial land which will be converted to land sales over the next couple of years.

Separately, we divested our entire 10.27% equity interest in Gallant Venture for a consideration of S$62 million. Disposing of Sembcorp Development's entire holding in Gallant Venture is in line with the Group's strategy to recycle capital.

India

Following a change in scenario for the development of Amaravati Capital City, our joint development company Amaravati Development Partners (ADP) and the State Government of Andhra Pradesh mutually agreed to terminate the master development of Amaravati Capital City Start-up Area. We intend to complete the dissolution of ADP in 2020.

Outlook

In Vietnam, foreign direct investment rose 6.7% in 2019 with the manufacturing and processing industry set to receive the largest amount of investments, comprising 65% of total investment pledges. While gross domestic product expanded 7.0% for the whole year, the economy slowed in the fourth quarter of 2019 due to a contraction in exports. The statistics reflect Vietnam's susceptibility to any slowdown in the global economy as US-China trade relations continue to pose uncertainty for manufacturers. Dampened growth in advanced economies such as the US, Europe and Japan which are traditional recipients of exports from Vietnam, may impact demand for industrial land in VSIPs.

In China, growth decelerated to 6.1% in 2019 on the back of higher trade tariffs to the US as well as flagging consumer confidence. The impact on manufacturing of low value-added products has been significant, with Chinese manufacturers seeking alternative production facilities in Asia. However, we expect demand in our Wuxi-Singapore Industrial Park to remain resilient, as tenants are in the higher value-added semiconductor sector. On the commercial and residential (C&R) front, we sold two plots of C&R land in SNEI which were recognised in 2019. However, land sales are expected to remain slow as the government has upheld property cooling measures and continues to regulate the release of C&R land for development.

In 2019, the Urban business recognised significant contribution from the sale of a residential development in China. Excluding this contribution, the Urban business is expected to provide steady profitability underpinned by its net orderbook. Operations in Vietnam and China may see challenges in the near term arising from US-China trade tensions but this is expected to be partially offset by better performance in Indonesia. The COVID-19 outbreak and its disruptions on manufacturing supply chains could further impact land sales as well as industrial and commercial leasing activities.

Board of Directors

Ang Kong Hua

Neil McGregor

Margaret Lui

Tan Sri Mohd Hassan Marican

Tham Kui Seng

Dr Teh Kok Peng

Ajaib Haridass

Nicky Tan Ng Kuang

Yap Chee Keong

Jonathan Asherson OBE

Dr Josephine Kwa Lay Keng

Nagi Hamiyeh

Ang Kong Hua

Chairman
Non-executive & Independent Director
Appointed February 26, 2010 E C N T

As Chairman, Mr Ang is responsible for leading the board, setting its agenda and ensuring its effectiveness in all aspects of its role. Mr Ang heads the board's Executive Committee, Executive Resource & Compensation Committee, Nominating Committee and Technology Advisory Panel.

A well-known corporate figure in Singapore, Mr Ang brings to Sembcorp a wealth of experience in the manufacturing and services sectors, including the chemicals, electronics, engineering and construction sectors. Currently, he serves on the board of GIC, which manages Singapore's external reserves, as well as the board of Southern Steel.

Mr Ang holds a BSc (Honours) in Economics from the University of Hull, UK.

Neil McGregor

Group President & CEO
Appointed April 1, 2017 E T

Mr McGregor is Group President & CEO of Sembcorp Industries. He is a member of the board's Executive Committee and Technology Advisory Panel. He is also a non-executive director on the board of Sembcorp Marine, a listed subsidiary of Sembcorp Industries.

Mr McGregor brings to Sembcorp a unique and varied background spanning business, operations and investment in the energy as well as infrastructure sectors across Europe, USA, Asia and Oceania. His rich international experience includes over a decade based in Singapore serving markets in the region. Previously, he also headed companies in India and Singapore as CEO including Singapore LNG Corporation and PowerSeraya Group. Prior to joining Sembcorp, Mr McGregor was the Head of Temasek International's Energy and Resources Group, Head of Australia and New Zealand, and Senior Managing Director of its Enterprise Development Group.

Mr McGregor holds a BEng (Honours) from the University of Auckland and an MBA in International Finance from the University of Otago in New Zealand. He also completed the Advanced Management Programme at INSEAD, France.

Past directorships in listed companies and major appointments 2017 – 2019:

- Certis CISCO Security
- Singapore LNG Corporation

Margaret Lui

Non-executive &
Non-independent Director
Appointed June 1, 2010 E C N

Mrs Lui is a member of the board's Executive Committee, Executive Resource & Compensation Committee, as well as its Nominating Committee.

She is CEO and a board member of Azalea Investment Management. In addition, Mrs Lui is a member of the Singapore Exchange's (SGX) listings advisory committee. She serves on the board of trustees and finance committee of the Singapore Institute of Technology and heads its investment committee. She also chairs the marine services supervisory committee of PSA International.

Mrs Lui holds a BAcc from the National University of Singapore (NUS). She attended the Advanced Management Program at the Wharton School of the University of Pennsylvania, USA.

Tan Sri Mohd Hassan Marican

Non-executive & Independent Director
Appointed June 16, 2010 C N

Tan Sri Mohd Hassan Marican serves on the board's Executive Resource & Compensation Committee and Nominating Committee.

He is Chairman of Sembcorp Marine, a listed subsidiary of Sembcorp Industries.

Tan Sri Mohd Hassan Marican was President and CEO of Malaysia's Petroliam Nasional (PETRONAS) from 1995 until his retirement in February 2010. He brings to the board over 30 years of experience in the energy sector, as well as in finance and management. He is Chairman of Singapore Power, Pavilion Energy, Pavilion Energy Trading & Supply, Pavilion Energy Singapore (formerly known as Pavilion Gas) and Lan Ting Holdings and a director of Sarawak Energy, Lambert Energy Advisory, Khazanah Nasional and mh Marican Advisory. He is also a senior international advisor at Temasek International Advisors.

Tan Sri Mohd Hassan Marican holds an honorary doctorate from the University of Malaya and is a fellow of the Institute of Chartered Accountants in England and Wales.

Past directorships in listed companies and major appointments 2017 – 2019:

- Regional Economic Development Authority of Sarawak

Board Committees:
E Executive A Audit R Risk C Executive Resource & Compensation N Nominating T Technology Advisory Panel

Board of Directors

Tham Kui Seng

Non-executive & Independent Director

Appointed June 1, 2011 E C

Mr Tham is a member of the board's Executive Committee and Executive Resource & Compensation Committee.

Formerly chief corporate officer of CapitaLand, Mr Tham brings to the board a strong background in management in various industries, including over a decade of experience in the real estate sector.

Mr Tham is a director of Banyan Tree Holdings, Avanda Investment Management and Sembcorp Properties.

Mr Tham holds a First Class Honours degree in Engineering Science from the University of Oxford, UK.

Past directorships in listed companies and major appointments 2017–2019:

- Global Logistic Properties
- Sembcorp Design and Construction
- Singapore Land Authority
- Straits Real Estate
- Temasek International Advisors
- The Straits Trading Company

Dr Teh Kok Peng

Non-executive & Independent Director

Appointed October 15, 2012 A R T

Dr Teh is a member of the board's Audit Committee, Risk Committee and Technology Advisory Panel.

Dr Teh is a senior advisor to China International Capital Corporation and a director of Fullerton Health Corporation, Astrea III, Astrea IV and Astrea V. He is Chairman of Azalea Asset Management, Lu International (Singapore) Financial Asset Exchange and NUS East Asian Institute. He is also a member of the Global Economic and Financial Advisory Council of Caisse de dépôt et placement du Québec (CDPQ) and an advisory director of Campbell Lutyens.

Previously, Dr Teh served as advisor to GIC's Group Executive Committee, chairman of GIC's China Business Group and Chairman of Ascendas. He was also formerly President of GIC Special Investments, Deputy Managing Director of GIC, Deputy Managing Director of the Monetary Authority of Singapore (MAS) and an economist at the World Bank.

Dr Teh holds a First Class Honours degree in Economics from La Trobe University, Australia and a PhD in Economics from the University of Oxford, UK. He also completed the Advanced Management Program at Harvard Business School, USA.

Past directorships in listed companies and major appointments 2017–2019:

- Dwell Capital
- NUS
- Oversea-Chinese Banking Corporation
- Temasek Foundation Connects

Ajaib Haridass

Non-executive & Independent Director

Appointed May 1, 2014 A R

Mr Haridass chairs the board's Risk Committee and is a member of the Audit Committee.

With 43 years of legal experience, Mr Haridass specialises in maritime law, and deals with commercial and banking litigation. Currently a consultant with Haridass Ho & Partners, a legal firm he founded in 1985, Mr Haridass is a panel member of arbitrators of the Singapore International Arbitration Centre, the Singapore Chamber of Maritime Arbitration and the Asian International Arbitration Centre. He is also an accredited principal mediator of the Singapore Mediation Centre and a senior accredited specialist (maritime and shipping law), Singapore Academy of Law. He is a commissioner for oaths, a notary public and a justice of the peace. He is also lead independent director of Nam Cheong.

Mr Haridass holds a Bachelor of Laws (Honours) degree from the University of London and is a qualified barrister-at-Law at the Honourable Society of the Middle Temple, UK.

Past directorships in listed companies and major appointments 2017–2019:

- Sembcorp Marine
- Small Claims Tribunal of the State Courts of Singapore

Nicky Tan Ng Kuang

Non-executive & Independent Director

Appointed November 1, 2015 E C N

Mr Tan is a member of the board's Executive Committee, Executive Resource & Compensation Committee and Nominating Committee.

He brings to Sembcorp rich experience in corporate finance, audit as well as mergers and acquisitions. Mr Tan currently runs nTan Corporate Advisory, a boutique corporate finance and corporate restructuring firm. Over the course of his career, he has been Partner and Head of Global Corporate Finance at Arthur Andersen Singapore and ASEAN, Partner and Head of Financial Advisory Services at PricewaterhouseCoopers Singapore, as well as chairman of Financial Advisory Services at PricewaterhouseCoopers Asia Pacific.

Mr Tan is a director of Singtel Innov8, Chloride Eastern Industries, Intellectual Property Office of Singapore as well as a director, executive committee member, and chairman of the audit & risk committee of the National University Health System. Mr Tan is a member of MOH Holdings' audit & risk committee. In addition, Mr Tan is a member of the Nee Soon Town Council and chairman of its investment & finance committee, as well as a member of Pei Chun Public School's management committee.

Mr Tan qualified as a chartered accountant in the UK. He is a member of the Institute of Chartered Accountants in England and Wales, the Institute of Singapore Chartered Accountants, as well as a fellow of the Singapore Institute of Directors.

Past directorships in listed companies and major appointments 2017–2019:

- Community Cancer Fund
- National Cancer Centre Research Fund

Yap Chee Keong

Non-executive & Independent Director

Appointed October 1, 2016 A R

Mr Yap chairs the board's Audit Committee and is a member of the Risk Committee.

Formerly the executive director of The Straits Trading Company and chief financial officer of Singapore Power, Mr Yap brings to the board both financial and audit expertise, as well as experience in industry sectors including energy, infrastructure and real estate. He is a director of companies such as Shangri-La Asia, Olam International, Citibank Singapore, Mediacorp, Certis CISCO Security and Ensign InfoSecurity.

Previously, Mr Yap served on the board of Singapore's Accounting and Corporate Regulatory Authority (ACRA) as well as on ACRA's Public Accountants Oversight Committee. He was a member of the working group convened by MAS, SGX and ACRA to review the Guidebook for Audit Committees in Singapore, as well as the panel convened by MAS, SGX, ACRA and the Singapore Institute of Directors, which formulated guidelines for board risk committees.

Mr Yap holds a BAcc from NUS and is a fellow of the Institute of Singapore Chartered Accountants and CPA Australia.

Past directorships in listed companies and major appointments 2017–2019:

- ACRA
- ARA Asset Management
- CityNet Infrastructure Management
- InterOil Corporation
- Malaysian Smelting Corporation
- Public Accountants Oversight Committee, ACRA
- The Straits Trading Company

Jonathan Asherson OBE

Non-executive & Independent Director

Appointed July 17, 2017 A R T

Mr Asherson is a member of the board's Audit Committee, Risk Committee and Technology Advisory Panel.

He brings to the board rich experience in regional strategy and business, as well as in the power and engineering industries. Over the course of his career, Mr Asherson has been non-executive Chairman of Rolls-Royce Singapore, regional director for ASEAN and the Pacific at Rolls-Royce and held various positions in Siemens' industrial power business in China, Malaysia, Germany and USA.

Mr Asherson is a director of Singapore International Chamber of Commerce, Genting Singapore and Tru-Marine. He sits on the board of the Advisory Council of Birmingham University, UK and is an advisory board member of Supply Chain and Logistics Academy. He is also a council member of the Singapore Business Federation and the Singapore National Employers' Federation.

He was previously Chairman and Vice-chairman of Singapore International Chamber of Commerce. He also formerly served as President of the British Chamber of Commerce and as a board member of the Singapore Economic Development Board. He was an advisory board member of the UK Department for International Trade (Southeast Asia). He has also been an advisor to the Singapore Institute of International Affairs and an advisory committee member for various educational and research institutes in Singapore and the UK. These include the Agency for Science, Technology and Research's (A*STAR) Science and Technology Advisory Council at the Engineering Research Institute @ NTU (ERI@N) and Nanyang Technological University (NTU) School of Mechanical and Aerospace Engineering. He also served on the Ngee Ann Polytechnic Aerospace Technology Advisory Committee and Nanyang Polytechnic Engineering Advisory Committee.

Mr Asherson qualified as a chartered engineer and holds a BSc (Honours) degree in Mechanical Engineering from Kingston University, UK.

Past directorships in listed companies and major appointments 2017–2019:

- Rolls-Royce Singapore

Board Committees:
E Executive A Audit R Risk C Executive Resource & Compensation N Nominating T Technology Advisory Panel

Board of Directors

Dr Josephine Kwa Lay Keng
Non-executive & Independent Director
Appointed August 1, 2018 T

Dr Kwa is a member of the board's Technology Advisory Panel.

Dr Kwa brings to the board rich experience in technology as well as research and development (R&D) across various industries, including energy and engineering. She is a member of the board and audit committee of A*STAR, as well as a member of the management board of NUS Energy Studies Institute. She is also a director of Southern Steel and Barghest Building Performance.

Dr Kwa was previously CEO of NSL and served in various other functions over her 23-year tenure with the company, including being its chief operating officer and Head of Technology, responsible for R&D, information technology, energy and environmental investments, and strategy. Dr Kwa chaired the National Energy Efficiency Committee for Industries in Singapore from 2000 to 2009 and continues to serve on the steering committee for the Singapore Certified Energy Manager Programme.

Dr Kwa holds a PhD and BSc (Honours) degree in Mechanical Engineering from the University of Leeds, UK.

Past directorships in listed companies and major appointments 2017 – 2019:

- Raffles Marina Holdings

Nagi Hamiyeh
Non-executive & Non-independent Director
Appointed March 3, 2020

Mr Hamiyeh is the Joint Head of Temasek's Investment Group. He is concurrently the Head of Portfolio Development. Mr Hamiyeh joined Temasek in 2005. Over the course of his career with Temasek, he has previously led the firm's natural resources, industrials, consumer and real estate investment teams and was Joint Head of the Enterprise Development Group as well as Head of Africa and Middle East, Australia and New Zealand. Mr Hamiyeh is a director of Dream International, Lebanese International Finance Executives, Olam International and Sheares Healthcare Group.

Prior to Temasek, Mr Hamiyeh was a banker with Credit Suisse First Boston's Energy Group. He began his career at Bain & Company.

Mr Hamiyeh holds a Master of Science degree in Civil and Environmental Engineering from Massachusetts Institute of Technology, as well as a Bachelor of Science degree in Civil Engineering from University of Texas.

Past directorships in listed companies and major appointments 2017 – 2019:

- Tana Africa Capital
- Tana Africa Investment Managers

Board Committees:
E Executive A Audit R Risk C Executive Resource & Compensation N Nominating T Technology Advisory Panel

Technology Advisory Panel


Ang Kong Hua


Neil McGregor


Dr Teh Kok Peng


Jonathan Asherson OBE


Dr Josephine Kwa Lay Keng


Prof Ng How Yong


Prof Lui Pao Chuen

Sembcorp's Technology Advisory Panel advises the company on digital and technological developments in line with our growth strategies.

The panel reviews and approves the vision and strategy for digital and technology developments at Sembcorp. It oversees the development and application of significant emerging as well as potentially disruptive technologies that can enhance Sembcorp's position as an integrated energy and urban player. It further ensures the appropriate management of specialised research and development (R&D) projects and systems for intellectual property creation and protection.

The panel also advises Sembcorp's leadership on technological trends and opportunities. Members of the panel help introduce new and emerging technologies or companies to the Group and regularly advise on topical issues and technologies in their respective fields of interest and expertise.

Ang Kong Hua
Chairman

BSc (Honours) in Economics, University of Hull, UK

Mr Ang chairs the Technology Advisory Panel and is also Chairman of the board. A well-known corporate figure in Singapore, he brings a wealth of experience in the manufacturing and services sectors, including the chemicals, electronics, engineering and construction sectors. He also serves on the boards of GIC and Southern Steel.

Neil McGregor

MBA in International Finance, University of Otago, New Zealand

BEng (Honours), University of Auckland, New Zealand

Advanced Management Programme, INSEAD, France

Mr McGregor is Group President & CEO of Sembcorp Industries. He brings to the company a unique and varied background spanning business, operations and investment in the energy and infrastructure sectors across Europe, USA, Asia and Oceania.

Mr McGregor's rich international experience includes over a decade based in Singapore serving markets in the region. Previously, he also headed companies in India and Singapore as CEO including Singapore LNG Corporation and PowerSeraya Group.

Prior to joining Sembcorp, he was the Head of Temasek International's Energy and Resources Group, Head of Australia and New Zealand, and Senior Managing Director of its Enterprise Development Group.

Dr Teh Kok Peng

PhD in Economics, University of Oxford, UK

BA (First Class Honours) in Economics, La Trobe University, Australia

Advanced Management Program, Harvard Business School, USA

Dr Teh sits on the board as a non-executive and independent director. He is a senior advisor to China International Capital Corporation and a director of Fullerton Health Corporation, Astrea III, Astrea IV and Astrea V. He is also Chairman of Azalea Asset Management, Lu International (Singapore) Financial Asset Exchange and the East Asian Institute at the National University of Singapore (NUS). He is also a member of the Global Economic and Financial Advisory Council of Caisse de dépôt et placement du Québec (CDPQ) and an advisory director of Campbell Lutyens.

Previously, Dr Teh served as advisor to GIC's Group Executive Committee, chairman of GIC's China Business Group and Chairman of Ascendas. He was also formerly President of GIC Special Investments, where he oversaw investments in infrastructure and international venture funds, among others.

Technology Advisory Panel

Jonathan Asherson OBE

BSc (Honours) in Mechanical Engineering, Kingston University, UK

Mr Asherson is a member of the board's Audit Committee and Risk Committee.

He brings rich experience in regional strategy and business, as well as in the power and engineering industries. Over the course of his career, Mr Asherson has been non-executive Chairman of Rolls-Royce Singapore, regional director for ASEAN and the Pacific at Rolls-Royce and held various positions in Siemens' industrial power business in China, Malaysia, Germany and USA.

Mr Asherson is a director of Singapore International Chamber of Commerce, Genting Singapore and Tru-Marine. He sits on the board of the Advisory Council of Birmingham University, UK and is an advisory board member of Supply Chain and Logistics Academy. He is also a council member of the Singapore Business Federation and the Singapore National Employers' Federation. He was previously Chairman and Vice-chairman of Singapore International Chamber of Commerce.

He also formerly served as President of the British Chamber of Commerce and as a board member of the Singapore Economic Development Board. He was an advisory board member of the UK Department for International Trade (Southeast Asia). He has also been an advisor to the Singapore Institute of International Affairs and an advisory committee member for various educational and research institutes in Singapore and the UK. These include the Agency for Science, Technology and Research's (A*STAR) Science and Technology Advisory Council at the Engineering Research Institute @ NTU (ERI@N) and Nanyang Technological University (NTU) School of Mechanical and Aerospace Engineering. He also served on the Ngee Ann Polytechnic Aerospace Technology Advisory Committee and Nanyang Polytechnic Engineering Advisory Committee.

Dr Josephine Kwa Lay Keng

PhD in Mechanical Engineering, University of Leeds, UK

BSc (Honours) in Mechanical Engineering, University of Leeds, UK

Dr Kwa sits on the board as a non-executive and independent director. Dr Kwa is a director of A*STAR, Southern Steel, Barghest Building Performance, as well as a member of the management board of NUS Energy Studies Institute. She was formerly CEO of NSL, and served in various functions during her 23 years as chief operating officer and Head of Technology within the NSL Group. As NSL's Head of Technology, Dr Kwa was responsible for the information technology, environment and R&D functions in the company.

Prof Ng How Yong

PhD in Environmental Engineering, University of California Berkeley, USA

BEng (First Class Honours) in Civil Engineering, National University of Singapore

Prof Ng is a Provost's Chair Professor of the NUS Department of Civil and Environmental Engineering, Director of the NUS Environmental Research Institute, as well as Director of the Sembcorp-NUS Corporate Laboratory. He has over 20 years of experience in biological wastewater treatment and membrane processes for water reuse and seawater desalination, and has served as a consultant on municipal wastewater treatment and reuse, industrial effluent treatment as well as seawater desalination in Singapore, China, Japan and the USA. Prof Ng is also a fellow of the Academy of Engineering Singapore and the International Water Association (IWA), vice-chairman of the management committee of the IWA Specialist Group on Membrane Technology, and President of the Environmental Engineering Society of Singapore.

Prof Lui Pao Chuen

MSc in Operations Research and Systems Analysis, Naval Postgraduate School, USA

BSc in Physics, University of Singapore

Prof Lui was formerly Singapore's Chief Defence Scientist and has several decades of experience in engineering, science and research. He is an advisor to Singapore's National Research Foundation and various government organisations. He sits on the boards of research institutes, corporations and technical organisations.

Prof Lui is a fellow of the Singapore Academy of Engineering and the Singapore National Academy of Sciences as well as an honorary fellow of the ASEAN Federation of Engineering Organisations. His accolades include the National Science & Technology Medal, the Institute of Physics Singapore's President's Medal, as well as the International Council on Systems Engineering's Pioneer Award. In addition, Prof Lui is the recipient of the Lifetime Engineering Achievement Award from the Institution of Engineers Singapore, the Defence Technology Medal (Outstanding Service) from the Ministry of Defence, as well as the Aviation Pioneer Award from the Singapore Institute of Aerospace Engineers.

Senior Executives

Neil McGregor
Group President & CEO

Graham Cockroft
Group Chief Financial Officer

Wong Weng Sun
President & CEO, Sembcorp Marine

Koh Chiap Khiong
Head, Singapore, SEA & China (Energy)

Vipul Tuli
Head, India (Energy)

Ng Meng Poh
Head, Global Operations

Nomi Ahmad
Head, United Kingdom (Energy)

Sriram Narayanan
Head, Gas & Power

Tan Cheng Guan
Head, Renewables & Environment

Namesh Hansjee
Head, Merchant & Retail

Kelvin Teo
CEO, Sembcorp Development

Yam Ah Mee
CEO, Sembcorp Specialised Construction

Yip Pak Ling
Senior Vice President & Mint Director, Singapore Mint

Matthew Friedman
Chief Digital Officer

Looi Lee Hwa
General Counsel

Kenneth Lui
Chief Risk Officer

Wendy Foong
Chief Human Resource Officer

Environmental, Social and Governance Review

About this Report

Reporting Framework

Our Sustainability Report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option. It is guided by the Singapore Exchange Sustainability Reporting Guide as well as the Ten Principles of the United Nations (UN) Global Compact. Our climate-related disclosures are guided by the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) as well as CDP's (formerly Carbon Disclosure Project) Climate Change programme. Our previous report was published in March 2019. There are no significant changes from previous reporting periods in the list of material sustainability issues and boundaries.

Materiality

Material sustainability issues have been identified in line with the GRI Standards for sustainability reporting. In our 2016 materiality assessment, stakeholders were identified in accordance with the AA1000 Stakeholder Engagement Standard. Our material sustainability issues are reviewed and endorsed by our Sustainability Steering Committee and the board annually.

For more information on our approach to stakeholder engagement and materiality, please visit Our Approach page in the Sustainability section of our website.

Reporting Scope

- Our report provides information on Sembcorp as well as its subsidiaries and covers the period from January 1 to December 31, 2019
- It excludes operations, joint ventures, partnerships and associates where Sembcorp does not have management and / or operational control, with the exception of greenhouse gas (GHG) emissions data. In line with the methodology used for the development of our carbon emission targets, we report our GHG emissions and GHG emissions intensity using an equity share approach
- Our Marine business, Sembcorp Marine, is separately listed and reports its activities in a separate Sustainability Report
- New acquisitions and subsidiaries are given one year upon the completion of construction or agreement to integrate their reporting systems with that of the Group. Thereafter, their sustainability data will be reported externally once a full calendar year of data is collected
- Data on health and safety as well as community investments from our Energy assets under construction is included
- Data pertaining to entities divested during the year is excluded from our report

Assurance

Our key sustainability data is independently assured by PricewaterhouseCoopers LLP.

Changes in reported data could occur arising from areas such as changes in material sustainability issues, boundaries or information, including the design, definitions and use of disclosures in the report. Upon such occurrences, current disclosures are presented alongside the appropriate restated comparative or historic data.

For the Independent Limited Assurance Report, please refer to Our Performance: 2019 Performance Data and Commentary report in the Sustainability section of our website.

Sustainability Contact

We welcome feedback on our sustainability issues and reporting at sustainability@sembcorp.com.

2019 Highlights

Generated
S$899 million
of revenue from the Renewables and Environment business

Generated over
4.5 million MWh
of renewable electricity in 2019, equivalent to powering over one million households[1] in Singapore

Avoided over
3.9 million tonnes
of carbon dioxide equivalent emissions with energy generated by our renewable assets

Reclaimed around
74 million m^3
of wastewater for industrial use. This was a higher than usual volume, driven by stronger customer demand

Provided over
39,000 people
with access to potable water for their daily needs through our community investment programme, the Sembcorp Water Initiative

Achieved
74 %
recycling rate for fly ash produced by our coal-fired power plants in India

Converted over
360,000 tonnes
of waste into energy in Singapore

Planted over
800,000 trees
to help absorb air pollutants from the environment

Contributed over
8,500
volunteer hours
in local communities

Participation in sustainability ratings

- CDP (formerly known as the Carbon Disclosure Project)
- Dow Jones Sustainability Asia Pacific Index
- Energy Intelligence's Top 100 Green Utilities Report
- FTSE4Good Index Series[2]
- MSCI ESG Ratings[3]
- Sustainalytics

[1] Based on the average energy consumption of a four-room public housing unit in Singapore. Source: Energy Market Authority, Singapore, 2017

[2] FTSE Russell (the trading name of FTSE International Limited and Frank Russell Company) confirms that Sembcorp Industries has been independently assessed according to the FTSE4Good criteria, and has satisfied the requirements to become a constituent of the FTSE4Good Index Series. Created by the global index provider FTSE Russell, the FTSE4Good Index Series is designed to measure the performance of companies demonstrating strong environmental, social and governance practices. The FTSE4Good indices are used by a wide variety of market participants to create and assess responsible investment funds and other products

[3] The use by Sembcorp Industries of any MSCI ESG Research LLC or its affiliates (MSCI) data, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement, recommendation, or promotion of Sembcorp Industries by MSCI. MSCI services and data are the property of MSCI or its information providers, and are provided 'as-is' and without warranty. MSCI names and logos are trademarks or service marks of MSCI

About this Report

Key Performance Indicators

	2019	2018	2017
Environmental			
Climate Change			
Direct GHG emissions[1] (Scope 1) *(million tCO_2e)*	**26.0**	23.6	22.2
GHG emissions intensity[1] *(tCO_2e/MWh)*	**0.54**	0.55	0.54
Renewable energy generation capacity *(MW)*	**2,601**	2,569[r]	2,181[r]
Resource Management			
Water withdrawal[2] *(million m^3)*	**1,971.3**	1,856.2	1,856.4
Net water consumption[3] *(million m^3)*	**46.1**	54.3	49.3
Water discharge[2] *(million m^3)*	**1,925.3**	1,801.9	1,807.1
Waste generated[4] *(thousand tonnes)*	**1,894.3**	1,713.3	1,452.7[e]
Hazardous waste	**51.3**	39.9	10.0
Non-hazardous waste	**1,843.0**	1,673.4	1,442.7
Local Environmental Protection			
Significant spills[5]	**0**	0	0
Social			
Health and Safety[6]			
Number of fatalities[7]	**2**	1	3
Lost time injury rate[8] *(number per million man-hours)*	**1.1**	0.5	1.1
Accident severity rate[9] *(number per million man-hours)*	**473.1**	137.0[r]	263.4[r]
People			
Employee turnover[10] *(%)*	**12.1**	11.6	10.1
Training hours[11] *(average hours per employee)*	**29.4**	25.2	23.8
Community			
Community contributions *(S$ million)*	**1.4**	1.1	5.5

Commentary on the data and other performance data, is available in this report, as well as in the Sustainability section of our website.

Notes: Please refer to the Reporting Scope section on page 54 for details on our reporting coverage.

1 Emissions data covers entities that produce GHGs from the combustion of fossil fuels consumed by our Energy business' assets. It excludes emissions from our anaerobic wastewater treatment plants, chemical waste and maintenance and servicing equipment. Emission factors used are from the IPCC Guidelines for National Greenhouse Gas Inventories for 2006. Only CO_2, CH_4 and N_2O emissions are included in the calculation of direct GHG emissions. Global warming potential factors used are from the IPCC Fifth Assessment Report. A 100-year time horizon is applied

2 Water withdrawal includes all water we extract from the sea, surface, ground or third party sources such as wastewater from customers or treated water from water utilities. The calculation methodology for water withdrawal and discharge was updated to align to the GRI 303: Water and Effluents 2018 Standard

3 Net water consumption is defined as water consumed by our own sites and administrative offices

4 Data for waste generated excludes waste that is collected and incinerated for our customers

5 A significant spill refers to an accidental release of a hazardous substance which results in severe and / or persistent environmental damage, and is classified as having major or massive impact in our Group HSSE Hazard Identification and Risk Management Standard. Significant spills are reported upon occurrence of the incident

6 Health and safety data covers both assets in operation and under construction

7 Data covers employees and contractors as well as members of the public. Details of fatalities are reported on page 70

8 The lost time injury rate is defined as the number of fatalities and lost work day cases per million man-hours worked. It includes high-consequence work-related injuries, which refer to injuries that result in permanent disability and / or injuries that require long term follow up such as physiotherapy treatment and where the individual is not expected to recover fully to pre-injury health status within six months

9 The accident severity rate is defined as the number of lost work days per million man-hours worked. We record lost time due to one fatality as 6,000 lost work days, in line with guidelines by the US National Institute for Occupational Safety and Health

10 Data covers both voluntary and involuntary turnover of permanent employees

11 Data covers permanent and contract employees

r Indicates restated figure. Adjustments were made to 2017 and 2018 renewable energy generation capacity figures for conversion of capacity in Singapore from MWp to MW. Accident severity rate was revised to include fatalities

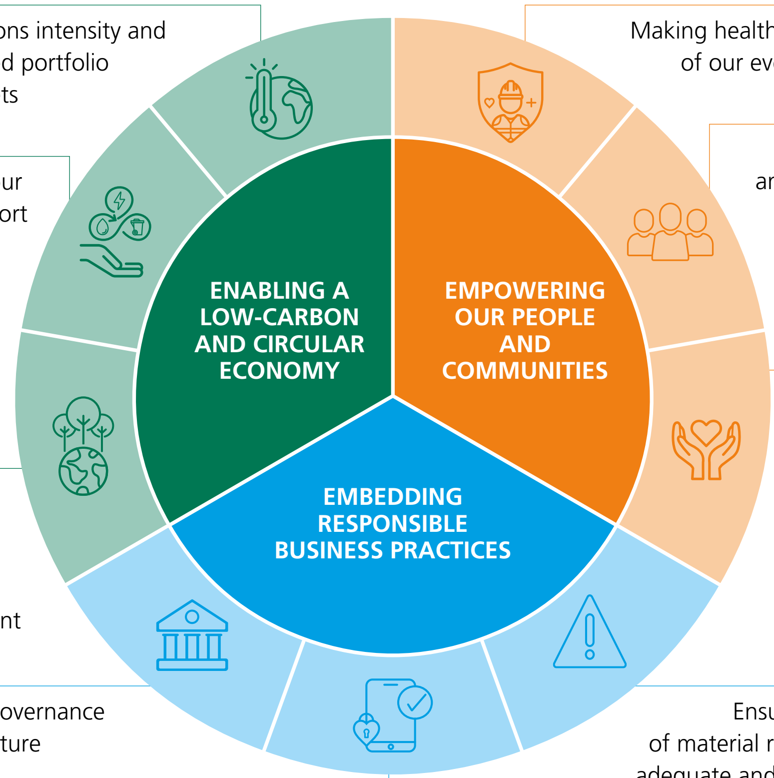
e Indicates data based on management's best estimates; we have since refined the accuracy and consistency of the data

Managing Sustainability

Sembcorp has long held a strong commitment to sustainability. We believe that responsible corporates can play a role as agents of transformation for a sustainable future. We see sustainability in our company as inextricably linked to our ability to deliver long-term value and growth to our stakeholders.

Our Sustainability Framework

Sustainability is one of the key pillars of our business strategy that underpins our value creation process. As a Group, we want to enable a low-carbon and circular economy, empower our people and communities, and embed responsible business practices throughout our organisation. These ambitions in turn support the UN Sustainable Development Goals (SDGs).



Climate Change
Reducing our GHG emissions intensity and moving towards a balanced portfolio of low-carbon energy assets

Resource Management
Growing and innovating our business solutions to support a circular economy while ensuring more efficient operations to avoid or minimise the unnecessary use of resources

Local Environmental Protection
Minimising negative environmental impacts and ensuring the highest standards of environmental management

Health and Safety
Making health and safety an integral part of our everyday business and culture

People
Creating a values-based and performance-led culture. Providing an engaging employment experience where our people can grow and excel

Community
Contributing to the sustainable development of our communities through engagement, partnerships and investing in initiatives that make a lasting positive impact

Corporate Governance
Maintaining an effective governance and decision-making structure

Ethical Business and Compliance
Fostering an ethical culture and conducting our business with integrity, and ensuring we comply with all legal and regulatory requirements

Risk Management
Ensuring effective identification of material risks and putting in place an adequate and effective risk management and internal control system

Driven by Our Purpose

Our purpose and passion is to do good and play our part in creating a sustainable future. We deliver energy and innovative solutions that support development and create value – for our stakeholders and communities.

Underpinned by Our Values

Creative Insight
We innovate and solve complex problems

Committed
We walk the talk, do the right thing and deliver on our promises

Connected
We value our people, forge strong partnerships and care for our communities and the environment

Managing Sustainability

Supporting the SDGs

The SDGs and their accompanying targets were ratified by 193 states at the UN Summit in September 2015. The scale and ambition of the SDGs mean they cannot be achieved by governments alone, and require the collective effort of businesses, organisations and all levels of society. Sembcorp believes in playing its part to help meet these goals. We have identified SDG 6 and 7 as priority SDGs to focus on. These encapsulate areas that our businesses have significant impact on and can make the greatest contributions to sustainable development by 2030.

Goal 6: Clean Water and Sanitation

Our suite of water solutions for industrial customers helps to reduce the use of freshwater and potable water

Target: We aim to grow our water reclamation volume to 63 million m^3 by 2022

Goal 7: Affordable and Clean Energy

As an integrated energy player, we aim to help advance the global energy transition. We are committed to increasing our share of renewable assets, while managing existing thermal assets to operate at optimal efficiency

Target: We aim to grow our renewable energy capacity to 4,000MW by 2022

For more information on our support of the SDGs, please visit Our Approach page in the Sustainability section of our website.

Sustainability Governance

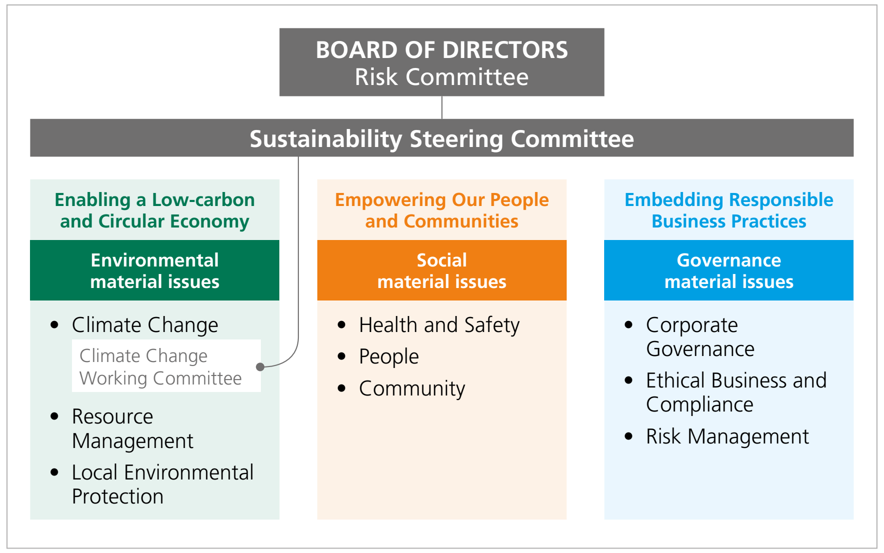
Sembcorp's board of directors oversees the business affairs of the Group. The main duties of the board include providing leadership on Sembcorp's overall strategy which takes into consideration our material sustainability issues. Sembcorp also has a Sustainability Steering Committee that provides strategic direction for managing sustainability-related risks and opportunities. The committee is chaired by our group chief financial officer, and comprises senior executives who are accountable for the management of Sembcorp's material sustainability issues.

Board Statement

Sembcorp's board of directors is collectively responsible for the long-term success of the company. The board considers sustainability issues as part of its strategy formulation. It has determined Sembcorp's material ESG factors, and exercises oversight in the management and monitoring of our material ESG factors.

To ensure sustainability is embedded into the business, environmental, social and governance (ESG) components are included in the performance scorecard of our leadership team, who are responsible for cascading action for these components throughout the organisation. With this, the performance incentives of our senior executives specifically take into account ESG performance and the achievement of set targets.

For more information on our sustainability-related policies, please visit the Reports & Policies page in the Sustainability section of our website.



Memberships and Associations

Signatory to the United Nations Global Compact

Supporter of the Financial Stability Board's Task Force on Climate-related Financial Disclosures

Member of the founding consortium of the GRI ASEAN Regional Hub which opened in Singapore in 2019

Our Material ESG Issues

Enabling a Low-carbon and Circular Economy

Climate Change

Our Priorities

Reducing our greenhouse gas (GHG) emissions intensity and moving towards a balanced portfolio of low-carbon energy assets

Relevant SDGs

7, 9, 13

How We Did in 2019

Our renewables capacity in 2019 was 2,600MW

Our GHG emissions intensity was slightly lower than in 2018. We are committed to meeting our targets by 2022

> Pages 59–61

Resource Management

Our Priorities

Growing and innovating our business solutions to support a circular economy while ensuring more efficient operations to avoid or minimise the unnecessary use of resources

Relevant SDGs

6, 11, 12

How We Did in 2019

We reclaimed around 74 million m^3 of water

> Pages 61–66

Local Environmental Protection

Our Priorities

Minimising negative environmental impacts and ensuring the highest standards of environmental management

Relevant SDGs

3, 6, 12

How We Did in 2019

We registered zero significant spill incidents in 2019

We paid significant fines totalling S$10.5 million in 2019. Details of fines and sanctions can be found on page 78 of this report

> Pages 66–67

Climate Change

Why this is material

Climate change poses an enormous threat to the safety and well-being of entire populations as well as the global economy. In particular, as an energy producer, our energy generation activities release GHG emissions that contribute to climate change. In addition, climate change also poses potential regulatory, technological, physical and reputational risks to our business. However, we recognise that in spite of these challenges, we are also uniquely positioned to leverage opportunities that have arisen from actions in response to climate change.

For more information on our Climate Change Strategy, please visit the Reports & Policies page in the Sustainability section of our website.

Our approach

In 2018, we launched our Climate Change Strategy, which outlines megatrends in the global energy transition, why climate change matters to Sembcorp and how we are addressing climate-related risks and opportunities.

Our climate-related disclosures are guided by the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). TCFD is a market-driven initiative, which articulates a set of voluntary climate-related financial risk disclosures for use by companies.

Our TCFD disclosure is available in the Our Focus Areas: Environment page in the Sustainability section of our website.

Performance

Progress on Our Renewables Growth

Our total renewables capacity accounts for over 20% of our total energy capacity.

We improved our CDP Climate Change score from C to B- in 2019. We were the only Singaporean company to feature in the global Top 100 Green Utilities ranking by Energy Intelligence, and were placed 60th in the list.

Managing Our Emissions

Direct GHG emissions (Scope 1) are from sources owned or controlled by the company. Our GHG emissions data is reported using an equity share approach. Our Scope 1 GHG emissions and GHG emissions intensity was 26 million tonnes of CO_2 equivalent (tCO_2e) and 0.54 tonnes of CO_2 equivalent per megawatt hour (tCO_2e/MWh), respectively. The increase in absolute emissions was due to the inclusion of data from our gas-fired power plants in Bangladesh and Myanmar, our small-scale power generation assets in the United Kingdom (UK), as well as an increase in electricity generation at our Indian thermal power plants. The slight decrease in our overall GHG emissions intensity was due to higher renewable energy generation and gas-fired electricity production. We remain committed to meeting our 2022 GHG emissions intensity target of 0.42 tCO_2e/MWh.

Supporting Singapore's Solar Ambition

Sembcorp Solar staff inspecting our rooftop solar panels

Sembcorp is greening its portfolio and helping to drive the adoption of renewables by partnering industry leaders to lead the charge together. This is in line with our strategy to enable a low-carbon future and support Singapore's target to produce enough solar energy to power about 350,000 homes annually by 2030. In 2019, we expanded our solar business in Singapore, securing an additional 63MWp of solar capacity. This brings our total solar capacity in operation and under development in Singapore to 180MWp.

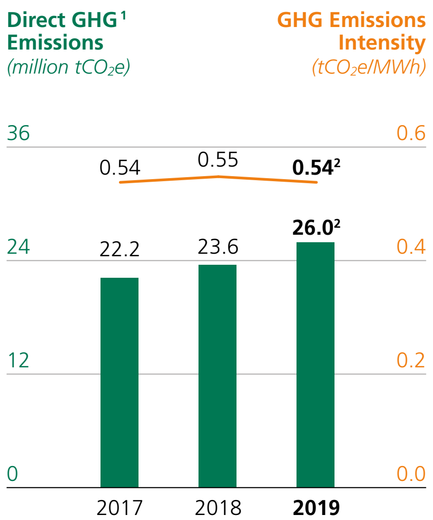
We report emissions from the combustion of biomass separately, in accordance with the Global Reporting Initiative (GRI) Standards. Our global biogenic emissions amounted to approximately 531 thousand tCO_2e in 2019, compared to approximately 446 thousand tCO_2e the year before.

Indirect GHG emissions (Scope 2) are from purchased electricity, steam, heating and cooling. We report Scope 2 GHG emissions from the majority of our plants. Our Scope 2 emissions amounted to over 303 thousand tonnes or 0.3 million tCO_2e. The increase in our Scope 2 emissions is largely due to the expansion in our reporting scope.

Other indirect GHG emissions (Scope 3) are generated as a result of the company's activities but are not derived from sources controlled or owned by Sembcorp. We began measuring Scope 3 GHG emissions in 2019, starting with the emissions from the use of natural gas sold to our customers. Our Scope 3 emissions amounted to 3.8 million tCO_2e[1].

[1] Emissions are calculated using the Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories for 2006 emission factors. Data is calculated on the assumption that all gas sold is combusted

Direct GHG Emissions (Scope 1) and GHG Emissions Intensity

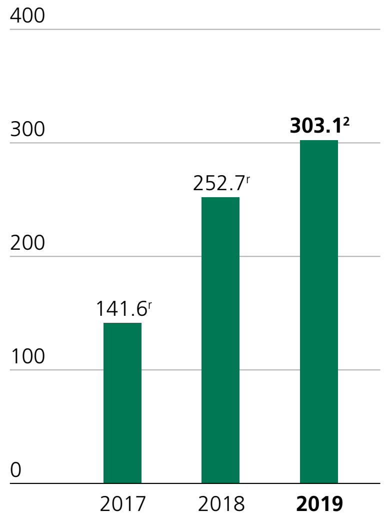


[1] Emissions data covers entities that produce GHGs from the combustion of fossil fuels consumed in our Energy business' assets. It excludes emissions from our anaerobic wastewater treatment plants, chemical waste and maintenance and servicing equipment. Emission factors used are from the IPCC Guidelines for National Greenhouse Gas Inventories for 2006. Only CO_2, CH_4 and N_2O emissions are included in the calculation of direct GHG emissions. Global warming potential factors used are from the IPCC Fifth Assessment Report. A 100-year time horizon is applied. Base year is set to 2017 to compare our Scope 1 GHG emissions intensity over time. Our base year reflects the year we developed our Climate Change Strategy and correspondingly set our GHG emissions intensity targets

[2] Includes data from our Urban business

Indirect GHG Emissions[1] (Scope 2)

(thousand tCO_2e)



[1] Indirect GHG emissions include location-based data for all Energy business' assets. In Singapore our operations purchase energy from our own assets; to avoid double counting, the emissions resulting from these have been accounted for under Scope 1 GHG emissions. CO_2, CH_4 and N_2O emissions are included in the calculation of indirect GHG emissions, except for India where their grid emission factor only takes into account CO_2. Emission factors are taken from the International Energy Agency, Ministry of Energy of Chile, Central Electricity Authority of India, and the UK Department for Environment, Food & Rural Affairs. Emissions relating to heating have been excluded. We are in the process of setting the base year for Scope 2 emissions to compare our performance over time

[2] Includes data from the import of steam, our municipal water businesses in Southeast Asia, our administrative offices in key markets, as well as our Urban business

[r] Indicates restated figure. The reason for the restatement is provided in our 2019 Performance Data and Commentary report in the Sustainability section of our website

Resource Management

Why this is material

Global population growth coupled with rapid urbanisation and industrialisation have led to an unprecedented demand for critical resources. This has underscored the need for us to reduce the unnecessary use of resources while pursuing innovations that support a circular economy. As an integrated energy and urban player, Sembcorp is uniquely positioned to help others on the journey towards sustainable development.

We have identified three key areas under resource management:

- Energy management
- Water and wastewater management
- Waste management

In each area, we seek to optimise resource use for our customers and in our own operations.

Our approach

Energy Management

The challenge for the energy sector is to meet growing energy needs, with fewer emissions. While we are taking steps to green our portfolio, this process takes time. In the meantime, we are optimising the efficiency of our power assets.

The Sembcorp Global Asset Management System enables process optimisation, troubleshooting and predictive analytics, and consolidates real-time operational data from our global assets. The system shortens the lead time required to identify and resolve complex issues, leverages digital solutions to improve cost-effectiveness and enables best practice sharing across the Group.

In 2019, Sembcorp planted 19 species of flora around our thermal operations in India with a total of over 130,000 saplings across some 180 acres. To date, we have contributed a total of 32 flora species and over 800,000 saplings across nearly 750 acres, which is equivalent to approximately 416 football fields. This has helped to create a "green belt" to restore land degradation while absorbing air pollutants from the atmosphere

Innovative Technology as a Key Differentiator for Sembcorp

Innovative and practical technologies are key differentiators for our business. For example, Sembcorp Solar employs the use of an online monitoring system that tracks the performance of its solar assets across Southeast Asia. The system enables the identification and measurement of real-time performance indicators to ensure that its assets are operating optimally. Sembcorp Solar customers can also access an online application, which provides them with a visual representation of the performance of their rooftop solar panel installations.

Sembcorp Solar's online monitoring system

In India, we introduced our Virtual Brain platform, an analytics-based digital asset management platform that enables the business to monitor data remotely. It provides information from our renewable energy sites across seven states, supporting our operations with performance monitoring, forecasting, real-time condition monitoring and anomaly detection.

Virtual Brain platform for wind assets in India

Energy efficiency parameters are embedded in our plant operation management systems and monitored daily. Monthly technical forum discussions are conducted by our operations teams to facilitate knowledge sharing of best practices on operational and efficiency issues.

In addition to managing our own assets, Sembcorp seeks to empower customers to achieve their own sustainability targets, through the application of technology and integrated solutions.

Water and Wastewater Management

Water is a precious resource. Our aim is to ensure that all our interactions with, and the usage of, water resources are responsibly managed. We are committed to integrating environmental protection and stewardship into our operations to help mitigate environmental risks and support water conservation.

As a water solutions provider, Sembcorp uses water for a number of purposes. In addition to consuming water in our own operations, we also supply water and associated water services to our customers. We withdraw water from a variety of sources including the sea, water bodies on the surface such as rivers and lakes, ground and third party sources such as wastewater from our customers or treated water from water utilities. We are committed to ensuring that any effluent is treated in line with regulatory discharge standards.

Where required, environmental impact assessments are conducted in accordance with national and / or international standards and methodologies, to understand the effect our activities have on the local environment, including water bodies. Recommendations from these assessments are then incorporated into the design, construction and operation of new plants.

Power plants use large amounts of water for cooling purposes. Almost 99% of the water we withdraw for such purposes is seawater, which minimises the need for freshwater and groundwater. In some of our power plants, we employ closed loop cooling water systems to further minimise the need for seawater.

Our specialised water solutions for industries enable us to treat multiple streams of industrial wastewater directly from source, without the need for pre-treatment on the part of our customers. This helps customers to focus on their core business, and allows us to leverage different wastewater influent profiles to further optimise the wastewater treatment process. In some cases, a proportion of treated water is channelled for reclamation and re-supplied to customers for their industrial processes – thus forming a closed loop which minimises liquid discharge and helps to conserve water.

Supporting the UK's Transition to Renewables

Sembcorp Energy UK's flexible gas-fired generation plants (top) and battery energy storage system (above)

In August 2019, over one million people in the UK were left without electricity for up to 45 minutes, after a lightning strike caused two large generators that power the national grid to trip which led to a plunge in grid frequency. Within minutes of the blackout, Sembcorp Energy UK's fleet of rapid response gas-fired power plants swung into action to make over 600MW of electricity available, which supported the restoration of power to the grid.

We operate the UK's largest distributed energy portfolio that comprises 813MW of small-scale, fast-ramping power generation assets and rapid response batteries in operation and under construction. In 2019, the first 60MW of our battery energy storage system commenced operations in the UK. These are used by the national grid electricity system operator to dynamically manage the system in real-time. Our batteries function like the cruise control in a car, automatically increasing or decreasing their output to ensure that the system frequency remains consistently within safe limits, thus reducing the risk of a power cut.

With the growth of renewables in the UK's energy mix, flexible rapid response gas engines and battery energy storage systems will play increasingly important roles to help address the intermittency of renewables by bridging supply gaps and ensuring the reliability of power supply.

In water-stressed regions such as Oman and the United Arab Emirates, our large-scale integrated power and desalination plants use multi-stage flash distillation and reverse osmosis to provide high-quality water to meet municipal and industrial needs.

Waste Management

Tackling the challenge of waste management requires a circular economy approach, including reduction in waste generation and exploring opportunities to reuse resources.

For example, Sembcorp operates energy-from-waste plants in Singapore and the UK, where waste is used as feedstock for power generation. In Singapore, this waste is collected by our solid waste management business. In addition, the majority of fly ash generated as a by-product in our coal-fired power plants in India is recycled into cement and bricks.

We actively seek to reduce the volume of sludge generated in our industrial wastewater treatment operations. Methodologies include anaerobic sludge digestion which involves a series of biological processes that breaks down sludge and reduces sludge volume, while also generating biogas which is channelled towards the production of steam and electricity. In addition, non-hazardous sludge is converted into useful products such as bricks or plant fertiliser where possible.

Performance

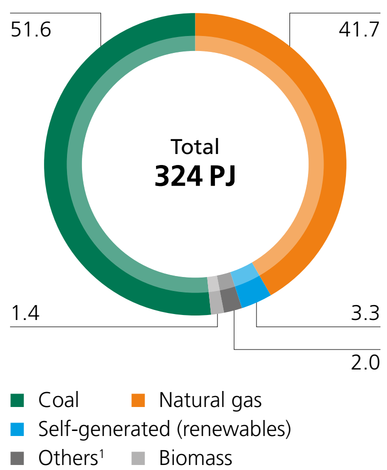
Energy Management

We consumed 324 petajoules (PJ) of energy in 2019. We set internal targets for our plants to improve operational performance and efficiency.

This year, our global energy and water facilities undertook a total of 22 energy optimisation projects that resulted in the reduction of nearly 29,000MWh of electricity[1].

[1] Based on projected annualised energy savings

Energy Consumption by Fuel Type *(%)*



[1] Others includes diesel, petrol, fuel oil, chemical waste, solid waste as well as imported electricity and steam

Water and Wastewater Management

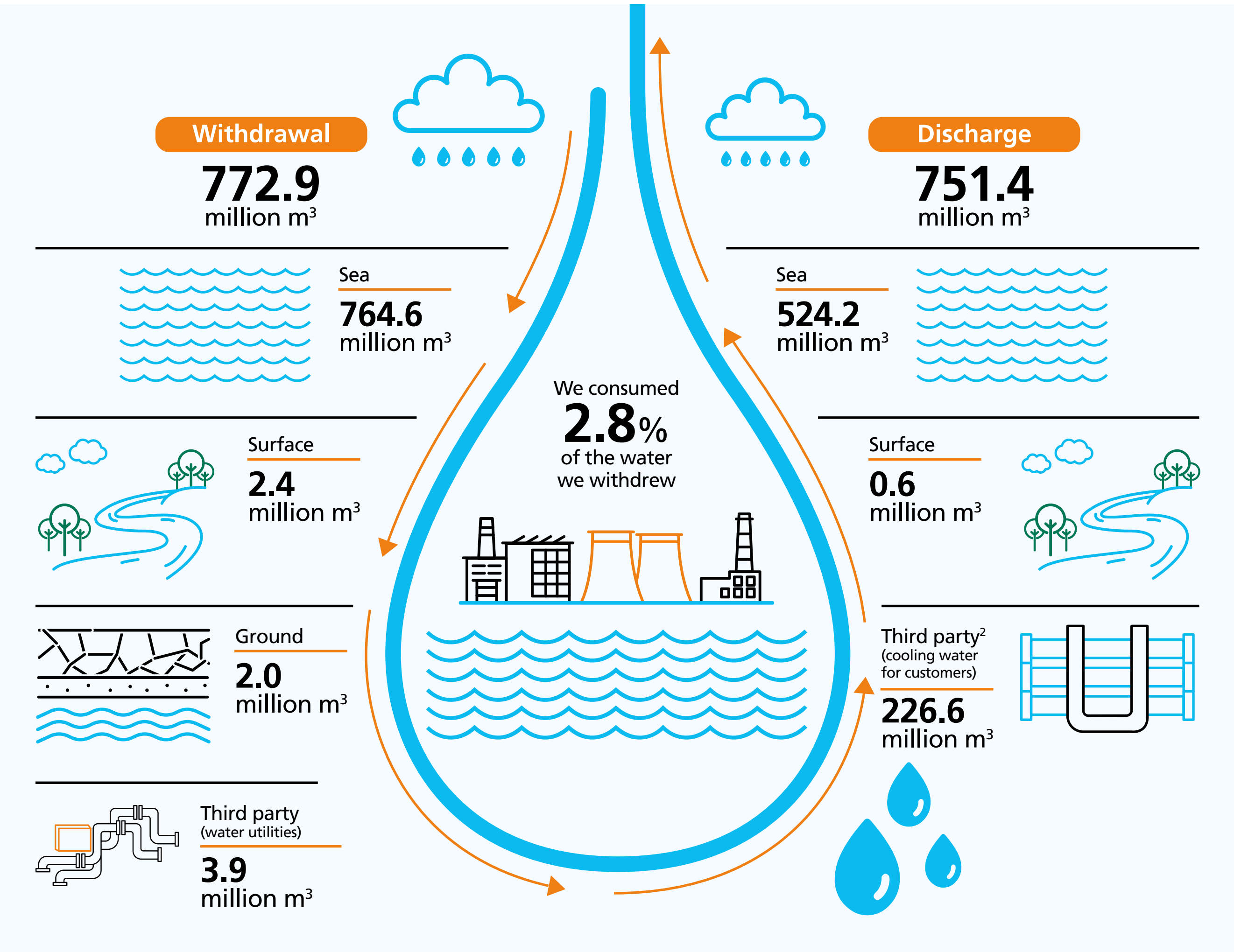
We revised our disclosures for water to begin aligning with the new GRI 303: Water and Effluents 2018 Standard.

For the GRI-compliant disclosure, please refer to Our Performance: 2019 Performance Data and Commentary report in the Sustainability section of our website.

The infographics that follow provide a summary of our water interactions across our Energy businesses and markets. In adopting the GRI Standards, we have defined the terms as follows:

- **Water withdrawal**: includes all water we extract from the sea, surface, ground or third party sources such as wastewater from our customers or treated water from water utilities
- **Water discharge**: includes all water that is discharged from our operations to various destinations including the sea, surface and third parties such as customers
- **Water consumption**: comprises the water we use in our own operations and administrative buildings. It excludes water that we withdraw and treat for supply to customers

Water Flow of Our Energy Generation Assets[1]



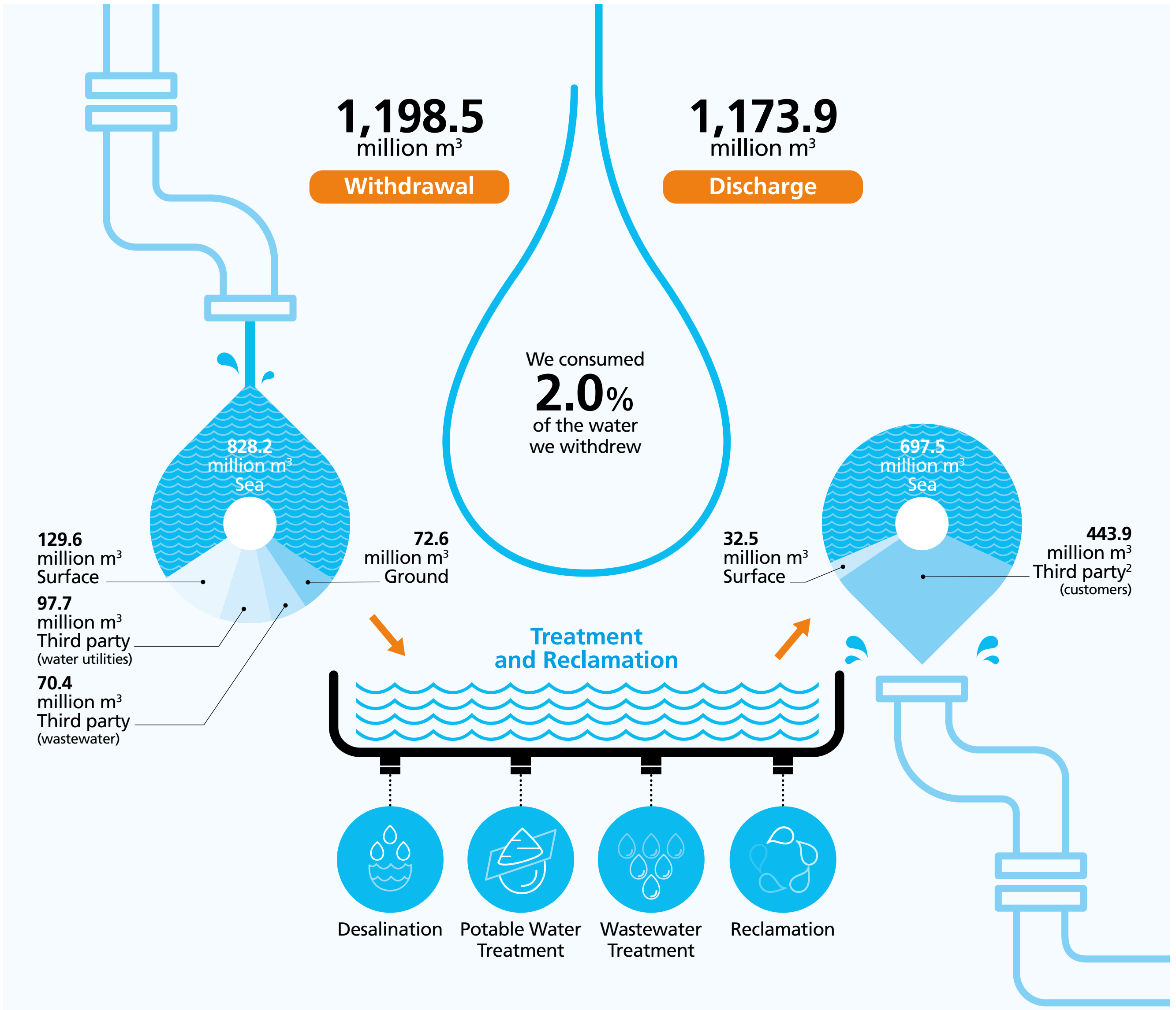
[1] Excludes data from our gas import and retail business, solid waste management business in Singapore, as well as our administrative offices

[2] Refers to cooling water we supply to customers

Our energy generation assets withdrew nearly 773 million m³ of water in 2019:

- 98.9% was seawater that was used for plant cooling purposes
- 0.3% was surface water that was used for plant cooling purposes
- 0.3% was groundwater that was used for cooling purposes. Moving forward we are developing new water intake infrastructure to withdraw surface water instead of groundwater
- 0.5% came from water utilities and was used for our operations

Water Flow of Our Water Assets[1]



[1] Excludes data from our gas import and retail business, solid waste management business in Singapore as well as our administrative offices

[2] Third party refers to the provision of treated and reclaimed water to municipal, industrial and other customers

Our water assets withdrew over 1,198 million m³ of water in 2019:

- 69.1% was seawater and was used to produce desalinated water
- 10.8% was surface water, the majority of which was used to produce water for municipal customers
- 8.1% was water from water utilities, of which more than half was treated wastewater that we reclaimed and supplied to customers
- 5.9% was wastewater from our customers. Out of the total volume of wastewater we treated, we reclaimed approximately 16% which was supplied to customers
- 6.1% was groundwater, 100% of which was treated and supplied to municipal customers

We reclaimed around 74 million m³ of water in 2019, driven by stronger customer demand.

In 2019, we undertook a water optimisation project that led to improved efficiency and a projected annualised reduction of 35,000m³ of water used.

We also provided access to drinking water to over 39,000 people in India and Myanmar through our community investment projects.

Our Material ESG Issues

Helping to Make Recycling in Singapore *'ezi'*

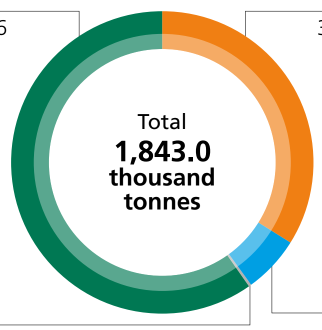
Dr Amy Khor, Senior Minister of State, MEWR (centre) with Mr Neil McGregor, Group President and CEO of Sembcorp Industries, and other dignitaries at the official launch of the *'ezi'* app in November 2019

In November 2019, Sembcorp launched the *'ezi'* recycling mobile application. The initiative aimed to improve recycling in Singapore and was part of a nationwide push towards reducing waste. A recent survey conducted by the Ministry of Environment and Water Resources (MEWR) highlighted the need to better educate residents on the different types of recyclable items and the need to make recycling more convenient.

To help address these gaps, the *'ezi'* mobile app adopted a two-pronged approach to recycling. Using the app, residents could arrange for their recyclables to be collected at their doorstep, in exchange for a cash incentive. The app also included an interactive educational module on recycling.

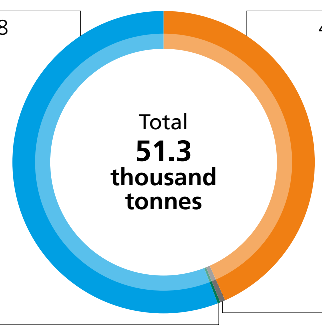
The pilot programme was rolled out to selected households in the Woodlands zone in the north of Singapore. As of end 2019, the app was downloaded nearly 7,500 times and had helped to facilitate the collection of over 10,000 kilogrammes of recyclable waste.

Disposal Method for Non-hazardous Waste[1,2] *(%)*



- Recycling, reuse, composting
- Ash pond
- Landfill
- Others: incineration and on-site storage

Disposal Method for Hazardous Waste[1] *(%)*

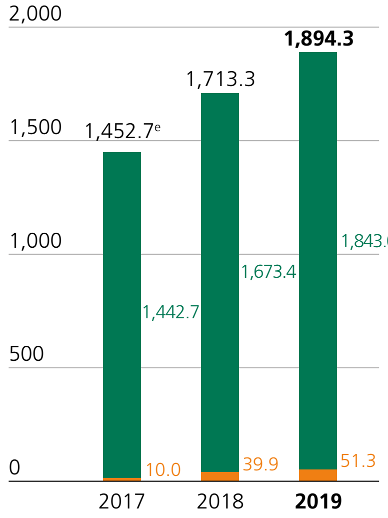


- Landfill
- Incineration
- On-site storage
- Recycling

[1] We do not dispose of waste through deep-well injection. The respective disposal methods are in some cases dependent on the availability of the disposal sites at our operational facilities

[2] Coal ash is directly disposed by Sembcorp in line with local regulations. We have added ash pond as a non-hazardous category to more accurately show our non-hazardous waste disposal methods

Waste Generated[1,2] *(thousand tonnes)*



- Non-hazardous waste
- Hazardous waste

[1] The data excludes waste that is collected and incinerated for our customers

[2] Hazardous and non-hazardous waste materials are defined by the relevant country regulations in each market

[e] Indicates data based on management's best estimates

Waste Management

In 2019, total waste generated increased due to more fly ash produced as a result of higher energy output by our thermal power plants in India. About 74%, or approximately 1.1 million tonnes, of fly ash was recycled. To further improve recycling rates, we aim to install a fly ash classification and segregation plant at our thermal assets in India by the second half of 2020. The plant will help process the fly ash into fine quality ash, for which there is greater market demand.

Local Environmental Protection

Why this is material

As a result of the products and services we provide, our operations may have varying degrees of impact on the environment, in direct or indirect ways. These may include the discharge of effluent, disposal of waste, and the emission of air pollutants. Any improper or non-compliant discharge, disposal or emissions may result in harm to the environment and public health, as well as threaten the long-term viability of our business.

Our approach

Environmental protection and stewardship are integrated into our operations, guided by our Group Health, Safety, Security and Environment (HSSE) management system comprising:

- Group HSSE Policy
- Group HSSE rules, standards and procedures
- All applicable environmental regulations

Our Group HSSE standards, such as the environmental protection and hazardous substances handling standards, set out the principles and requirements which support the Precautionary Principle in managing environmental risks. We seek to take all possible preventive action to minimise our impact on the environment. Our aim is to avoid pollution from effluents or disposal of waste and hazardous substances, prevent spills or other environmental incidents, keep our atmospheric emissions within legally acceptable levels, as well as monitor and minimise boundary noise.

Environmental considerations are integrated into the planning for all existing and new operations, products and services. Where required, environmental assessments are conducted in accordance with national and / or international standards and methodologies, which include environmental and social impact assessments, environmental baseline studies as well as pollution control studies. Recommendations based on study findings then inform our management of HSSE risks, and are incorporated into the design, construction and operation of new plants.

Our Group HSSE Incident Reporting and Investigation Requirements set out systematic steps and actions in response to HSSE incidents and near misses, with the aim of preventing a recurrence. Our Integrated Assurance Framework (IAF) sets out the three lines of defence that ensure compliance to our operating standards.

For more information on our IAF, please visit Our Focus Areas: Governance page in the Sustainability section of our website.

Performance

In 2019, we enhanced our Environmental Protection Management Standard on hazardous material handling. We tightened the requirements around hazard analysis and identification, spill prevention, inspection of process equipment and safe transfer of hazardous substances. These enhanced requirements are focused on the early identification of environmental risks, and prioritises the mitigation and management of such risks as well as the maintenance of the integrity and operability of our assets. Training programmes were conducted to support the implementation of the enhanced Standard.

In 2019, we registered zero significant spill incidents[1] across our global operations. We paid significant fines totalling S$10.5 million in 2019, mainly in relation to the discharge of off-specification wastewater that took place prior to early 2017. Details of the fines can be found on page 78 of this report.

[1] A significant spill refers to an accidental release of a hazardous substance which results in severe and / or persistent environmental damage, and is classified as having major or massive impact in our Group HSSE Hazard Identification and Risk Management Standard. Significant spills are reported upon occurrence of the incident

Atmospheric Emissions[1,2]
(thousand tonnes)

	2019
Nitrogen oxides *(NO_x)*	30.6
Sulfur oxides *(SO_x)*	74.6
Particulate matter *(PM)*	2.5

[1] Emission figures are derived from direct measurement and estimation

[2] Estimations for flue gas flow are based on operational conditions

Our atmospheric emissions are largely from our thermal energy assets. Material air pollutants are nitrogen oxides, sulfur oxides, and particulate matter. Persistent organic pollutants, volatile organic compounds and hazardous air pollutants emissions are not considered significant and therefore not monitored.

Members of the Sembcorp Virtual Brain platform for water team receiving the 2019 Operating Model Master Award for Singapore at the IDC Digital Transformation Awards ceremony

Technology-enabled, Real-time Monitoring

Since 2018, Sembcorp deployed the Virtual Brain (VB) platform for water, which allows real-time, round-the-clock automated monitoring of our 26 water and wastewater facilities globally. VB is a control system which collects and monitors thousands of data points, including the influent and effluent of the plant. Using custom built algorithms, it detects problems before they occur and recommends solutions to the operator. VB also features an enhanced alert management system, notifying users of issues and creating an auditable trail of the responses to any issues detected. This facilitates a more dynamic and timely response to issues with the process, ensuring water discharge that consistently meets regulatory standards. The innovation won the Operating Model Master Award at the IDC Digital Transformation Awards in October 2019.

Our Material ESG Issues

Empowering Our People and Communities

Health and Safety

Our Priorities

Making health and safety an integral part of our everyday business and culture

Relevant SDG

How We Did in 2019

We continued to implement training and tools to nurture a proactive health and safety culture, including the Behaviour-based Safety programme and the 360 Safety Check tool. We suffered two fatalities in 2019. We are deeply saddened by the loss and are working closely with our stakeholders across the Group to improve our health and safety practices, and prevent injuries

> Pages 68–71

People

Our Priorities

Creating a values-based and performance-led culture. Providing an engaging employment experience where our people can grow and excel

Relevant SDGs

How We Did in 2019

We began a comprehensive employee benefits review in our key markets. Recommended changes based on our findings are being implemented, starting with our home base in Singapore. We also saw an increase in training hours from 2018, registering an average of 29.4 hours of training per employee

> Pages 71–74

Community

Our Priorities

Contributing to the sustainable development of our communities through engagement and partnerships, and investing in initiatives that make a lasting positive impact

Relevant SDGs

How We Did in 2019

We made community investments totalling S$1.4 million. Some 91% of our global operations engaged in local community and / or development programmes

> Pages 74–75

Health and Safety

Why this is material

A healthy and safe work environment is a fundamental right of every employee. As Sembcorp develops and operates power and water plants as well as other facilities, we understand that the nature of our business operations means that any lapse in health or safety protocols can result in direct or indirect impact on our people, customers and communities. Therefore, it is our responsibility to ensure that our employees and contractors at all levels are equipped with training and the right tools to work safely.

Our approach

Occupational Health and Safety

Health and safety form an integral part of our daily business operations. We aim to be an organisation with a proactive health and safety culture. We are committed to working towards the goal of zero fatalities and injuries in our workplaces, with a workforce that puts safety first.

Achieving a safe work environment is a responsibility shared by all employees across the organisation. To incentivise positive behaviour and practices, health and safety key performance indicators are embedded into relevant employees' scorecards. Performance incentives for all employees also take into account the Group's overall health and safety performance for the year.

We aim for progressive improvement in our health and safety performance, which is benchmarked against global industry safety statistics such as the International Oil and Gas Producers Global Safety Performance Indicators. To meet our goals we have in place structures and processes including:

- Board review
- Oversight by the board's Risk Committee
- Leadership by our Group President & CEO, supported by our Senior Leadership Council (SLC)
- A Group Health, Safety, Security and Environment (HSSE) management system comprising:
  - Group HSSE Policy
  - Group HSSE rules, standards and procedures

The Group HSSE management system details expectations and principles relating to different aspects and activities of stakeholders across the entire Group, including contractors, vendors and suppliers working within or at project sites outside our facilities. Our management approach and elements are aligned with the relevant OHSAS and ISO Standards, and ensures that we comply with the legal requirements relating to HSSE in all respective jurisdictions of our operations. In addition, the framework is supported by Sembcorp's 10 Elements for HSSE Excellence.

For more information on our health and safety certifications, please visit the Initiatives, Memberships & Certifications page in the Sustainability section of our website.

The Group HSSE management system covers key processes for effective health and safety management including:

- Hazard Identification and Risk Assessment
- Incident Investigation and Reporting
- Occupational Health Management
- Consultation and Communication

For more information on our Group HSSE management system, please refer to Our Performance: 2019 Performance Data and Commentary report in the Sustainability section of our website.

Training

Equipping our people with the relevant HSSE and technical capabilities ensures the presence of competent safety practitioners and line managers across our operations. Training plans are tailored according to the particular operation or site's risk profile and local conditions. Examples of operations-specific training include defensive driving at our solid waste management unit as well as project commissioning and construction orientation for project development teams. An annual global HSSE workshop also provides a platform for learning as well as the sharing of corporate initiatives and best practices by different operations.

Product Safety and Quality

Our customers depend on us to deliver safe, reliable products and services for their municipal or industrial needs. Quality assurance and compliance testing of our products are done at various points in the value chain, from manufacturing to distribution and supply. To minimise the risk of non-compliance, our stringent monitoring and control regime includes detailed inspections as well as preventive maintenance of all critical instruments, including meters and sensors, for us and our customers. We also conduct regular quality checks to comply with regulatory requirements and to ensure that the water we produce is safe for our customers and end users, including our potable water products.

Prioritising Safety Excellence in Our Solar Business Growth

Sembcorp Solar safety personnel demonstrating the use of safety equipment

Since 2016, our solar business arm in Singapore, Sembcorp Solar, has grown to become one of Singapore's largest renewable energy players. While Singapore's target to produce enough solar energy to power about 350,000 homes annually by 2030 has presented business opportunities, this rapid growth has also highlighted new risks including exposure to pool price fluctuations, lower solar specific yields and safety risks. To ensure the necessary risk controls were put in place, our solar operations needed to take a proactive approach to risk identification. As such, Sembcorp Solar adapted the Group HSSE management system and was certified with ISO 45001 for its occupational health and safety management system. Our solar operations also undergo regular internal and external site safety audits.

To support the upskilling of the solar industry workforce in Singapore, Sembcorp Solar also conducted safety trainings and briefings to build the safety awareness and capabilities of our contractors. In addition, Sembcorp Solar developed customised programmes to verify and monitor the implementation of our contractors' safety management system to promote health and safety at the workplace.

As at the end of 2019, all our solar sites in Singapore have maintained a record of zero demerit points under the single-stage Demerit Points System for the construction industry.

Our Material ESG Issues

To optimise and ensure consistent quality output of our products, we use digital technology to augment our processes and reduce the risk of human error in the monitoring and control functions of our operations. For example since 2018, our water facilities in Singapore and China have implemented Sembcorp's Virtual Brain platform for water, which allows round-the-clock automated monitoring.

<u>Physical Security</u>

The global operating landscape is becoming increasingly complex and challenging. As our businesses grow across different markets, we must stay current in the way we safeguard the security of our people and assets. In line with our responsibility to provide a secure working environment, we closely monitor and assess security threats and risks to our operations.

Our Group Security Management System adopts a holistic approach to safeguarding the long-term security of our operations – by aligning physical security measures with international practices. The management system includes standards such as the Physical Access Control Standards and Recommended Practices which are benchmarked against relevant international security management protocols.

<u>Assurance</u>

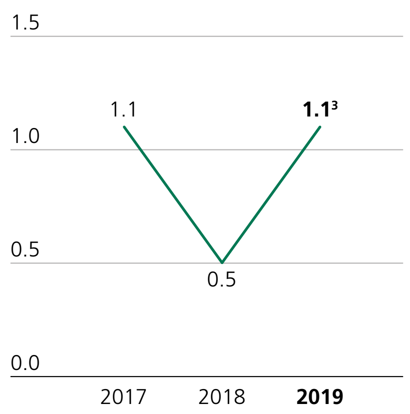
Our Group HSSE assurance is aligned with the Integrated Assurance Framework (IAF). The IAF adopts a three lines of defence (LOD) approach that sets in place a robust accountability system to enable effective controls for identified risks and to promote continual improvement.

For more information about how HSSE is managed through our three LOD model, please refer to Our Performance: 2019 Performance Data and Commentary report in the Sustainability section of our website

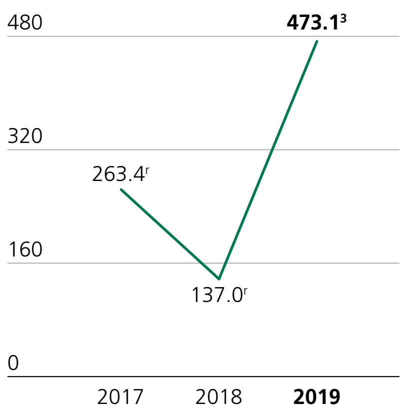
Performance

We revised our disclosures for occupational health and safety to begin aligning with the new GRI 403:

Lost Time Injury Rate[1,2]
(number per million man-hours)



Accident Severity Rate[1,4]
(number per million man-hours)



1 Group Health and Safety Performance is reported and recorded in accordance with the reporting requirements defined in the Group HSSE Health and Safety Performance Reporting Standards. The principles adopted in our standards are consistent with the general principles of the Global Reporting Initiative Standards, the International Association of Oil and Gas Producers Reporting Standards, and the US National Institute for Occupational Safety and Health (NIOSH). Occupational health and safety data covers employees and contractors in our operational assets and Energy assets under construction. It also includes data from administrative offices and service companies, with the exception of our corporate headquarters. All injuries involved male employees and contractors

2 Lost time injury rate is defined as the number of fatalities and lost work day cases per million man-hours worked. It includes high-consequence work-related injuries, which refer to injuries that result in permanent disability and / or injuries that require long term follow up such as physiotherapy treatment and where the individual is not expected to recover fully to pre-injury health status within six months

3 Data for Sembcorp Design and Construction (SDC) is excluded as it was divested in December 2019. In 2019, SDC had 13 cases of lost time injuries

4 Accident severity rate is defined as the number of lost work days per million man-hours worked. We record lost time due to one fatality as 6,000 lost work days, in line with guidelines by the US NIOSH

r Accident severity rate was revised to include fatalities

Occupational Health and Safety 2018 Standard. In line with our aim to be an organisation that puts safety first, we continued to implement training and tools that nurture a proactive health and safety culture:

- We began train-the-trainer sessions on our Behaviour-based Safety (BBS) programme that we rolled out to all our operating assets globally starting in 2018. To foster greater ownership of safety practices across the group, employees are encouraged to conduct regular BBS observations and record them in a web-based mobile application. By the end of 2019, we completed all train-the-trainer sessions
- We ran a campaign to promote the adoption of our 360 Safety Check, a 30-second visual self-check tool designed to help employees be more vigilant in their work environments. By applying this tool, workers are able to identify and correct risky behaviour or potential hazards in their workplaces. This in turn facilitates more prompt rectification of unsafe conditions, which contributes to a reduction of incident occurrences

There was an increase in both our lost time injury rate and accident severity rate since 2018. We remain committed to health and safety as an integral part of our business, and have implemented targeted initiatives to improve the ability of our operations and sites to identify and address unsafe conditions or actions.

With great regret, we report that there were two fatalities concerning our contractors in India in 2019. We are deeply saddened by these incidents. Thorough investigations were carried out, following which preventive measures have been implemented to prevent recurrence. We are working closely with our stakeholders to further improve safety and prevent injuries.

People

Why this is material

The unprecedented energy transition has led to significant risks and business model disruption. In this fast-changing climate, our people play a vital role in ensuring our business stays relevant by delivering on our transformation strategy and goals. Developing and retaining a capable, highly motivated and performance-led workforce will be key to our shared success. Of the issues relating to our people, our materiality review process has identified the following areas of focus:

- Employee development
- Employee compensation and benefits
- Employee engagement
- Employee wellness
- Diversity and equal opportunities
- Human rights and labour standards

Our approach

We have more than 4,500 employees across our operations spanning multiple markets worldwide, where labour laws, regulations, employment codes and practices differ widely. All our local human resource policies comply with local laws.

Our human resource practices are guided by the following governing frameworks and policies:

- Oversight by the board's Executive Resource & Compensation Committee
- Oversight by the SLC
- The Sembcorp Mindset and Leadership Competencies
- Code of Conduct
- Human Rights Policy
- Harassment Policy
- Grievance Handling Policy and Consequence Management Framework

<u>Employee Development</u>

The Sembcorp Mindset encapsulates the five Cs – Creative Insight, Committed, Connected, Courageous and Curious – and defines who we are and how we conduct ourselves. Building on this foundation, we add our Leadership Competencies which mark key behaviours unique to Sembcorp employees. Together these represent our promise to internal and external stakeholders, to drive organisational excellence and play our part in creating a sustainable future.

We are committed to equipping our people with the capabilities and know-how to achieve their fullest potential, while enabling them to remain relevant in an evolving operating landscape. We have in place several organising frameworks to facilitate talent management and enhance our employees' experience.

To enhance talent management, we launched a new talent review and succession planning framework in 2019 that will allow a more consistent approach to talent identification and development. This talent review and succession planning process has been integrated into our existing LeAD (Lead, Appraise, Develop) and Learn online platform, which allows us to more effectively review our talent pool from a global perspective.

Leadership development is another key focus. In addition to deepening our bench strength, our leadership development programmes facilitate more comprehensive learning and development across different job grades. These programmes include priority learning areas such as effective communication skills.

As a global company, local talent is key to helping us understand market conditions, while supporting local communities in meaningful and effective ways. We strive to identify the best possible local talent for senior management roles in our markets, so that Sembcorp can continue to support capability building in the communities in which we operate.

We also see effective performance management as a critical component of Sembcorp's business transformation. This is facilitated through our performance management system LeAD, which takes a structured approach by aligning employee performance with the Sembcorp Mindset, Leadership Competencies and key performance indicators needed to create a values-based, performance-led culture, with integrity at our core.

<u>Employee Compensation and Benefits</u>

To attract, motivate and retain talent, we have in place a competitive remuneration and reward system based on key principles of equity and meritocracy. Our salary levels are reviewed regularly and benchmarked against local standards, as well as data from global market surveys and consultancy firms. Where applicable, they also undergo negotiations with employee unions.

Annual variable bonuses for all staff are based on Group and individual performances which are measured against personal targets that were agreed upon with their supervisors. Employee share plans that foster greater ownership of the Group's shared success are also available. For example, under the Restricted Share Plan, managerial participants of the Group are awarded restricted shares, while non-managerial participants receive their awards in an equivalent cash value, known as the Sembcorp Challenge Bonus.

For more information on our employee share plans, please see the Share-based Incentive Plans section of the Directors' Statement on pages 109 to 114.

Engaging Employees to Build a Dynamic Organisation

Our people play a vital role in ensuring the success of our business, as we transform to meet the challenges of industry disruption. To build a dynamic organisation able to thrive in this fast-changing climate, we focused on developing a values-based, performance-led culture underpinned by purpose and integrity.

As part of our ongoing culture-building exercise, we enhanced our global employee engagement survey to gain a deeper understanding of our employees. Survey results were above industry average, with encouraging scores in the areas of satisfaction with the company as a purpose-driven and socially responsible organisation. The results also identified key drivers of employee satisfaction which included talent engagement and change management. We will be focusing our efforts on these areas as we continue on our transformation journey.

To foster stronger engagement with our people, we introduced the "60 seconds with 60 people" campaign. The series featured 60 different internal stakeholders in 60-second long videos designed to educate employees on various initiatives across the Group. We also launched an employee video contest for staff. The winning entries were chosen by popular vote, with over 80% of global staff participating.

Our employee engagement efforts also include encouraging volunteerism. In October 2019, we launched Sembcorp Gives Back Week (SGBW). Over 1,000 staff volunteers across nine countries came together to give back to local communities, with a host of employee-led activities centred on the theme of "Zero Waste". Together, the Sembcorp family clocked approximately 5,000 volunteer hours. In a post-event survey, over 80% of respondents agreed that the programme allowed them to engage fellow colleagues and senior management in a more meaningful way.

Staff in Singapore after a beach clean-up during SGBW

Employee Engagement

Effective employee engagement is fundamental to any organisation's long-term success, as a key driver to increase job satisfaction and performance.

We continue to grow our employee engagement platforms. For example, senior management conducts quarterly face-to-face staff communication sessions which are webcast to all markets. Market-specific engagement sessions are also organised to keep employees up to date on current happenings and upcoming projects. Both platforms incorporate question-and-answer segments for employees to share their views. In addition, employees can also engage senior management directly in virtual chat sessions via an internal online platform.

Over the course of the year, organisational updates, internal campaigns as well as business milestones are communicated to staff via channels such as briefings and workshops, emails, the intranet and other internal digital platforms.

Employee Wellness

Workplace wellness and health promotion are key elements of an employee's overall well-being. We have set aside a dedicated budget in major markets like Singapore, China and India which is available for department heads to use for activities that encourage employee well-being and team bonding. Around the world, employee-led committees organise a range of recreational activities as well as nutrition and stress management programmes to support employees' physical and mental well-being.

We also provide Group Term Life and Group Personal Accident coverage in all our key markets. Besides mandatory medical screenings for employees who might be potentially exposed to occupational health hazards, voluntary annual health screenings are available free of charge to all employees in most markets.

Diversity and Equal Opportunities

Sembcorp is committed to promoting a fair and equitable work environment for all employees. We believe all employees should have the opportunity to thrive in a workplace free from harassment and prejudice. Recruitment, promotion, rewards and career development opportunities are based on merit, without discrimination against age, race, gender, sexual orientation, religion, family or marital status, or any other status protected by the laws or regulations in the locations where we operate. Our SLC is represented by more than five different nationalities and our global workforce includes people from over 35 nationalities.

Human Rights and Labour Standards

Our Human Rights Policy defines our responsibility to ensure the highest respect for human rights and the company's expectations of our workers and business partners. Our Code of Conduct also sets out our stance on fairness, opportunity, non-discrimination, dignity, respect and harassment. We are committed to honouring and safeguarding the spirit of the following international declarations as well as the relevant reinforcing instruments:

- United Nations (UN) Guiding Principles on Business and Human Rights
- UN Universal Declaration of Human Rights
- International Labour Organization's Declaration on Fundamental Principles and Rights at Work
- The Employers' Pledge of Fair Employment Practices under Singapore's Tripartite Alliance for Fair and Progressive Employment Practices

Our Code of Conduct, Human Rights Policy and Whistle-blowing Policy are available in the Reports & Policies page in the Sustainability section of our website.

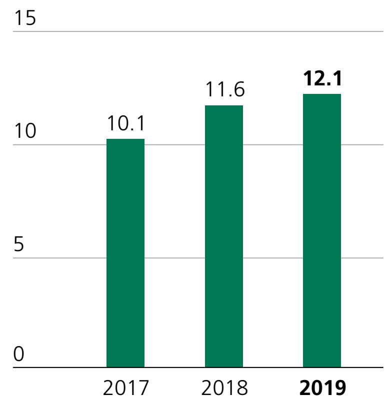
Performance

In line with our aim to create a purpose-driven, values-based and performance-led culture, we continued to implement initiatives to provide an environment where our people can grow and excel:

- In 2019, nine new leadership development programmes were introduced. These included priority learning areas following recommendations from a 2018 review of our training curriculum, such as effective communication skills
- In Singapore, we piloted courses in the Sembcorp technical leadership academy, an internal training arm that aims to equip technical workers with relevant functional skills
- To equip our senior leaders with skills needed to operate in an increasingly complex global environment, we also piloted courses on an e-platform in partnership with top business schools such as Yale and University of California Berkeley to provide our senior leadership with convenient access to executive education
- We brought together 100 global seniors leaders at our inaugural three-day Global Leadership Conference. The conference gave participants an opportunity to co-create and develop solutions to further business objectives in line with the Group's strategic direction
- We extended the roll out of LeAD to other markets. The system provides a more holistic approach to performance and development, laying a stronger foundation for us to manage talent development across the Group
- In 2019, we conducted an employee benefits review in our key markets. Recommendations from survey findings, together with benchmarking against industry peers, will be implemented in phases. For example in Singapore, we introduced an increase in paid time-off. The changes were applicable to all executive staff and took effect on January 1, 2020. A more formal flexible benefits programme will be implemented later in 2020

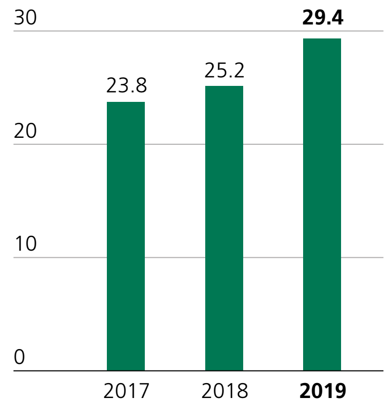
Employee turnover rate was stable, increasing slightly from 11.6% in 2018 to 12.1% in 2019. The voluntary turnover rate increased from 9.3% in 2018 to 10.1% in 2019. We recognise the potential impact that our transformation efforts may have on our people, and remain committed to engaging employees

Employee Turnover[1] *(%)*



[1] The data covers both voluntary and involuntary turnover of permanent employees of Sembcorp and its subsidiaries, excluding Sembcorp Marine

Training Hours[1]
(average hours per employee)



[1] The data covers both permanent and contract employees of Sembcorp and its subsidiaries, excluding Sembcorp Marine

and equipping them with the right skills and capabilities as we continue on our transformation journey.

The average number of training hours per employee grew approximately 17% to 29.4 hours in 2019 from 25.2 hours the year before. The increase has been in line with group-wide efforts to better equip our staff, develop new capabilities, and support building a values-based, performance-led culture. We are committed to developing a robust training curriculum to support capability building of our employees.

Community

Why this is material

Sembcorp's long-term success is based on being a valued partner to the communities we operate in. While our businesses play a role in supporting economic development and improving the quality of life in these communities, we also recognise that the nature of our business means we can have varying degrees of economic, social and environmental impact, in direct or indirect ways, on the communities in which we operate. As such, as part of our licence to operate, we aim to contribute to the sustainable development of local communities through engagement, by investing in meaningful partnerships and programmes that can have a lasting positive impact.

Empowering Women in India to Secure Their Own Livelihoods

Women observing a demonstration as part of the beauty therapy course offered by SEDC

Ms Shyamala, 31, is a mother of two. She wants to give her children the best she can and hopes that a good education will help them find well-paying jobs in the future. Up until recently, those dreams seemed a distant reality as she struggled to put food on the table for her family. To make ends meet, she did odd jobs in the agricultural fields near her village, earning less than INR3,000 (S$57) a month.

Last year, she enrolled in a free three-month training programme offered by the Sembcorp Entrepreneurship Development Centre (SEDC) to become a certified beautician. The Centre is a community initiative by Sembcorp Energy India Limited, which has been investing in education and healthcare related programmes to support communities across India since 2012.

Established in 2018, SEDC provides training and development courses to women and youth in the surrounding villages of Nellore, Andhra Pradesh. It aims to reduce high unemployment rates among these target groups, especially young mothers.

Since its establishment, SEDC has trained over 450 women and youth. Of the five courses on offer, tailoring and beauty therapy have proven to be the most popular and account for over 70% of enrolment. A significant number of participants who completed the training and received certification from SEDC have been able to improve their livelihood with their newly acquired skills.

Since graduating from the programme, Ms Shyamala now runs a small cosmetics and beauty parlour in her village of Varkaipudi. Her income has more than doubled compared to what she earned in the fields.

"I never imagined that as a housewife, I would be able support my children's education with my own earnings," she said. "With more income, I am now much more confident about our future."

Our approach

Our operations support local development by providing employment and revenue that contribute towards economic growth as well as the infrastructural development of our host communities.

With operations across multiple markets worldwide, we understand first-hand how the needs of one region can vary greatly from another. We believe our local operations are best placed to understand the unique needs of the community and forge partnerships with local stakeholders. As such, markets manage community assessments, engagement programmes and contributions, while aligning to group-level strategic frameworks and guidelines.

Assessment and Engagement

Our community assessment and engagement practices are guided by our Group Stakeholder and Community Engagement Policy, and the Group Community Grievance Management Policy. Environmental and social impact studies are carried out in accordance with international and / or national standards for major new projects and expansions as required. These studies typically include social management plans which are implemented by the operations team at various stages of project development.

Community Investment

Our revamped Community Investment Guidelines provide a more strategic approach to our charitable contributions and community investments. The updated guidelines aim to achieve a greater proportion of investments in long-term initiatives which integrate community needs with our business objectives, core competencies or assets. Our efforts currently focus on supporting the following five Sustainable Development Goals (SDGs):

The LBG (formerly London Benchmarking Group) Guidance Manual guides the tracking and reporting of our community contributions. This uses standardised definitions and valuations to account for our total community giving.

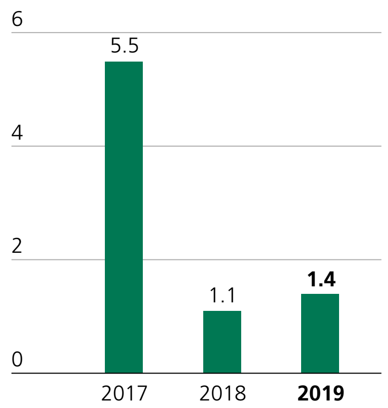
For more information on our programmes, please visit Our Approach: Feature Stories section on our website.

Performance

In 2019, Sembcorp contributed S$1.4 million through cash and in-kind donations to charities and community initiatives globally, of which over S$350,000 comprised mandatory contributions. Some of the causes we support include environmental and water conservation education, as well as youth development, apprenticeships and job training programmes.

Community Contributions

(S$ million)



As part of our commitment to SDG 6, one of our priority SDGs, we invested in programmes to secure access to safe drinking water for communities living in the vicinity of our plants. To date, we have installed a total of 27 community water treatment plants that serve over 39,000 people in India and Myanmar. Some 91% of our global operations engaged in local community and / or development programmes. We plan to grow this coverage to 100% by 2022.

Total volunteer hours was more than 8,500 hours, of which over 10% was spent outside of working hours.

Embedding Responsible Business Practices

Corporate Governance

Our Priorities

Maintaining an effective governance and decision-making structure

Relevant SDG

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

How We Did in 2019

We continue to be placed in the top 10 of the Singapore Governance & Transparency Index

> Pages 76–77

Ethical Business and Compliance

Our Priorities

Fostering an ethical culture and conducting our business with integrity while ensuring we comply with all legal and regulatory requirements

Relevant SDG

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

How We Did in 2019

In 2019, we enhanced and updated our Anti-bribery and Corruption Policy and programme, and also enhanced our Third Party Due Diligence compliance programme

> Pages 77–78

Risk Management

Our Priorities

Ensuring effective identification of material risks and putting in place an adequate and effective risk management and internal control system

Relevant SDG

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

How We Did in 2019

We made good progress in transitioning from our Governance Assurance Framework (GAF) to an Integrated Assurance Framework (IAF) which puts greater emphasis on the three lines of defence (LOD) model

> Pages 78–82

Corporate Governance

Why this is material

We define corporate governance as the structures, practices and processes in place by which our organisation is controlled, operated, directed and accountable for. Well-defined corporate governance processes are essential to enhancing corporate accountability and long-term sustainability to preserve and maximise shareholder value.

Our approach

Sembcorp is led by an effective board. In 2019, 82% were independent non-executive directors. Our Board Diversity Policy sets out principles to maintain diversity on the board's composition. The board is collectively responsible for providing overall strategic direction and ensuring the long-term success of the Group. Several board committees have been established with clear terms of reference, both to assist the board in fulfilling its responsibilities and to provide independent oversight of management.

We comply with the principles and guidelines set out in the new Singapore Code of Corporate Governance 2018 issued by the Monetary Authority of Singapore, and our corporate governance practices are set out in the Corporate Governance Statement in this annual report.

To facilitate the effective execution of both our internal processes and business needs, we have in place a clearly defined organisational structure which includes detailed roles and responsibilities for key appointment holders. This is further supported by an established matrix for the delegation of authority as well as financial authority limits, which has been approved by the board. A comprehensive set of governance and functional policies ensure entity-level controls have been implemented across the Group. The Group's internal controls policy and manual, which adopts principles of the Committee of Sponsoring Organizations of the Treadway Commission, provides a framework for what constitutes an effective and adequate system of internal controls. It also provides guidelines on the appropriate segregation of duties and a checklist of recommended internal controls for operations in our various markets to put in place.

We are in the midst of transitioning from our GAF to an IAF to provide a more holistic and robust basis of assurance for the adequacy and effectiveness of our risk management and internal control system. The process identifies risk from strategic top-down and bottom-up perspectives from each key market, putting greater emphasis on the three LOD model.

For more information on our three LOD model, please visit Our Focus Areas: Governance page in the Sustainability section of our website.

Performance

We maintained sixth position in the Singapore Governance and Transparency Index, the leading index for assessing the corporate governance practices of Singapore-listed companies. As part of our ongoing efforts towards best practice,

Sembcorp's Integrated Assurance Framework

THREE LINES OF DEFENCE		
FIRST	SECOND	THIRD
Accountability and Ownership	Standardisation, Consistency and Monitoring	Independent Assurance
Driven by Markets and business units	Driven by Business lines / subject matter experts and corporate functions	Driven by Group Integrated Audit and external audit

we developed a Board Diversity Policy that sets out our principles on board composition. In the appointment of its directors, Sembcorp considers directors with different skillsets, experience, age, gender, educational and professional background, length of service, as well as other relevant attributes.

Ethical Business and Compliance

Why this is material

Responsible business conduct and ethical business practices ensure the long-term viability of our businesses by building trust and confidence with our stakeholders. We are committed to high standards of behaviour and integrity in everything we do and expect the same of those whom we do business with. We have zero tolerance for fraud, bribery and corruption. Our businesses operate in highly regulated environments where non-compliance may subject us to statutory and regulatory fines and sanctions, including losing our licence to operate and material litigation. It may also result in damage to our reputation and credibility, limiting future growth opportunities.

Our approach

Our Group Ethics & Compliance (GEC) function holds the charter to:

- Foster and promote an organisational culture of integrity, ethical decision-making and compliance that is in line with our values and with the law and regulations
- Promote appropriate risk assessment and due diligence to prevent, detect and respond to unlawful and unethical conduct or non-compliance

The goals, initiatives and key performance indicators of the GEC function are tied to its charter. The outcomes and effectiveness of the GEC function are reported quarterly to the Senior Leadership Council and Audit Committee as part of our governance and accountability structure. The policies under the ownership and management of the department include the Code of Conduct (CoC), the Anti-bribery and Corruption (ABC) Policy and the Data Protection Policy. The GEC function continuously looks to implement and enhance other relevant policies relating to the CoC and regulatory compliance to ensure we remain up-to-date and relevant to industry and regulatory practices.

The bonus payments of senior managers and above are tied to the completion of mandatory compliance training which comprises the CoC, ABC Policy, Gifts, Entertainment and Travel Policy as well as the Data Protection Policy.

Code of Conduct

All employees are required to comply with the requirements of the CoC, which is endorsed by the board. Requirements of the CoC are communicated to employees globally through a message from the Group President & CEO, via face-to-face training sessions, e-learning and in other forms of communication such as compliance newsletters and email.

Employees are required to complete an annual declaration form to acknowledge that they have read and understood the principles and requirements of the CoC, agree to comply with its principles and requirements, and will promptly report any violation through available reporting channels. Suppliers and contractors who work with Sembcorp are also expected to follow the Supplier CoC.

The CoC also provides a channel for employees to raise concerns or seek guidance in the event of a breach or if they encounter difficult choices in the course of their work. The whistle-blowing channel was established for this purpose and the organisation does not tolerate any retaliation against employees who raise concerns about a violation of the law, the CoC or any company policy in good faith.

Our Code of Conduct is available in the Reports & Policies page in the Sustainability section of our website.

Anti-bribery and Corruption

Our ABC Policy sets out the standards and principles on conducting business with integrity and the highest ethical standards expected of every employee. Our employees are trained on our policy and principles via e-learning or face-to-face training sessions. Our Third Party Due Diligence compliance programme helps us better manage and mitigate the risk of bribery and corruption that may arise through an intermediary or third party acting on behalf of Sembcorp.

Data Protection
The Group Data Protection Policy sets out the framework and principles which govern the collection, use, disclosure and retention of confidential personal and business data. Our businesses globally are expected to abide by the policy, subject to local laws and regulations on data protection. We also respect the privacy of individuals and we protect personal information whenever personal data is collected, used and processed by us.

Adherence to the above policies is accounted for and monitored with the following approach: the second LOD and policymakers will train and educate employees, as well as monitor, review and perform a gap analysis and use data analytics to identify trends or anomalies. The outcomes of these analyses are reported to senior management for accountability and action. In addition, audits are also conducted by Group Integrated Audit (GIA) to provide an independent assurance to management, and to ensure follow up action plans are implemented to mitigate future lapses.

Performance
In 2019, employee acknowledgement of compliance to the CoC was 100%, and a total of 94% of employees underwent mandatory compliance training.

As part of our continuous improvement efforts, we have updated and enhanced our ABC Policy and supporting programmes to ensure that these are relevant and up to date with current regulations and best practices in addition to being compliant with the US Foreign Corrupt Practices Act and UK Bribery Act. We have also enhanced our Third Party Due Diligence compliance programme to strengthen our controls around intermediary and third party relationships. In 2019, we conducted a total of 29 face-to-face ABC training workshops with over 800 employees globally, and covered topics including gifts, entertainment, travel and third party due diligence.

A total of 22 data protection and cyber security awareness training workshops were conducted for over 700 employees globally. We regularly review our data protection policies, processes, practices and controls to identify any gaps or lapses which may result in non-compliance. We seek to ensure that all identified gaps are addressed in a timely fashion.

Fines and Sanctions
We are committed to complying with statutory and regulatory requirements. As part of our IAF, all heads of markets must certify compliance with all relevant legal and regulatory requirements in their respective entities and countries of operation. These certifications are reported to the senior management and the Audit Committee quarterly. In instances where there has been evidence of non-compliance, the case undergoes review or investigation. We report significant monetary fines incurred upon the payment of the fine.

In 2019, we paid significant* fines totalling S$10.5 million in Chile and China. Of this, S$522,000 was for three fines incurred by our operations in Chile, while S$10 million was for a fine imposed on a joint venture company in China. In Chile, two fines amounting to S$400,000 were for incidents that occurred in 2015 and 2016 for delays in the construction of wells, water and sewage networks that were committed under a regulatory development plan. In addition, a S$122,000 fine was imposed due to the discharge of untreated sewage to the ocean in 2016. The sewage lifting system was improved to better manage the sewage water discharge.

In China, legal proceedings related to the discharge of off-specification wastewater by a joint venture wastewater treatment company in Nanjing, China, concluded in February 2020. The Group's share of fines and cash settlement for both the criminal and civil claims was a total of S$54 million. This amount included a S$10 million fine for the criminal case in 2019. In addition, there was a S$44 million settlement for the civil claim.

The isolated incident had resulted from the illegal and criminal activities of some former employees of the joint venture company for a period prior to early 2017. The involved employees have since been charged, tried and sentenced in their individual capacities by the local courts. The employment of those individuals found guilty was also terminated.

Following this incident, we took all necessary steps to further strengthen our internal controls and processes in our water operations in China. We implemented a proprietary technology platform, Virtual Brain platform for water, in wastewater facilities to track and monitor plant performance and compliance, and established a Country Centre of Excellence in Shanghai. The Centre of Excellence centralises all technical resources, implements Group water business standard operating procedures and oversees project management and controls for all new projects. The Group has also committed to new investments worth approximately S$45 million over the next four years to develop projects and initiatives to support environmental protection in the country.

Risk Management
Why this is material
The global energy transition and technological advances have led to significant risks and business model disruptions. As a diverse company with a presence in multiple markets, we are exposed to risks including financial, operational, compliance and information technology threats. Risk management is an integral part of our business as it minimises the likelihood and impact of potential financial losses, as well as provides a framework of evaluation for new business opportunities. It also assures our board and shareholders that key enterprise and business risks faced by the organisation have been identified, assessed and managed with appropriate risk mitigation measures and controls.

Our approach
The Group has an overall risk management strategy, as set in place by the board of directors and supported by the board's Risk Committee and Audit Committee. The Risk Committee reviews and enhances the effectiveness of the Group's risk management and health, safety, security and environment (HSSE) plans, systems, processes and procedures. It also regularly reviews group-wide risks including significant risk exposures relating to foreign exchange rates, commodity prices and major investment projects as well as corresponding risk mitigation plans. HSSE policies, guidelines and limits are also regularly reviewed. Oversight for risk management within the Group's listed entities lies with their respective boards.

Risk Appetite Framework
The board has determined a risk appetite framework which guides the board and management in the execution of the Group's strategy and objectives. Under this framework, the board has approved risk appetite statements with respect to economic, environmental, social and governance areas in line with our material issues for the management and reporting of our overall sustainability performance.

a. Economic
Sembcorp actively pursues global strategies to deliver sustainable long-term value and growth. This includes developing new capabilities and expanding our business in both existing and new markets. Though this carries inherent risks, the Group aims to be a disciplined investor with an investment approval framework that integrates robust due diligence and risk management. The Group has set appropriate limits for investment exposure in each country to further manage concentration risk.

The Group is committed to maintaining a strong financial position and targets to achieve an investment grade equivalent credit rating to ensure access to funding and protect shareholder value. The Group has a defined set of risk management policies to manage our financial risks. The Group will not take part in any form of transaction that is deemed speculative in nature, under any circumstance.

b. Environmental
Sembcorp is committed to operating in a socially responsible manner to manage our impact on the environment, as well as provide high quality products and services that contribute to the sustainable development of the communities in which we operate.

In addition to being committed to complying with all applicable environmental standards and requirements through our established internal policies and processes, we assess the impact of environmental and climate-related risks on our business, and apply appropriate control measures to manage them. Where viable, we also invest in the latest technologies and utilise our capabilities to achieve better operational efficiencies and promote environmental sustainability.

c. Social
Sembcorp is committed to being a responsible business that ensures the health and safety of our people, and makes a positive impact on our stakeholders and communities. In our pursuit of operational excellence and business growth, Sembcorp will not compromise the health and safety of our internal and external stakeholders. The health and safety of all our employees, contractors, customers and the public is of paramount importance to the Group. We take a serious view of any breach of health and safety standards and regulations across all our operations and facilities.

Sembcorp recognises the need to have in place a strong and competent team that is committed to our values for transformation and growth. Sembcorp will continue to equip our employees with the relevant capabilities and competencies, and provide an engaging employment experience, thereby creating a purpose-driven, values-based and performance-led culture to ensure a sustainable business.

Sembcorp is also committed to building our digital capabilities to improve the efficiency of our businesses and to maintain an effective control environment to manage the cyber risk exposure of our and our customers' data as well as our assets and operations.

In addition, Sembcorp strongly believes in the need to conduct our business in a responsible manner and to make a positive contribution to the communities in which we operate. The Group is therefore committed to high standards of business conduct, engaging our stakeholders and managing our environmental and social impact on local communities responsibly.

d. Governance
As a listed company on the Singapore Exchange with the responsibility and accountability to a wide range of stakeholders, Sembcorp is committed to maintaining high standards of behaviour and integrity, and aims to be the best in class for governance practices. The Group strives to comply with all applicable laws and regulatory requirements in the countries where we operate, including adopting a zero tolerance stance towards any form of fraud, bribery and corruption. We expect all employees to adhere to the guidelines set forth in the company's CoC.

* A significant fine refers to a monetary sanction equal to or above S$50,000 that was paid during the financial year

Our risk appetite statements are also supported by key risk indicators, which are monitored and reported to the board's Risk Committee on an ongoing basis.

Enterprise Risk Management
The Group is committed to ensuring that an effective and practical enterprise risk management (ERM) framework is in place. Our framework aims to safeguard our people and assets, protect shareholders' interests, facilitate informed decision-making for value creation and ultimately enhance our brand and reputation. In designing our ERM framework, the Group has adapted and made reference to various industry risk management standards, such as ISO 31000 and the Enterprise Risk Management – Integrated Framework of the Committee of Sponsoring Organizations of the Treadway Commission. Our ERM framework specifically sets out a systematic and structured approach towards risk management through the following activities:

- Awareness training and workshops
- Risk identification and assessment
- Formulation of key risk management strategies
- Design and implementation of risk mitigation controls (preventive, detective and responsive controls)
- Monitoring and timely reporting of risk management performance and risk exposure levels
- Continual improvement of risk management capabilities and mitigation measures

Our ERM framework is supported by the following key pillars:

a. Fraud Risk Management
The possibility of fraud is an inherent risk in any organisation. To manage this, the Group has established a fraud prevention policy which has been approved by our board's Risk Committee. The policy provides a framework and comprehensive guidance on anti-fraud measures to proactively manage the risk of fraud, bribery and corruption. We actively influence and encourage our joint ventures and associates to adopt our fraud risk management framework. The Group maintains a zero tolerance policy for fraud, which we take to include corruption and bribery. This is regularly communicated to employees through awareness training and e-learning programmes.

The following key activities and complementary policies and procedures are part of our holistic approach towards fraud risk management, and to address the risk of bribery and corruption:

Preventive anti-fraud measures
- Code of Conduct
- Conflict of Interest Policy
- Gifts and Entertainment Policy
- Fraud risk assessments
- Third party due diligence

Detective anti-fraud measures
- Whistle-blowing Policy
- Compliance and monitoring
- Pre-employment screening

Responsive anti-fraud measures
- Fraud reporting procedures
- Fraud investigation procedures
- Grievance handling procedures

Whistle-blowing policy
Sembcorp has a Whistle-blowing Policy in place. We provide employees and external parties with well-defined and accessible channels through which they may, in confidence, raise concerns regarding possible improprieties in the conduct of business activities, financial reporting or other matters to the Audit Committee. This facilitates an independent investigation of such matters for appropriate resolution. The policy is available on our website and is reviewed regularly.

A whistle-blower may submit his / her allegations or concerns via telephone, email, our online whistle-blowing portal or other communication channels.

The company will take reasonable steps to protect the identity of the whistle-blower. The company does not condone retaliatory action against the whistle-blower. The whistle-blowing case will be received by the Head of GIA and an investigation will be conducted in compliance with the requirements set out in the company's Whistle-blowing Policy.

Our Whistle-blowing Policy is available in the Report & Policies page in the Sustainability section of our website.

b. Operational Risk Management
The Group's management of operational risk is focused on the following areas:

Crisis management and business continuity
A robust and effective crisis management framework is put in place with the Group's crisis management, emergency response and business continuity procedures and plans. These procedures and plans are regularly tested and fine-tuned. The Group also addresses crises and emergencies through the implementation of appropriate prevention, preparedness, as well as response and recovery programmes. Some of these material operational risks include natural disasters, terrorism, cybersecurity attacks, epidemic outbreak and failure of critical equipment.

With operations across the globe, the Group monitors for emerging threats that may disrupt our operations, and formulates and updates our strategies and mitigation measures accordingly. Focus is placed on establishing a robust and effective crisis management framework that is relevant to the current business environment and risk landscape. The Group aims to enhance and improve existing emergency response protocols and business continuity plans across our business entities, and to strengthen operational readiness. Crisis communication procedures are also embedded as part of the Group's crisis management framework. The Group's crisis management, emergency response and business continuity plans are regularly tested and fine-tuned to ensure that the Group can respond effectively to crises and emergencies, while ensuring that critical business functions can recover and continue in a timely manner. In addition, the Group adopts key standards and practices set out by ISO 22301:2012 under Societal Security – Business Continuity Management Systems – Requirements. This approach enables us to build resilience and enhances our ability to manage and respond to emergencies. It also helps to minimise the impact of incidents on people and the environment, prevent loss of assets and mitigate disruption to business operations, while safeguarding the company's reputation.

Health, Safety, Security and the Environment (HSSE)
A group-wide HSSE management system, which is aligned with international standards and industry best practice, sets out the standard for operations in the various markets to actively manage HSSE risks.

The Group HSSE department is guided by our Group President & CEO and the board's Risk Committee, reflecting the high priority accorded to HSSE issues at Sembcorp. The department has formalised a group-wide HSSE management system and promotes global HSSE efforts to ensure effective and timely management of HSSE issues across the Group. This management system is aligned with ISO 14001 and OHSAS 18001 Standards and provides guidance to business units in actively managing HSSE risks associated with our activities and services in a systematic manner.

Insurance
As a risk transfer mechanism, the Group has in place a comprehensive insurance programme to protect our worldwide business operations against financial loss arising from property damage, machinery breakdown, business interruption and / or third party liability. The Group has also engaged a panel of insurance consultants, leveraging their technical expertise and resources to negotiate competitive pricing and comprehensive coverage with insurance companies. To balance the cost of risk transfer, the Group focuses on insuring catastrophic events while maintaining our emphasis on improving internal controls for operations and maintenance. Sembcorp Captive Insurance, a wholly-owned captive insurance subsidiary, provides first-layer coverage against property damage and business interruption losses for the Group's energy operations in Singapore and Teesside in the UK. Sembcorp Captive Insurance serves not only as an internal risk transfer mechanism but also showcases the Group's efforts to promote greater accountability and responsibility in operations and maintenance. Over the years, Sembcorp Captive Insurance has successfully built up a strong capital surplus, allowing it to extend its insurance reach to other operations and broaden its scope of coverage should the need arise.

c. Financial, Market and Credit Risk Management
The Group actively manages our financial, market and credit risk exposures with respect to foreign exchange rates, commodity prices and interest rates via established policies, including treasury policies, financial authority limits and Governance Assurance Certification. These policies set out the parameters for managing the Group's exposure to counterparty, liquidity, foreign exchange and other material transaction risks.

Financial and market risks
The Group defines and utilises approved financial instruments to manage exposure to foreign exchange, commodity prices and interest rate fluctuations arising from operational, financing and investment activities. Under the Group's overall treasury policy, transactions for speculative purposes are strictly prohibited. The commodities include fuel oil, coal and natural gas. Transactions such as foreign exchange forwards, interest rate swaps, commodities swaps, purchase of options and contracts for differences are used to manage these risks as appropriate. Transactions are only allowed for hedging purposes based on the underlying business and operating requirements. Exposure to foreign currency risk is also hedged naturally, where possible. In addition, the Group has financial authority limits, which seek to limit and mitigate operational risk by setting out the threshold of approvals required for entering into contractual obligations and investments.

Default and counterparty credit risks
Our default and counterparty credit risks arise from varied counterparties such as customers, vendors, joint venture partners and financial institutions who may fall short of their payment and / or performance obligations. As such, a group-wide credit risk policy has been put in place to ensure that we transact with creditworthy counterparties as much as possible. This is achieved via thorough credit analysis and limit setting prior to entering into any business contract. After entering into business contracts, we perform periodic credit reviews and monitor credit exposures closely to detect signs of credit deterioration. In the event that we have to deal with

counterparties who do not meet our minimum credit criteria due to commercial reasons, approval from the relevant authorities according to the credit risk policy has to be obtained before proceeding. Risk mitigation measures such as parental and banker's guarantees, letters of credit, deposit securities and collateral may be deployed on a case-by-case basis as credit enhancements. Last but not least, we also screen for material concentrations of credit risk to ensure that no single counterparty or group of related counterparties has excessive credit exposure that may result in material impact on the Group in the event of a default.

d. Investment Risk Management
To ensure that prudence is exercised in all investment decisions, the Group has in place an investment approval process, under which a disciplined approach is taken to review the key risks and opportunities presented by potential investments. As part of our investment approval process, all new investments and transactions are reviewed by a cross-functional project team that provides risk assessments, mitigation measures and recommendations to the respective authorised persons for approval in accordance with the applicable financial authority limits.

In addition, to ensure that Sembcorp maintains appropriate diversification across different geographies, the Group has put in place a country risk framework to monitor and report our investment exposure globally. Furthermore, our investment exposure to each country is regularly reported to the board's Risk Committee. This framework also defines limits that have been approved by the board and stipulates that any deviation from these country limits requires prior board approval according to a set procedure. In reviewing any request for deviations from the country limits, the board will consider the key risk drivers at hand, in terms of investment size, duration and economic life of the project, as well as the level of residual risk after the implementation of mitigation plans.

As at December 31, 2019, the countries outside of Singapore in which the Group has the largest investment exposure are India (S$3.8 billion), China (S$1.7 billion), Brazil (S$1.7 billion) and the UK (S$1.1 billion). Investment exposure comprises invested capital, including reserves and committed contingent support for projects and assets.

e. Tax Risk Management
It is our policy to comply with all relevant taxation laws, regulations and regulatory disclosure requirements.

In 2018, Singapore implemented Country-by-Country (CbC) Reporting for Singapore multinational enterprise (MNE) groups. As a Singapore-headquartered MNE, Sembcorp is required to file a CbC Report for financial years beginning on or after January 1, 2017. During the financial year, we filed the CbC Report in compliance with the submission requirements of the Inland Revenue Authority of Singapore.

With regard to our approach to tax risk management, our policy stipulates the following:

- Comply with relevant taxation laws and regulations and other regulatory disclosure requirements
- Apply diligent professional care and judgement to arrive at well-reasoned recommendations, supplemented by advance rulings from tax authorities, written advice and confirmation from external tax advisors / experts, as appropriate
- Ensure that all decisions are taken at an appropriate level and supported by a business purpose / commercial rationale and the appropriate documentation
- Establish and maintain adequate documentation of the Group's tax risk evaluation and tax risk management, and update the Group's tax risk management policies including internal controls, as and when appropriate
- Develop respectful professional relationships with all tax authorities, government bodies and other related third parties

Performance
We made good progress in transitioning from our GAF to an IAF to put greater emphasis on the three LOD model.

For more details on our IAF, please refer to page 95 of the Corporate Governance Statement and Our Focus Areas: Governance page in the Sustainability section of our website.

Corporate Governance Statement

Sembcorp's corporate governance principles are built on integrity and reflect our commitment to enhance shareholder value.

The board and management of Sembcorp recognise that well-defined corporate governance processes are essential to enhancing corporate accountability and long-term sustainability. We are committed to high standards of governance to create, preserve and maximise long-term value for all its stakeholders.

This report sets out the company's corporate governance processes and activities for the financial year 2019 with reference to the principles set out in the new Singapore Code of Corporate Governance 2018 (the Code), which is applicable to this corporate governance statement. The board is pleased to report that the company has complied in all material aspects with the principles and provisions set out in the Code, and any deviations are explained in this report.

We constantly review and refine our processes in light of best practice, consistent with the needs and circumstances of the Group. Sembcorp ranked sixth in the 2019 edition of the Singapore Governance and Transparency Index, which is the leading index for assessing corporate governance practices of nearly 600 Singapore listed companies. At the Singapore Corporate Awards 2019, Sembcorp also won the gold award for Best Investor Relations in the category for companies with S$1 billion and above in market capitalisation.

Board Matters

Board's Conduct of Affairs (Principle 1)

Effective board to lead and effect controls

Sembcorp is led by an effective board comprising mainly independent non-executive directors. Headed by Ang Kong Hua and directed by Group President & CEO Neil McGregor, there are 12 members on the board.

Non-Executive Independent Directors

Ang Kong Hua
Chairman

Tan Sri Mohd Hassan Marican
Tham Kui Seng
Dr Teh Kok Peng
Ajaib Haridass
Nicky Tan Ng Kuang
Yap Chee Keong
Jonathan Asherson OBE
Dr Josephine Kwa Lay Keng

Executive Director

Neil McGregor
Group President & CEO

Non-Executive & Non-Independent Directors

Margaret Lui
Nagi Hamiyeh *(appointed March 3, 2020)*

Role of the board
The board is collectively responsible for the long-term success of the company. Each director exercises his / her independent judgement to act in good faith and in the best interests of the company for the creation of long-term value for shareholders. The principal duties of the board are to:

- Provide leadership and guidance to management on the Group's overall strategy with a focus on value creation, innovation as well as the need to ensure the necessary financial and human resources are in place;
- Ensure the adequacy of the Group's risk management and internal controls framework and standards, including ethical standards, and that our obligations to shareholders and the Group's other stakeholders are met;
- Review management performance and oversee the Group's overall performance objectives, key operational initiatives, financial plans and annual budget, major investments, divestments and funding proposals, financial performance reviews, risk management and corporate governance practices; and
- Provide guidance on sustainability issues such as environmental, social and governance factors, as part of the Group's overall business strategy.

The directors and executive officers of the company have each given an undertaking that in the exercise of his / her powers and duties as a director or executive officer of the company, he / she shall use his / her best endeavours to comply with the requirements of the Listing Manual of Singapore Exchange Securities Trading (SGX-ST) that are in force from time to time, and to use his / her best endeavours to procure that the company shall so comply.

Temasek Holdings (Temasek), Sembcorp's substantial shareholder, is an engaged shareholder. It promotes sound corporate governance practices in its portfolio companies. This includes the formation of high calibre, experienced and diverse boards to guide and complement management leadership. It does not direct its portfolio companies' business decisions or operations.

Corporate Governance Statement

Delegation by the board

To assist the board in the efficient discharge of its responsibilities and provide independent oversight of management, the board has established the following board committees with written terms of reference:

- Executive Committee (ExCo)
- Audit Committee (AC)
- Risk Committee (RC)
- Executive Resource & Compensation Committee (ERCC)
- Nominating Committee (NC)
- Technology Advisory Panel (TAP)

Special purpose committees are also established from time to time as dictated by business imperatives.

The composition of the board committees is structured to ensure an equitable distribution of responsibilities among board members, maximise the effectiveness of the board and foster active participation and contribution. Diversity of experience and appropriate skills are considered along with the need to maintain appropriate checks and balances among the different committees. Hence, membership of the ExCo, with its greater involvement in key businesses and executive decisions, and membership of the AC and RC, with their respective oversight roles, are mutually exclusive.

The Group has adopted internal controls and guidelines that set out financial authorisation and approval limits for borrowings, including off-balance sheet commitments, investments, acquisitions, disposals, capital and operating expenditures, requisitions and expenses. Significant investments and transactions exceeding threshold limits are approved by the board while transactions below the threshold limits are approved by the ExCo and management to facilitate operational efficiency, in accordance with applicable financial authority limits.

The roles and responsibilities as well as key activities of each of the board committees are explained in this corporate governance statement. The composition of these board committees for 2019 is set out below.

Executive Committee

The five-member ExCo is chaired by Mr Ang.

Ang Kong Hua
Chairman

Neil McGregor
Margaret Lui
Tham Kui Seng
Nicky Tan Ng Kuang

The ExCo assists the board in developing the overall strategy for the Group and supervises, on behalf of the board, the management of the Group's business and affairs. Under its terms of reference, the ExCo:

- Reviews and approves business opportunities, major contracts, strategic investments and divestments of the Group that are within the financial authority limits delegated by the board, as well as the Group's investment and treasury policies;
- Evaluates and recommends to the board for approval, investments, capital and operating expenditures, and divestments that are above the financial authority limits; and
- Reviews the performance of the Group's new investments or projects against the approved financial model periodically.

Technology Advisory Panel

The TAP, chaired by Mr Ang, comprises seven members where two of whom are co-opted members.

Ang Kong Hua
Chairman

Neil McGregor
Dr Teh Kok Peng
Jonathan Asherson OBE
Dr Josephine Kwa Lay Keng
Prof Ng How Yong
(co-opted member)
Prof Lui Pao Chuen
(co-opted member)

Profiles of the TAP members are found on pages 49 and 50.

Composition of Board Committees for 2019

Board member	ExCo	AC	RC	ERCC	NC	TAP
Ang Kong Hua	Chairman			Chairman	Chairman	Chairman
Neil McGregor	Member					Member
Margaret Lui	Member			Member	Member	
Tan Sri Mohd Hassan Marican				Member	Member	
Tham Kui Seng	Member			Member		
Dr Teh Kok Peng		Member	Member			Member
Ajaib Haridass		Member	Chairman			
Nicky Tan Ng Kuang	Member			Member	Member	
Yap Chee Keong		Chairman	Member			
Jonathan Asherson OBE		Member	Member			Member
Dr Josephine Kwa Lay Keng						Member

Directors' Attendance at Board and Board Committee Meetings in 2019

Board member	Board	ExCo	AC	RC	ERCC	NC	TAP	AGM
Total number of meetings held in 2019	**8**	**6**	**5**	**4**	**4**	**2**	**4**	**1**
Ang Kong Hua^	7*	5*	–	–	4	2	3*	1
Neil McGregor	8	6	–	–	–	–	4	1
Margaret Lui	8	6	–	–	4	2	–	1
Tan Sri Mohd Hassan Marican	8	–	–	–	4	2	–	1
Tham Kui Seng	8	6	–	–	4	–	–	1
Dr Teh Kok Peng	7*	–	5	4	–	–	4	1
Ajaib Haridass^	8	1^	5	4	–	–	1^	1
Nicky Tan Ng Kuang	7*	6	–	–	4	2	–	1
Yap Chee Keong	8	–	5	4	–	–	–	1
Jonathan Asherson OBE	8	–	5	4	–	–	4	1
Dr Josephine Kwa Lay Keng	7*	–	–	–	–	–	4	1

* Even though directors could not attend, they conveyed their views / comments for consideration prior to the meetings they did not attend

^ Mr Haridass chaired the ExCo and TAP meetings on behalf of Mr Ang during his medical leave

The principal responsibilities of the TAP are to:

- Provide guidance to the Group on our vision and strategy in leveraging technology to enhance Sembcorp's leadership in our business sectors;
- Advise on technologies for research and development (R&D) as well as investment;
- Oversee the development and application of significant emerging and potentially disruptive technologies relevant to Sembcorp;
- Ensure the appropriate management of specialised R&D projects, tapping into various government grant support schemes and the external technological ecosystem;
- Provide guidance to develop systems for intellectual property creation and protection; and
- Advise Sembcorp's board and management on technological trends and opportunities in line with the company's growth strategies.

Meetings and attendance

The board meets regularly to review and approve the release of the company's financial results as well as to deliberate on key activities and business strategies, including significant acquisitions, disposals and operational matters, and to approve the Group's budget for the following year. At these board meetings, the Group President & CEO updates the board on the development and prospects of the Group's businesses and each board committee provides a report on its activities. Minutes of board committee meetings are circulated to the board to keep directors updated on each committee's activities. In addition, time is set aside for the board to discuss management performance. Members of management are not present at, or privy to, such discussions.

Ad-hoc board meetings may be convened as necessary to consider other specific matters. An annual off-site strategic review meeting is organised for the board to have in-depth discussions with management on the Group's strategy and other key issues relevant to the Group. In September 2019, this off-site meeting was held in Vietnam.

Board and board committee meetings, as well as annual general meetings (AGMs) of the company are scheduled in consultation with the directors before the start of each year, with the aim to have full attendance for all meetings. Directors who are unable to attend physically are allowed, under the company's constitution, to participate remotely through voice calls or video conferencing. Should a director be unable to attend any board or board committee meeting, he / she will still be sent the papers tabled for discussion and will have the opportunity to separately convey views to the chairman for consideration or further discussion with other directors. If necessary, a separate session may be organised for management to brief that director and obtain his / her comments and / or approval. Decisions made by the board and board committees may be obtained at meetings or via circular resolutions. Directors disclose personal interests in transactions and recuse themselves from discussions and decisions in the event of any conflict.

The directors' attendance at board and committee meetings held during the financial year 2019 is set out above.

Board orientation and training

All new directors receive formal letters of appointment explaining the Group's governance policies and practices, as well as their duties and obligations as directors. New directors also receive an information pack that contains the Group's organisation structure, the contact details of members of senior management, the company's constitution, the respective committees' terms of reference, the Group's policies relating to disclosure of interests in securities and prevention of insider trading, Code of Conduct, as well as guidelines on directors' fees.

The company conducts comprehensive orientation programmes for new directors. These include briefings on board policies and processes, presentations by senior management about Sembcorp, overall strategic plans and direction, financial performance and business activities in various markets as well as facility visits.

As part of training and professional development for the board, the company ensures that directors are kept up to date on changes to regulations, guidelines and accounting standards, as well as other relevant trends or topics including the outlook of various markets, macro view of the global environment and updates to the Singapore Code of Corporate Governance. These are done either during board meetings or at specially convened sessions including training sessions and seminars conducted by external professionals which are funded by the company.

In 2019, the directors participated in the following briefings and updates provided by the company:

- Briefings on developments in accounting and governance standards presented by our external auditors at AC meetings;
- Quarterly updates on the Group's business and strategic developments presented by the Group President & CEO to the board;
- Update on the Integrated Assurance Framework presented by the Group Integrated Audit and Group Risk departments to the AC;
- Quarterly overviews presented by the Group Risk department to the RC and AC on the Group's risk and controls environment and updates relating to risk management initiatives and key emerging threats, such as the heightened risk of cyberattacks;
- Biannual briefings by the Group Strategic Communications and Sustainability department to the RC on sustainability matters;
- Presentation on digital strategy and roadmap by the Group Digital & Technology department to the board;
- Presentation on cybersecurity performance by the Group Digital & Technology department to the AC;
- Quarterly updates on our cyber posture, KPIs and road map by the Group Digital & Technology department to the AC; and
- Public conferences, forum discussions and briefings on topics such as financial and accounting fraud, offshore & marine outlook, digital transformation and cyber resilience, developments in exponential technologies and its social impacts, challenges and issues in corporate governance, as well as the roles and skillsets of board members.

In addition, articles and reports relevant to the Group's businesses are also circulated to the directors for information. Furthermore, directors regularly visit the Group's operations in different key markets, to enhance their understanding of our businesses as well as promote active engagement and foster stronger relationships with stakeholders.

In 2019, the directors visited our facilities and industrial parks in Vietnam, where they also met with government officials as well as key customers and partners. They witnessed the signing ceremony of the joint venture agreement with our key partner, Becamex IDC Corporation, to introduce a new generation of sustainable smart energy solutions to the market. Directors also visited Sembcorp Marine's state-of-the-art Tuas Boulevard Yard in Singapore to understand the yard's work-efficient design and integrated centralised facilities.

Complete, adequate and timely information

The company recognises that directors should be provided with complete, adequate and timely information to enable them to make informed decisions and discharge their duties well. They must also be kept abreast of the Group's operational and financial performance, key issues, challenges and opportunities. Financial highlights of the Group's performance and key developments are presented on a quarterly basis at board meetings. The Group President & CEO, Group Chief Financial Officer (CFO) and members of senior management attend board and board committee meetings to provide insight into matters under discussion and to address any queries that the directors may have.

As part of Sembcorp's commitment towards environmental protection, directors are provided with electronic tablets to access board and board committee papers prior to and during meetings, in order to reduce paper consumption. As a general rule, all relevant board papers are made available to directors a week prior to meetings. This is to give directors sufficient time to review and consider matters at hand. It also facilitates more focused discussions from matters arising during meetings. Should the board require additional information or consultation, they have ready and independent access to the Group President & CEO, Group CFO, senior management, the company secretary, internal and external auditors, and counsel at all times.

Director Experience / Skills Matrix

Experience / Skills	Industry experience	Senior management experience	Strategic planning	Accounting & Finance	Legal	IT	R&D	Risk management	HR management
Ang Kong Hua	✓	✓	✓	✓		✓	✓	✓	✓
Neil McGregor	✓	✓	✓	✓		✓	✓	✓	✓
Margaret Lui	✓	✓	✓	✓		✓		✓	✓
Tan Sri Mohd Hassan Marican	✓	✓	✓	✓		✓	✓	✓	✓
Tham Kui Seng	✓	✓	✓	✓				✓	✓
Dr Teh Kok Peng	✓	✓	✓	✓		✓	✓	✓	✓
Ajaib Haridass	✓	✓	✓	✓	✓			✓	✓
Nicky Tan Ng Kuang	✓	✓	✓	✓				✓	✓
Yap Chee Keong	✓	✓	✓	✓		✓		✓	✓
Jonathan Asherson OBE	✓	✓	✓	✓		✓	✓	✓	✓
Dr Josephine Kwa Lay Keng	✓	✓	✓	✓		✓	✓	✓	✓
Nagi Hamiyeh	✓	✓	✓	✓		✓		✓	✓

Company Secretary

The appointment and removal of the company secretary are subject to the board's approval. The company secretary assists the Chairman to ensure good flow of information within the board and its committees as well as between the board and senior management. In addition, the company secretary attends to corporate and administrative matters, such as arranging orientations for new directors and assisting with their professional development as required. In consultation with the Chairman and Group President & CEO, the company secretary assists the board with scheduling of board and board committee meetings and prepares meeting agendas. The company secretary also administers, attends and minutes board proceedings.

The company secretary assists the board in ensuring the Group's compliance with the company's constitution and applicable regulations including requirements of the Companies Act, Securities & Futures Act and SGX-ST Listing Manual. The company secretary also acts on behalf of the company to liaise with SGX-ST, the Accounting and Corporate Regulatory Authority (ACRA) and when necessary, shareholders.

Independent professional advice

In the furtherance of its duties, the board exercises its discretion to seek independent professional advice at the company's expense, where necessary.

Board Composition and Guidance (Principle 2)

Independence and diversity of the board

Board composition and diversity

The company sees diversity at the board level as essential towards the achievement of its strategic objectives, and has put in place a Board Diversity Policy which sets out principles to maintain diversity on board composition, as well as to ensure effective decision making and governance of the company and its businesses.

Board members include business leaders and professionals with strong experience relevant to the Group's businesses, from the engineering, petrochemical, oil, power and gas and real estate industries to accountancy, banking and finance, legal and technology R&D sectors. In addition to contributing their valuable expertise and insights to board deliberations, best efforts have been made to ensure that directors also bring independent and objective perspectives to allow balanced and well-considered decisions to be made.

The board is of the view that the directors as a group provide an appropriate balance and mix of skills, knowledge and experience, as well as other aspects of diversity such as gender and age.

The current board comprises 12 directors including nine independent directors. With the exception of the Group President & CEO, all directors are non-executive and independent of management in terms of character and judgement. This helps to assure objectivity on issues deliberated.

Profiles of the directors are found on pages 44 to 48.

Review of directors' independence
Each director's independence is individually assessed by the board annually, with a focus on their capacity to bring independence of judgement to board decisions. Directors are required to complete a Director's Independence Checklist based on the provisions in the Code. The checklist also requires each director to assess whether he / she considers himself / herself independent despite involvement in any of the relationships identified in the Code. Thereafter, the Nominating Committee (NC) reviews the completed checklists, assesses the independence of the directors and presents its recommendations to the board.

In 2019, all directors except Mr McGregor and Mrs Lui declared themselves to be independent. As a result of the disclosures received, the board also assessed the independence of Tan Sri Mohd Hassan, Mr Tham, Mr Haridass and Dr Kwa as elaborated below. The board has determined that with the exception of Mr McGregor and Mrs Lui, all members of Sembcorp's board for 2019 are independent.

Mr McGregor is the Group President & CEO and an executive director of Sembcorp. Mrs Lui is CEO of Azalea Investment Management, a subsidiary of Temasek, which is a substantial shareholder of the company.

Tan Sri Mohd Hassan is an independent director of Sembcorp Marine, a listed subsidiary of the company from which the company received payment in excess of S$200,000 in aggregate for consultancy services and provision of utilities services. Mr Haridass has been an independent director of Sembcorp Marine till his retirement on April 18, 2018. Mr Tham was a non-executive director of Sembcorp Design and Construction (SDC), formerly a wholly-owned subsidiary, from which the company received payment in excess of S$200,000 for consultancy services. Mr Tham retired from the board of SDC on October 24, 2019 before the company divested SDC in December 2019.

The board has assessed these matters and is of the view that the payment received from these subsidiaries is not significant in the context of the Group's earnings. The board believes that Tan Sri Mohd Hassan, Mr Haridass and Mr Tham's directorships in these subsidiaries have not and will not interfere, or be reasonably perceived to interfere, with their ability to exercise independent judgement and act in the best interests of the company.

Tan Sri Mohd Hassan is also a Senior International Advisor of Temasek International Advisors, a subsidiary of Temasek. His role as advisor at Temasek International Advisors is non-executive in nature and he is not involved in its day-to-day conduct of business. He is also not accustomed or under an obligation, whether formal or informal, to act in accordance with the directions, instructions or wishes of Temasek. The board believes that Tan Sri Mohd Hassan has acted and will continue to act in the best interests of Sembcorp.

Dr Kwa is a director of the Agency for Science, Technology and Research (A*STAR), with which Sembcorp is jointly researching R&D projects mainly under the Sembcorp-EMA Energy Technology Partnership for which the company has made payment in excess of S$200,000 for project costs. A*STAR has also undertaken several research projects with Sembcorp Marine for which Sembcorp Marine has made payment in excess of S$200,000. The board is of the view that the amount paid to A*STAR is insignificant in the context of the Group's earnings and Dr Kwa's directorship on A*STAR will not interfere with her ability to exercise independent judgement and act in the best interests of Sembcorp.

Under the Code, any director serving more than nine years will not be independent unless his / her continued appointment as an independent director has been sought and approved in separate resolutions by (a) all shareholders, and (b) all shareholders, excluding shareholders who also serve as directors or the CEO or their associates. However, as transition, Guideline 2.4 of the 2012 Code of Corporate Governance continues to apply till December 31, 2021, where the independence of any director who has served on the board beyond nine years from the date of his / her first appointment should be subject to a particularly rigorous review. The board has set a term limit of nine years for determining the independence of directors of the company. Should the board decide to retain any director beyond this nine-year term, it will rigorously review the independence of that director and determine if he / she should continue to be regarded as an independent director.

In 2019, Mr Ang and Tan Sri Mohd Hassan have served the board for more than nine years. The board has observed that over the tenure from 2010 until present, both Mr Ang and Tan Sri Mohd Hassan have shown strong independence of character and judgement in the discharge of their duties as directors. They have accumulated deep knowledge of the business of Sembcorp and made valuable contributions to the board, particularly to the management team and especially during this transformation period that the Group is undergoing. The board is of the opinion that their length of service has not affected the independence of either director, and that their institutional knowledge is advantageous to the Group. Therefore, after a rigorous and thorough review, the NC recommended to the board that Mr Ang and Tan Sri Mohd Hassan shall remain independent despite serving more than nine years on the board, and the board concurred. Both Mr Ang and Tan Sri Mohd Hassan recused themselves from the discussion and decision making.

Chairman and Chief Executive Officer (Principle 3)

Clear division of responsibilities between the board and management

The Chairman and the Group President & CEO are not related to each other. Their roles are kept separate to ensure a clear division of responsibilities, greater accountability and increased capacity for independent decision-making.

The Chairman helms the board, ExCo, ERCC, NC and the TAP. He chairs all general meetings and plays a pivotal role in fostering constructive dialogue between shareholders, the board and management.

The Chairman leads and ensures effective and comprehensive discussion on relevant matters including strategic issues and business planning. He ensures that board and board committee meetings are conducted in a manner that promotes open communication, participation and decision making. He provides advice to management and monitors all follow-up actions, ensuring that board decisions are translated into executive action. In addition, the Chairman provides leadership and guidance to management, particularly with regard to global growth strategies and project investments. As chairman of the ERCC, and in collaboration with the Group President & CEO, he oversees the Group's talent management and ensures that robust succession plans are in place for key management positions.

The Group President & CEO makes strategic proposals to the board. He develops and manages the company's businesses in accordance with board approved strategies, policies, budgets and business plans, and ensures accountability while providing guidance and leadership to key management personnel.

The board has ascertained that there is a strong element of independence on the board and there is no necessity to appoint a lead independent director, as nine out of 12 directors, including the Chairman, are independent.

Board Membership (Principle 4)

Formal and transparent process for the appointment and re-appointment of directors

Nominating Committee N
The NC, chaired by Mr Ang, comprises four members:

Ang Kong Hua
Chairman & Independent Director

Margaret Lui
Non-Executive &
Non-Independent Director

Tan Sri Mohd Hassan
Independent Director

Nicky Tan Ng Kuang
Independent Director

The NC is responsible for continually reviewing Sembcorp's board composition to ensure strong, independent and sound board leadership to drive the continued success of the company and our businesses. Key responsibilities of the NC are to:

- Ensure that the board has the right balance of skills, attributes, knowledge and experience in business, finance and related industries, as well as management expertise critical to the company's businesses;
- Review the composition and size of the board and its committees and recommend new appointments, re-appointments or re-elections to the board and board committees as appropriate;
- Review the directors' independence and succession plans for the board;
- Develop an evaluation process and criteria for the board and board committees' performance; and
- Review training and professional development programmes for the directors.

Succession planning, appointment and re-appointment of directors
The NC seeks to refresh board membership progressively and in an orderly manner. All appointments to the board are made based on merit and measured against objective criteria, taking into account the individual's skills, experience, and knowledge, as well as competencies which support the Group's strategies and business plans. They must also be able to discharge their responsibilities while upholding the highest standards of governance practised by the Group.

The board recognises the contributions of directors who have over time, developed deep insights into the Group's businesses. It exercises discretion to retain the services of such directors where appropriate, to avoid an abrupt loss of experienced directors with a valuable understanding of the Group.

When the need for a new director arises, the NC consults with the board and management and identifies a shortlist of potential candidates. Candidates are sourced through an extensive network of contacts and appropriate external databases. Criteria include skill sets, experience, age, gender, educational and professional background, length of service and other relevant personal attributes. The NC interviews candidates and makes its recommendations for the board's approval.

The company subscribes to the principle that all directors, including the Group President & CEO, should retire and submit themselves for re-election at regular intervals, subject to their continued satisfactory performance. The company's constitution requires a third of our directors to retire and subject themselves for re-election by shareholders at every AGM (one-third rotation rule).

Board member	Position held on the board	Date of first appointment to the board	Date of last re-election / re-appointment as director	Nature of appointment
Ang Kong Hua*	Chairman	Feb 26, 2010	Apr 20, 2018*	Non-executive / Independent
Neil McGregor*	Director	May 1, 2014	Apr 19, 2017*	Executive / Non-independent
Margaret Lui*	Director	Jun 1, 2010	Apr 20, 2018*	Non-executive / Non-independent
Tan Sri Mohd Hassan Marican	Director	Jun 16, 2010	Apr 18, 2019	Non-executive / Independent
Tham Kui Seng	Director	Jun 1, 2011	Apr 18, 2019	Non-executive / Independent
Dr Teh Kok Peng	Director	Oct 15, 2012	Apr 20, 2018	Non-executive / Independent
Ajaib Haridass	Director	May 1, 2014	Apr 18, 2019	Non-executive / Independent
Nicky Tan Ng Kuang	Director	Nov 1, 2015	Apr 18, 2019	Non-executive / Independent
Yap Chee Keong*	Director	Oct 1, 2016	Apr 19, 2017*	Non-executive / Independent
Jonathan Asherson OBE	Director	Jul 17, 2017	Apr 20, 2018	Non-executive / Independent
Dr Josephine Kwa Lay Keng	Director	Aug 1, 2018	Apr 18, 2019	Non-executive / Independent
Nagi Hamiyeh*	Director	Mar 3, 2020	N.A.*	Non-executive / Non-independent

* Up for retirement and re-election at the company's upcoming AGM

In addition, all newly-appointed directors should submit themselves for retirement and re-election at the AGM immediately following their appointment. Thereafter, these directors are subject to the one-third rotation rule.

Pursuant to the one-third rotation rule, Mr Ang, Mr McGregor, Mrs Lui and Mr Yap will retire and, with the exception of Mrs Lui, have offered themselves for re-election at the forthcoming AGM. Mrs Lui, who was appointed in June 2010, is not seeking re-election and is retiring at the forthcoming AGM in April 2020.

Mr Hamiyeh, who was newly appointed to the board on March 3, 2020, will also retire and has offered himself for re-election at the forthcoming AGM.

The board does not encourage the appointment of alternate directors. No alternate director has been or is currently being appointed to the board.

The dates of first appointment, last re-election / re-appointment of board members are set out above.

Review of directors' time commitments

While reviewing the re-appointment and re-election of directors, the NC also considers the directors' other board representations and principal commitments to ensure they have sufficient time to discharge their responsibilities to the board and Sembcorp adequately. The board has adopted an internal guiding principle that seeks to address competing time commitments that may be faced when a director holds multiple directorships. As a general rule, the board has determined that any Sembcorp director should not hold more than five listed company directorships. However, the board recognises that the individual circumstances and capacity of each director are unique and there may be instances in which the limit on board appointments may differ as appropriate.

For 2019, the NC has reviewed and recommended to the board and the board is satisfied that all directors have given sufficient time and attention to the affairs of the company and have discharged their duties adequately.

Board Performance (Principle 5)

Active participation and valuable contributions are key to the overall effectiveness of the board

Board evaluation process and performance criteria

The board believes that its performance is inextricably linked to the long-term performance of the Group. Each year, in consultation with the NC, the board assesses its performance to identify key areas for improvement in the effectiveness of the board and board committees, and the requisite follow-up actions. The assessment helps the directors to maintain focus on their key responsibilities, while improving board performance.

To facilitate this process, each director is required to complete a questionnaire on the effectiveness of the board, board committees and individual directors' contribution and performance. The evaluation considers factors including the size and composition of the board and board committees, processes and accountability, board and board committees' development and effectiveness, information and technology management, decision-making processes, risk and crisis management, succession planning, communication with senior management and stakeholder management. Assessments and feedback are consolidated and presented to the board for discussion. The NC periodically reviews and refines the directors' questionnaire to enhance the evaluation process.

For 2019, the evaluation indicated that the board and its committees continued to perform effectively to support Sembcorp.

Remuneration Matters

Procedures for Developing Remuneration Policies (Principle 6)

Formal and transparent procedure for developing polices on director and executive remuneration

With the assistance of the Executive Resource & Compensation Committee, the board ensures that a formal policy and transparent procedure for determining remuneration of executives and directors are in place.

Executive Resource & Compensation Committee C

The ERCC, chaired by Mr Ang, consists of five members.

Ang Kong Hua
Chairman & Independent Director

Margaret Lui
Non-Executive & Non-Independent Director

Tan Sri Mohd Hassan
Independent Director

Tham Kui Seng
Independent Director

Nicky Tan Ng Kuang
Independent Director

The ERCC is responsible for developing, reviewing and recommending to the board the framework of remuneration for the board and key management personnel as defined in the Code, as well as reviewing succession plans for key management personnel. Key responsibilities are to:

- Assist the board by ensuring that competitive remuneration policies and practices for the company and management are in place, and aligned with the prevailing economic environment;
- Review the Directors' Fee Framework and remuneration package of each member of key management periodically, and endorse or make further recommendations on such matters to the board for its consideration;
- Establish guidelines on share-based incentives and other long-term incentive plans and approve the grant of such incentives to key management personnel. These incentives serve to motivate executives to maximise operating and financial performance and shareholder value. They are aimed at aligning the interests of key management personnel with those of shareholders; and
- Review succession planning for key management personnel and the leadership pipeline for the organisation.

In its deliberations, the ERCC takes into consideration industry practices and compensation norms. The Group President & CEO does not attend discussions relating to his own compensation, terms and conditions of service, or the review of his performance. In addition, no ERCC member or director is involved in deliberations involving any remuneration, compensation, share-based incentives or any form of benefits to be granted to himself / herself.

The ERCC has access to expert professional advice on human resource matters whenever the need arises. In 2019, Aon Hewitt (Singapore) was engaged as external consultants to provide such advice, including the validation of pay levels and compensation structure of the Group President & CEO against the industry and market, thereby ensuring rigour of the compensation framework design and its application for executives. In engaging external consultants, the Group ensures that the relationship, if any, between ourselves and these external consultants will not affect the independence and objectivity of the latter. In 2019, the ERCC undertook a review of the independence and objectivity of Aon Hewitt (Singapore) and confirmed that the Group had no relationship with the firm that would affect the latter's independence.

In reviewing succession planning and the Group's leadership pipeline, the ERCC reviews the development of management and senior staff, and assesses their strengths and development needs based on the Group's leadership competencies framework, with the aim of building talent and maintaining strong, sound leadership for the Group. Each year, the ERCC reviews succession planning for the position of Group President & CEO, for officers reporting directly to him, as well as other selected key positions in the company. Potential internal and external candidates for succession are reviewed for different time horizons according to immediate, medium- and long-term needs. In addition, the ERCC also reviews the company's obligations arising in the event of termination of the contracts of service of the Group President & CEO and key management personnel, to ensure that such contracts contain fair and reasonable termination clauses.

Level and Mix of Remuneration (Principle 7)

A competitive reward system ensures the highest performance and retention of directors and key management personnel

We recognise that a competitive remuneration and reward system based on individual performance is important to attract, retain and incentivise the best talent. Sembcorp believes that our remuneration and reward system aligns with the long-term interests and risk policies of the company.

The Group President & CEO, as an executive director, does not receive director's fees from Sembcorp. As a lead member of management, his compensation comprises his salary, allowances, bonuses and share-based incentives conditional upon meeting certain performance targets.

Corporate Governance Statement

Directors' Fee Framework for FY2019*

	S$
Retainer fee (per annum)	
Chairman (all-in fee)[1]	750,000
Director's basic retainer	75,000
Chairman, Executive Committee	50,000
Chairman, Audit Committee	50,000
Chairman, Risk Committee	35,000
Chairman, Executive Resource & Compensation Committee	35,000
Chairman, Nominating Committee	25,000
Chairman, Technology Advisory Panel / Others	25,000
Member, Executive Committee	30,000
Member, Audit Committee	30,000
Member, Risk Committee	20,000
Member, Executive Resource & Compensation Committee	20,000
Member, Nominating Committee	15,000
Member, Technology Advisory Panel / Others	15,000
Attendance fee (per meeting)	
Board meeting (Local)[2]	2,500
Board meeting (Overseas)[2]	5,000
Committee / General meeting (Local)[2]	1,500
Committee / General meeting (Overseas)[2]	3,000
Committee / AGM & EGM (flat fee)[3]	1,000
Teleconference (per meeting)	
Board meeting	1,500
Board committee meeting	1,000
General meeting	1,000

Notes:

* The Directors' Fee Framework applies to all directors except the Group President & CEO, who is an executive director and does not receive any directors' fees

1 With effect from January 1, 2014, the Chairman of our board only receives one all-in chairman's fee. He does not receive the directors' basic fee, nor any further fees or allowances for serving as a chairman or member of any of our board committees

2 Local – home country of the directors
Overseas – outside home country of the directors

3 Attendance fee for attending committee meetings is payable if such meetings are held on separate days from the board meeting. In the event that the committee meeting is held on the same day as the board meeting, only a flat fee of S$1,000 is payable

Details of the share-based incentives and performance targets are available in the Directors' Statement on pages 106 to 116 and Note H1 in the Notes to the Financial Statements.

Non-executive directors' fees
An independent review of the Directors' Fee Framework was conducted in 2018 by our external consultants, Willis Towers Watson. The board adopted a new fee framework which aligned to the market from financial year 2018.

The framework above adopted by the company is based on a scale of fees divided into basic retainer fees, attendance fees and allowances for service on board committees.

The directors' fees payable to non-executive directors are paid in cash and in share awards under the restricted share plan. The ERCC has determined that up to 30% of the aggregate directors' fees approved by shareholders for a particular financial year may be paid out in the form of restricted share awards. Mr McGregor does not receive directors' fees as Group President & CEO. The payment of directors' fees (both cash and share components) is contingent on shareholders' approval. Directors and their associates also abstain from voting on any resolution(s) relating to their remuneration.

Share awards granted under the restricted share plan to non-executive directors as part of directors' fees will consist of the grant of fully paid shares outright with no performance and vesting conditions attached but with a selling moratorium. Non-executive directors are required to hold shares in the company (including shares obtained by other means) worth the value of their annual basic retainer fee (currently S$75,000); any excess may be disposed of as desired, subject to SGX-ST listing rules. A non-executive director may only dispose of all of his shares one year after leaving the board. Subject to shareholders' approval at the forthcoming AGM, the cash component of the directors' fees for the financial year 2020 is intended to be paid half-yearly in arrears.

The actual number of shares to be awarded to each non-executive director will be determined by reference to the volume-weighted average price of a share on the SGX-ST over the 14 trading days from (and including) the day the shares are first quoted ex-dividend after the AGM (or, if the resolution to approve the final dividend is not approved, over the 14 trading days immediately following the date of the AGM). The number of shares to be awarded will be rounded down to the nearest hundred and any residual balance will be settled in cash.

The share component of the directors' fees for the financial year 2019 is intended to be paid in 2020 after the AGM has been held.

The company does not have a retirement remuneration plan for non-executive directors.

Remuneration for key management personnel
Sembcorp's remuneration and reward system for key management personnel is designed to ensure competitive compensation to attract, retain and motivate employees to deliver high-level performance in accordance with the company's risk policies. Further, the level and mix of the variable remuneration component is structured to ensure that the total remuneration for key management personnel is strongly aligned to the financial performance and returns delivered to shareholders. The strong relationship between pay and performance has been validated based on the pay-for-performance study conducted by our external consultants, Aon Hewitt (Singapore), in 2019.

- **Fixed remuneration**
  Fixed remuneration includes an annual basic salary and, where applicable, fixed allowances, an annual wage supplement and other emoluments. Base salaries of key management personnel are determined based on the scope, criticality and complexity of each role, equity against peers with similar responsibilities, experience and competencies, individual performance and market competitiveness.

- **Annual variable bonuses**
  The annual variable bonus is intended to recognise the performance and contributions of the individual, while driving the achievement of key business results for the company. The annual variable bonus includes two components.

  The first is the performance target bonus, linked to the achievement of pre-agreed financial and non-financial performance targets comprising strategy, business processes and organisation and people development. It is designed to support the Group's business strategy and the ongoing enhancement of shareholder value through the delivery of annual financial strategy and operational objectives. At an individual level, the performance target bonus will vary according to the actual achievement of the Group, business unit and individual performance.

  The second is linked to the creation of economic value added (EVA) and is designed to ensure alignment with sustainable value creation for shareholders over the longer term. An EVA-linked "bonus bank" is created for each executive. Typically, one-third of the bonus bank balance is paid out in cash each year, while the remaining two-thirds is carried forward to the following year. The carried-forward balances of the bonus bank may be either reduced or increased in future, based on the yearly EVA performance of the company and its subsidiaries. There are provisions in the EVA incentive plan to allow for forfeiture of the outstanding balances in the bonus bank in exceptional circumstances of misstatement of financial results or misconduct resulting in financial loss to the company.

- **Share-based incentives**
  The company's performance share plan and restricted share plan were approved and adopted by shareholders at an extraordinary general meeting (EGM) held by the company on April 22, 2010. Through our share-based incentives, we motivate key management personnel to continue to strive for the Group's long-term shareholder value. In addition, our share-based incentive plans aim to align the interests of participants with the interests of shareholders, to improve performance and achieve sustainable growth for the company.

  The performance share award is only granted to the Group President & CEO and top management, while the restricted share award is granted to a broader group of executives. The number of performance and restricted shares awarded is determined using a valuation of the shares based on a Monte Carlo simulation. The share awards are conditional upon the achievement of pre-determined performance targets over the performance period. The performance conditions and targets are approved by the ERCC at the beginning of the performance period and the final number of shares vested to the recipient will depend on the level of achievement of these targets over the performance period, subject to the approval of the ERCC. The Group President & CEO and top management will, under the renewed Share Plan, be required to hold shares equivalent to a minimum of 200% and 100%, respectively, of their annual base salaries to align their interest with the shareholders.

  The size of the restricted share awards granted in 2019 is based on the achievement of stretched financial and non-financial targets, with emphasis on organisational transformation to meet future challenges and adherence to environment, health and safety standards.

  The restricted shares awarded in 2019 will vest conditionally over a four-year period contingent on satisfactory individual performance of the recipient for the financial year preceding each tranche of vesting, and continued employment with the Group.

Corporate Governance Statement

The performance share awards granted in 2019 were based on Total Shareholder Return, Return on Equity (excluding Sembcorp Marine), Total Renewables Capacity and implementation of digital initiatives to support the organisational transformation efforts. The grant will have a three-year performance period from January 1, 2019 to December 31, 2021. A minimum threshold performance must be achieved to trigger an achievement factor, which in turn determines the number of performance shares eventually awarded.

The performance shares awarded in 2019 will vest in two tranches, 50% vesting in March 2022 and 50% vesting in March 2023, contingent on satisfactory individual performance of the recipient for the financial year preceding each tranche of vesting, and continued employment with the Group.

As the duration of the company's performance share plan and restricted share plan is 10 years commencing on the date of adoption on April 22, 2010, these existing plans are due to expire on April 21, 2020. The company is proposing to adopt new Sembcorp Industries Performance Share Plan 2020 and Sembcorp Industries Restricted Share Plan 2020 to replace these existing plans following their expiry at the forthcoming AGM.

Pay for performance
As in prior years, a pay-for-performance study was conducted in 2019 by our external consultants, Aon Hewitt (Singapore), to review the alignment between the Group's executive pay programme and business results. The Group benchmarked ourselves against established comparable-sized local listed companies with whom the Group competes for talent and capital.

The study benchmarked different elements of senior executive pay, namely fixed remuneration, total cash remuneration and total remuneration including long-term incentives, against that of peer companies. It found fixed remuneration for senior executives at the Group to be positioned competitively vis-à-vis the Group's relative size and complexity. Further, the total remuneration over the last five years showed a robust correlation with the Group's key financial performance drivers, including profit from operations and net income. The performance conditions for short-term incentive plans were only partially met. Additionally, the shareholder return performance conditions that feature in the long-term incentive plan were not met, due to adverse share price movements. As a result, the realised value of the share incentive award was much lower than the granted value.

Overall, the study demonstrates sound correlation between the Group's executive pay, our key financial results, shareholder returns and peer company performance, thus reinforcing the strong pay-for-performance features underpinning the executive pay programme.

Disclosure on Remuneration (Principle 8)

Based on the Directors' Fee Framework, the computation of non-executive directors' fees totalled S$2,285,833 in 2019 (2018: S$2,206,333).

In 2019, the company had no employees who were immediate family members of a director or the Group President & CEO.

More information on directors' and key executives' remuneration can be found on pages 271 and 272.

Accountability and Audit

The board is accountable to shareholders

Sembcorp is committed to open and honest communication with shareholders at all times. The company presents a balanced and clear assessment of the Group's performance, position and prospects to shareholders through the timely release of our financial results. The company believes that prompt compliance with statutory reporting requirements is imperative to maintaining shareholders' confidence and trust in the company. In line with SGX-ST requirements, negative assurance statements were issued by the board in 2019 to accompany the Group's quarterly results announcements, confirming that to the best of its knowledge, nothing had come to its attention which would render the quarterly results false or misleading.

The company also recognises the importance of providing the board with accurate and relevant information on a timely basis. Sembcorp management furnishes management and operations reports as well as financial statements to the board on a regular basis.

Risk Management and Internal Controls (Principle 9)

The board has overall responsibility for the governance of the Group's risk management and internal controls. The company's board and management are fully committed to maintaining sound risk management and internal control systems to safeguard shareholders' interests and the Group's assets.

The board determines the company's levels of risk tolerance and risk policies, and oversees management in the design, implementation and monitoring of risk management and internal control systems.

Risk Committee R
The RC assists the board in overseeing risk management for the Group. Headed by Mr Haridass, all the four RC members are non-executive and independent directors.

Ajaib Haridass
Chairman

Dr Teh Kok Peng
Yap Chee Keong
Jonathan Asherson OBE

The RC's principal functions are to:

- Review and endorse the Group's policies, guidelines and systems to govern the process for assessing and managing risk, including the risk appetite;
- Review the adequacy and effectiveness of the risk management systems, processes and procedures of the Group;
- Review risk-related reports submitted by management. These include updates on the Group's risk portfolio, reports on major risk exposure and any other risk-related issues as well as actions taken to monitor and manage such exposure / issues; and
- Review infrastructure and resources in place to support the management of risk including insurance, human resources, information technology (IT) systems, and reporting structure and procedures.

Adequate and effective system of internal controls
The Group has implemented a comprehensive enterprise risk management (ERM) framework where key risks identified are deliberated by management with the support of the risk management function, and reported regularly to the RC. Robust mechanisms and systems have been put in place to identify and manage the inherent risks in our business and strategy, and to monitor the Group's exposure to key risks that could impact the overall strategy and sustainability of the business. Supporting the ERM framework is a system of internal controls comprising a Code of Conduct, group-wide governance and internal control policies, procedures and guidelines dictating the segregation of duties, approval authorities and limits, and checks and balances embedded in business processes. The Group has also considered the various financial risks, details of which can be found on our company website.

The Group has made good progress in transitioning from our current Governance Assurance Framework (GAF) to an Integrated Assurance Framework (IAF) to put greater emphasis on the three lines of defence (LOD) model. Through the IAF structure, the respective LOD work together to ensure that key financial, operational, compliance and IT risks are reviewed and tested using a robust assurance process. Under the IAF, a pragmatic and collaborative approach to risk and controls assessment has been established, with common and consistent criteria to assess the risks and the adequacy and effectiveness of the internal controls.

Key markets, as the first LOD, are adopting and implementing the IAF. This requires them to work with the second LOD comprising business lines, subject matter experts and corporate functions, to perform a thorough review and assessment of their risks and internal controls as well as updating of the new risk and control registers. Clear escalation procedures, consequence management framework and key risk indicators in line with the Group's risk appetite were developed concurrently as part of the IAF methodology. Together, these enable the Group to proactively manage key risks and controls. This enhances the Group's reporting and monitoring capabilities and cultivates a risk culture of accountability and ownership. As the third LOD, Group Integrated Audit (GIA) provides independent assurance across financial, operational, compliance and IT risks through a series of walkthroughs and substantive testing. Management works closely with GIA in closing out all material issues and gaps in a timely manner to ensure continual improvement of our risk and controls environment, as well as an effective feedback loop to the first and second LOD. External audit considers internal controls relevant to the preparation of financial statements to ensure they give a true and fair view.

The ERM framework and IAF are further complemented by a Management Control Assessment, which is a rigorous management attestation process submitted quarterly by each market and business unit, to provide the assurance that its risk management and internal control system is adequate and effective. The submissions and responses are further validated through substantive review by the business lines, subject matter experts and corporate functions as an added layer of assurance.

During the year, the Group's risk profile was reviewed and updated. The adequacy and effectiveness of the Group's risk management and internal controls were also assessed and enhanced through a combination of management control assessment and integrated audits, as well as actions taken as a follow up to these exercises.

For more information on the company's ERM framework, please refer to our company website.

For the financial year under review, the board has been assured by the Group President & CEO and Group CFO that the financial records have been properly maintained, that the financial statements give a true and fair view of the company's operations and finances, and that the risk management and internal control systems of the Group are adequate and effective.

The board, with the concurrence of the AC, is of the opinion that the company's internal controls and risk management systems are adequate and effective as at December 31, 2019 to address the financial, operational, compliance and IT risks of the Group. This assessment is based on the risk management and internal controls established and maintained by the Group, work performed by external and internal auditors, and reviews performed by senior management. Internal controls, because of their inherent limitations, can provide reasonable, but not absolute assurance, regarding the achievement of their intended control objectives. In this regard, the board will ensure that should any significant internal control failings or weaknesses arise, necessary remedial actions will be swiftly taken.

The IAF is in the final stages of implementation for all key markets. The AC, supported by the RC, oversees the progress of the IAF implementation.

Audit Committee A (Principle 10)

Chaired by Mr Yap, the four AC members are as follows:

Yap Chee Keong
Chairman & Independent Director

Dr Teh Kok Peng
Independent Director

Ajaib Haridass
Independent Director

Jonathan Asherson OBE
Independent Director

The AC does not have any member who was a former partner or director of the company's external auditors, KPMG, within the last 12 months or who holds any financial interest in KPMG.

Authority and duties of the AC
The AC assists the board in discharging its statutory and other responsibilities on internal controls, financial and accounting matters, operational and compliance controls, and business and risk management practices of the Group. The AC has established terms of reference approved by the board and has explicit authority to investigate any matter as per its terms of reference. Its main responsibilities are to:

- Review the company's policies, control procedures and accounting practices with external auditors, internal auditors and management;
- Review and act in the interest of the shareholders in respect of interested person transactions (IPT) falling within the scope of Chapter 9 of the SGX-ST Listing Manual, as well as any matters or issues that affect the financial performance of the Group; and
- Review the financial results announcements, accompanying press releases and presentation slides, as well as the financial statements of the Group and the adequacy and accuracy of information disclosed prior to submission to the board for approval.

The AC has full access to and co-operation from management, and full discretion to invite any director or executive officer to attend its meetings. It also has reasonable resources to enable it to discharge its functions properly.

Where relevant, the AC is guided by the recommended best practice for audit committees, set out in the revised Guidebook for Audit Committees issued by Singapore's Audit Committee Guidance Committee.

Key audit matters
The AC discusses the key audit matters with the management and external auditors on a quarterly basis to ensure that they are appropriately dealt with. The AC concurred with the basis and conclusions included in the auditor's report for the financial year 2019 with respect to the key audit matters.

For more information on the key audit matters, please refer to pages 117 to 125.

External auditors
Each year, the AC reviews the independence of the company's external auditors and makes recommendations to the board on their re-appointment. During the year, the AC reviewed the performance of the external auditors using audit quality indicators recommended by ACRA as reference. In accordance with SGX-ST Listing Rule 713(1), Ling Su Min, the audit partner who was in charge from financial years 2014 to 2018, has retired and Koh Wei Peng has been appointed the new audit partner for the financial year 2019.

The AC reviews and approves the external audit plan to ensure the adequacy of the audit scope. It also reviews the external auditors' management letter and monitors the timely implementation of required corrective or improvement measures. The AC meets external and internal auditors at least once a year without the presence of management to discuss any issues of concern. It has reviewed the nature and extent of non-audit services provided by the external auditors to the Group for the year excluding services provided to Sembcorp Marine, a listed subsidiary which has its own audit committee. The AC is satisfied that the independence of the external auditors has not been impaired by their provision of non-audit services. Accordingly, the AC has recommended the re-appointment of the external auditors at the forthcoming AGM.

Details of non-audit fees payable to the external auditors are found in Note B4(a) in the Notes to the Financial Statements.

Whistle-blowing policy
The AC oversees the Group's Whistle-blowing Policy which has been implemented to strengthen corporate governance and ethical business practices across all markets, business lines and functional units. Employees are provided with accessible channels to report suspected fraud, corruption, dishonest practices or other misdemeanours to the Group's integrated auditors and are protected from reprisal to the extent possible. This aims to encourage the reporting of such matters in good faith. In 2018, GIA rolled out a whistle-blowing portal on the internet. This whistle-blowing portal has a pre-defined set of questions to guide whistle-blowers in providing the required information / documents in reporting their concerns and also to allow the investigation team to maintain communication. The AC oversees the outcome of independent investigations and ensures remedial actions are followed on.

For more information on our Whistle-blowing Policy, please refer to our company website.

Internal Audit
Independent integrated audit function

The integrated audit function is an important third LOD for the company and a key component of the overall assurance framework.

The GIA function provides assurance to the AC that risk management and internal control systems are in place to manage and govern key aspects of the Group's businesses, including our financial, operational, compliance and IT systems.

GIA has enhanced its audit approach by aligning its integrated audit plan with the IAF through integrating operational, technological and financial audits. Subject matter specialists were seconded from relevant functions to GIA for the purposes of these integrated audits. GIA is also deepening its capabilities in the areas of operations, IT, and workplace health, safety, security and environment audits. The GIA team has unrestricted access to all personnel, documents, accounts and property, records and correspondence and other data of the company. Auditors also have the right to enter any premises of the Group and to request that any officer furnishes all information and such explanations deemed necessary for the audit team to form an opinion on the probity of action and adequacy of systems and / or controls.

The Head of GIA reports directly to the AC and administratively to the Group President & CEO. The AC participates in the appointment, replacement or dismissal, as well as evaluation and compensation of the Head of GIA.

The AC reviews the independence, adequacy and effectiveness of the GIA function and processes, as well as ensures that GIA is adequately resourced and set up to carry out its functions.

On a quarterly basis, the AC reviews the proposed scope and performance of the GIA function, audit findings and management responses, and the Group's Integrated Audit Plan to ensure that it is comprehensive and to enable the effective and regular review of all activities within the purview of GIA. It ensures that no limitation on audit has been imposed. Integrated audit summary of findings and actions taken are reviewed and discussed at AC meetings.

The AC is satisfied that the GIA team is effective, independent and has appropriate standing within the company.

Professional standards and competency
GIA comprises members with relevant qualifications and experience and the integrated audit is carried out based on the International Standards for the Professional Practice of Internal Auditing set by The Institute of Internal Auditors.

Shareholder Rights and Engagement

Shareholder Rights and Conduct of General Meetings (Principle 11)

Fair and equitable treatment of shareholders

Sembcorp treats all shareholders fairly and equitably. The company recognises, protects and facilitates the exercise of shareholders' rights and continually reviews and updates such governance arrangements.

The company is committed to ensuring that all shareholders have easy access to clear, reliable and meaningful information in order to make informed investment decisions. The company regularly communicates major developments in our business operations via SGXNet, press releases, circulars to shareholders and other appropriate channels. The company also encourages shareholder participation and voting at general meetings.

Conduct of General Meetings
All shareholders are invited to participate in the company's general meetings.

The Group President & CEO delivers a short presentation to shareholders at each AGM to update them on the performance of Sembcorp's businesses. Every matter requiring approval at a general meeting is proposed as a separate resolution. Shareholders present are given an opportunity to clarify or direct questions on issues pertaining to the proposed resolutions before these are voted on. The board and management are in attendance to address any queries or concerns and obtain feedback from shareholders. External auditors and legal advisors are also present to assist the board where necessary.

The company disseminates information on general meetings through notices in our annual reports or circulars. These notices are also released via SGXNet, published in local newspapers and posted on the company website www.sembcorp.com ahead of the meetings to give ample time for shareholders to review the documents. In line with the company's commitment towards environmental responsibility, the company no longer distributes our annual reports and circulars via CD-ROM. Instead, annual reports and circulars are available on our company website and shareholders are encouraged to access these online. A booklet containing the Request Form, Notice of AGM / EGM and Proxy Form will be sent to shareholders, informing them that the annual report / circular is available online and how to view it. However, we are mindful that some shareholders may prefer to receive a printed copy and this will be provided upon request.

The company's constitution allows shareholders to appoint up to two proxies to attend, speak and vote at general meetings on their behalf. Under the multiple proxy regime, "relevant intermediaries" such as banks, capital markets services licence holders that provide custodial services for securities and the Central Provident Fund Board (CPF), are allowed to appoint more than two proxies to attend, speak and vote at general meetings. This will enable indirect investors, including CPF investors, to be appointed as proxies to participate at general meetings. Voting in absentia by mail, facsimile or email is currently not permitted. Such voting methods will need to be cautiously evaluated for feasibility to ensure the integrity of the information and that the authenticity of the shareholders' identities is not compromised.

The company conducts electronic poll voting at general meetings for greater transparency in the voting process. Shareholders are informed of the voting procedures governing such meetings. An independent scrutineer is engaged to review the electronic poll voting system and proxy verification process during meetings to ensure that the information is adequately compiled and procedures are carried out effectively. The total number of votes cast for or against each resolution is tallied and displayed 'live' on-screen to shareholders immediately after the vote has been cast. Voting results will also be announced after the meetings via SGXNet.

The company secretary records minutes from these general meetings, including relevant comments or queries from shareholders together with responses from the board and management. Since 2019, these minutes are published on the company website www.sembcorp.com as soon as practicable.

Dividend policy
Sembcorp is committed to achieving sustainable income and growth to enhance total shareholder return. The Group's policy aims to balance cash return to shareholders and investment for sustaining growth, while aiming for an efficient capital structure. The company strives to provide consistent and sustainable ordinary dividend payments to our shareholders, and the practice is to consider declaring dividends on a biannual basis. In the event of a material variation in declared dividends compared to the previous corresponding period, or any decision not to declare a dividend, the reasons for such will be disclosed in accordance with SGX-ST Listing Rule 704(24).

Engagement with Shareholders (Principle 12)
Regular, effective and fair communication with shareholders

Sembcorp is committed to high standards of corporate transparency and disclosure. The Group has an investor relations policy which adheres to fair disclosure principles and emphasises active dialogue and engagement with shareholders, investors and analysts.

Disclosure of information on a timely basis
Sembcorp makes every effort to ensure that shareholders and capital market players have easy access to clear, meaningful and timely information on the company in order to make informed investment decisions. To do this, various channels including announcements, press releases, shareholder circulars and annual reports are utilised. All price-sensitive and material information is disseminated via SGXNet on a non-selective basis, in a timely and consistent manner. The company's announcements are also uploaded to the company website, www.sembcorp.com, after dissemination on SGXNet.

The financial results release date is disclosed at least two weeks prior to the announcement date via SGXNet. On the date of the announcement, the financial statements as well as the accompanying press release and presentation slides are released via SGXNet and posted on the company website. Thereafter, a briefing or teleconference by management is jointly held for the media and analysts. The results briefings and teleconferences are concurrently broadcast 'live' via webcast. Investor relations officers are available by email or telephone to answer questions from shareholders and analysts as long as the information requested does not conflict with the SGX-ST's rules on fair disclosure.

Establishing and maintaining regular dialogue with shareholders
Sembcorp employs multiple communication platforms to engage shareholders. In addition to our results briefings, the company maintains regular dialogue with our shareholders through investor-targeted events such as AGMs, roadshows, conferences, site visits, group briefings and one-on-one meetings. These platforms offer opportunities for senior management and directors to interact first-hand with shareholders, understand their views, gather feedback and address concerns.

Shareholders can also directly contact the investor relations team via email or telephone as the contact information for investor relations is provided on the company website.

To keep senior management and the board abreast of market perception and concerns, the investor relations team provides regular updates on analyst consensus estimates and views. On an annual basis, a more comprehensive report is presented, which includes updates and analysis of the shareholder register, highlights of key shareholder engagements for the year as well as market feedback.

For further details on Sembcorp's communications with its shareholders, please see the Investor Relations chapter on page 102.

Managing Stakeholders Relationships

Engagement with Stakeholders (Principle 13)
Balancing the needs and interests of material stakeholders

Sembcorp adopts an inclusive approach by considering and balancing the needs and interests of material stakeholders. Stakeholder engagement is the first key step in determining issues that are material to the company, giving insight into the perspective of our stakeholders and what they deem important in the context of their partnership with Sembcorp. The company engages and gathers feedback from a diverse range of stakeholders with the aim of improving our performance and driving long-term sustainability.

Our key stakeholders include customers, employees, financial institutions, governments and regulators, shareholders and the investment community, the local community, as well as contractors, suppliers, trade unions and industry partners. When assessing our material sustainability issues, we identify stakeholders in accordance with the AA1000 Stakeholder Engagement Standard. These stakeholders are managed by various departments at the corporate and market levels. The table on the following page provides an overview of our stakeholders and key topics raised.

The company maintains a dedicated investor relations section on our company website to cater to the specific information needs of shareholders, investors, analysts and the financial community. Designed to provide a convenient repository of information for investors' needs, the site includes the company's results announcements since our listing in 1998, an archive of the company's results briefing webcasts, downloadable five-year financial data, a calendar of upcoming events, as well as pertinent stock information such as dividend history, share price charts and analyst coverage. In addition to the company website, Sembcorp uses various platforms to engage different stakeholders. The frequency of the company's ongoing engagement with its stakeholders varies in accordance with the platforms used and the topics of engagement.

Dealings in Securities
A Policy on Prevention of Insider Trading has been implemented to prohibit dealings in the company's securities by our directors and senior management within a two-week window prior to the announcement of the company's financial statements for each of the first three quarters of the financial year, and within one month prior to the announcement of the company's full-year financial results. Directors and employees are advised to be mindful to observe insider trading laws at all times, even when dealing in the company's securities outside the prohibited trading period. They are also reminded not to deal in the company's securities on short-term considerations.

Interested Person Transactions
Shareholders have adopted an interested person transaction mandate (IPT Mandate) in respect of IPTs of the company. The IPT Mandate defines the levels and procedures to obtain approval for such transactions. Information regarding the IPT Mandate is available on the staff intranet. The company also has an internal policy and procedure to manage and capture any IPTs. All markets, business lines and functional units are required to be familiar with the IPT Mandate as well as the internal policy and procedure, and report IPTs to the company for review and approval by the AC. The Group maintains a register of IPTs in accordance with the reporting requirements stipulated by Chapter 9 of the SGX-ST Listing Manual.

Information on IPTs for 2019 can be found on pages 273 and 274.

Details on our IPT Mandate can be found on our company website.

Code of Conduct
In maintaining an effective governance and decision-making structure, the Group Code of Conduct was revised and implemented in 2018. The Group President & CEO actively references the code in key internal meetings which reinforces its importance among management. All employees and directors of the organisation receive training on the code and its key policies.

Corporate Governance Statement

Stakeholder group	Engagement and communication platforms	Topics raised include
Customers	Operational and commercial meetings, presentations and negotiations, surveys, site visits, company activities, customer service hotlines, social media, company websites and feedback channels, telephone and email contact	Reliability of products and services Competitive pricing for products and services Sustainable and integrated energy, water and waste solutions Innovation and development of new products and services
Employees	Employee communication sessions, workshops, seminars and training sessions, employee appraisal sessions, employee committees, social events and activities, newsletters, intranet and email contact	Talent engagement Change management Benefits design Health and safety
Financial institutions	Results briefings, presentations and meetings, news releases, stock exchange announcements, company websites, investor relations microsite, telephone and email contact	Company performance, growth and value creation Corporate governance
Governments and regulators	Briefings, presentations, committees, conferences, forums, roundtable and panel discussions, seminars and workshops, site visits, telephone and email contact	Solutions to meet the needs of industries and the community Regulatory compliance Skills transfer and community contributions Health and safety
Shareholders and the investment community	Results briefings, AGMs, investor roadshows, seminars and forums, investor meetings, site visits, news releases, stock exchange announcements, company websites, investor relations microsite, telephone and email contact	Company performance, growth and value creation Governance, ethical business practices and regulatory compliance
Local community	Participation and collaboration in community projects, community activities, company websites, telephone and email contact	Community needs Social and environmental impact
Contractors, suppliers, trade unions and industry partners	Review and co-ordination meetings, briefings, presentations and negotiations, committees, conferences, forums, roundtable and panel discussions, seminars and workshops, site visits, telephone and email contact	Safety and regulatory compliance Company's long-term viability

Summary of Governance Disclosure

The Summary of Disclosures, that describes our corporate governance practices with specific reference to disclosure requirements in the principles and provisions of the Code which can be found at SGX's website at rulebook.sgx.com, is set out below.

Investor Relations

Sembcorp is committed to ensuring that all capital market players have easy access to clear, reliable and meaningful information on our company in order to make informed investment decisions.

In the context of constantly-evolving disclosure, transparency and corporate governance requirements, we aim to provide investors with an accurate, coherent and balanced account of the Group's performance and prospects. Sembcorp has a dedicated investor relations team and communicates with the investing public through multiple platforms and channels. These include group briefings to analysts, investors and the media; one-on-one meetings with shareholders and potential investors; investor roadshows as well as the investor relations section of our company website.

Proactive Communication with the Financial Community

In 2019, senior management and the investor relations team actively engaged the financial community. We held one-on-one and group meetings with shareholders, analysts and potential investors. These included meetings during non-deal roadshows in Singapore, Tokyo, London, New York, Chicago and Toronto led by our senior management. Besides roadshows, we also attended the Macquarie ASEAN Conference 2019 in Singapore and the inaugural GPF-Bloomberg Sustainable Investing Forum in Bangkok. We continued to organise site visits to our facilities. In 2019, we organised a tour for analysts to the Vietnam-Singapore Industrial Parks in Binh Duong. The visit provided analysts with a first-hand look at our industrial parks and integrated townships in Vietnam.

During the year, we won the gold award for Best Investor Relations at the Singapore Corporate Awards 2019, under the category for companies with S$1 billion and above in market capitalisation. The award recognises companies that adopt and implement best practices in investor relations, and embody the spirit of good corporate governance and transparency.

Total Shareholder Return

Sembcorp Industries' last traded share price in 2019 was S$2.29 and the company ended the year with a market capitalisation of S$4.1 billion. The company's share price averaged S$2.41 during the year, registering a low of S$2.03 in August and a high of S$2.77 in April. Daily turnover averaged 3.4 million shares.

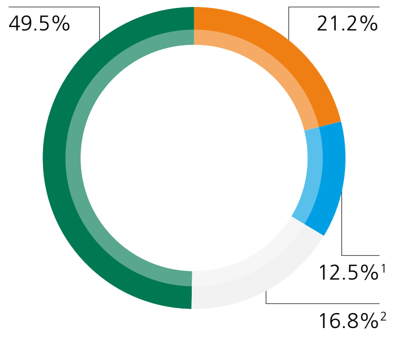
In 2019, the challenging operating environment in the offshore and marine sector continued to weigh on the earnings of our listed subsidiary Sembcorp Marine, which also impacted our share performance. Sembcorp Industries' total shareholder return for the year stood at negative 8%. This was lower than the Straits Times Index's 9% and the MSCI Asia Pacific ex-Japan Industrials Index's 6%.

For the financial year 2019, an interim dividend of 2 cents per ordinary share was declared and paid to shareholders in September 2019. In addition, a final dividend of 3 cents per ordinary share has been proposed, subject to approval by shareholders at the coming annual general meeting to be held in April 2020. Together with the interim dividend, this would bring our total dividend for 2019 to 5 cents per ordinary share.

Shareholder Information

Our major shareholder Temasek Holdings held 49.5% of our shares at the end of 2019. Institutional shareholders accounted for 21% of our issued share capital or 42% of free float, while retail shareholders[1] and shareholders not identified[2] held 29% of issued share capital or 58% of free float. In terms of geographical spread, excluding the stake held by Temasek Holdings and shareholders not identified, our largest geographical shareholding base was North America with 39% followed by shareholders from Asia and Europe, which accounted for 30% and 24% of the shares respectively.

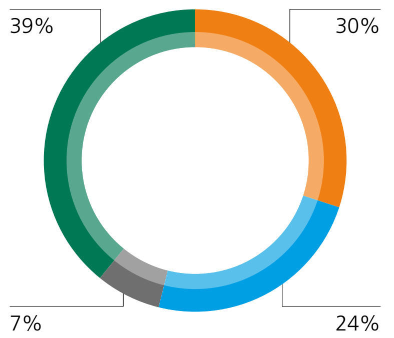
Share Ownership by Investor Category



As at December 31, 2019

Share Ownership by Geographical Distribution

Excluding shares held by the major shareholder Temasek Holdings and shareholders not identified



As at December 31, 2019

[1] Retail shareholders include private investors, brokers, custodians and corporates

[2] Shareholders not identified include mainly shareholders that fall below the threshold of 250,000 shares

Consolidated Financial Statements

Other Information

Directors' Statement

Year ended December 31, 2019

We are pleased to submit this annual report to the members of the Company together with the audited financial statements for the financial year ended December 31, 2019.

In our opinion:

a. the financial statements set out on pages 128 to 270 are drawn up so as to give a true and fair view of the financial position of the Group and of the Company as at December 31, 2019 and the financial performance, changes in equity and cash flows of the Group for the year ended on that date in accordance with the provisions of the Singapore Companies Act, Chapter 50, Singapore Financial Reporting Standards (International) and International Financial Reporting Standards; and

b. at the date of this statement, there are reasonable grounds to believe that the Company will be able to pay its debts as and when they fall due.

The Board of Directors has, on the date of this statement, authorised these financial statements for issue.

Directors

The directors in office at the date of this statement are as follows:

Ang Kong Hua
Neil McGregor
Margaret Lui
Tan Sri Mohd Hassan Marican
Tham Kui Seng
Dr Teh Kok Peng
Ajaib Haridass
Nicky Tan Ng Kuang
Yap Chee Keong
Jonathan Asherson OBE
Dr Josephine Kwa Lay Keng
Nagi Hamiyeh *(Appointed on March 3, 2020)*

Directors' Interests

According to the register kept by the Company for the purposes of Section 164 of the Singapore Companies Act, Chapter 50 (the Act), particulars of interests of directors who held office at the end of the financial year (including those held by their spouses and children) in shares, debentures, warrants and share options in the Company and in related corporations are as follows:

		Shareholdings registered in the name of director, spouse, children or nominee			Other shareholdings in which the director is deemed to have an interest		
Name of director and corporation in which interests held	**Description of interests**	**At beginning of the year**	**At end of the year**	**At 21/01/2020**	**At beginning of the year**	**At end of the year**	**At 21/01/2020**
Ang Kong Hua							
Sembcorp Industries Ltd	Ordinary shares (Note 1)	336,100	421,900	421,900	–	–	–
Neil McGregor							
Sembcorp Industries Ltd	Ordinary shares	159,400	360,875	360,875	–	–	–
	Conditional award of:						
	– 429,553 performance shares to be delivered after 2019 (Note 2a)	Up to 644,330	Up to 644,330	Up to 644,330	–	–	–
	– 638,000 performance shares to be delivered after 2020 (Note 2b)	Up to 957,000	Up to 957,000	Up to 957,000	–	–	–

Directors' Interests *(cont'd)*

		Shareholdings registered in the name of director, spouse, children or nominee			Other shareholdings in which the director is deemed to have an interest		
Name of director and corporation in which interests held	**Description of interests**	**At beginning of the year**	**At end of the year**	**At 21/01/2020**	**At beginning of the year**	**At end of the year**	**At 21/01/2020**
Neil McGregor *(cont'd)*							
Sembcorp Industries Ltd	Conditional award of:						
	– 740,000 performance shares to be delivered after 2021 (Note 2c)	–	Up to 1,110,000	Up to 1,110,000	–	–	–
	– 416,667 restricted shares to be delivered after 2018 (Note 3)	Up to 625,001	172,222	172,222	–	–	–
	Grant of award of 287,051 restricted shares to be delivered between 2019 to 2022 (Note 4)	–	215,288	215,288	–	–	–
Sembcorp Marine Ltd	Ordinary shares	15,700	15,700	15,700	–	–	–
Margaret Lui							
Sembcorp Industries Ltd	Ordinary shares	98,800	119,700	119,700	–	–	–
Tan Sri Mohd Hassan Marican							
Sembcorp Industries Ltd	Ordinary shares (Note 5)	94,300	113,500	113,500	–	–	–
Sembcorp Marine Ltd	Ordinary shares (Note 5)	371,500	466,500	466,500	–	–	–
Tham Kui Seng							
Sembcorp Industries Ltd	Ordinary shares	76,700	95,900	95,900	–	–	–
Dr Teh Kok Peng							
Sembcorp Industries Ltd	Ordinary shares	78,100	98,500	98,500	–	–	–
Sembcorp Marine Ltd	Ordinary shares	40,000	40,000	40,000	–	–	–
Ajaib Haridass							
Sembcorp Industries Ltd	Ordinary shares (Note 6)	60,500	81,300	81,300	–	–	–
Sembcorp Marine Ltd	Ordinary shares	888,610	888,610	888,610	–	–	–
Nicky Tan Ng Kuang							
Sembcorp Industries Ltd	Ordinary shares	31,200	51,900	51,900	–	–	–
Yap Chee Keong							
Sembcorp Industries Ltd	Ordinary shares	20,400	41,700	41,700	–	–	–

Directors' Interests *(cont'd)*

Name of director and corporation in which interests held	Description of interests	Shareholdings registered in the name of director, spouse, children or nominee: At beginning of the year	At end of the year	At 21/01/2020	Other shareholdings in which the director is deemed to have an interest: At beginning of the year	At end of the year	At 21/01/2020
Jonathan Asherson OBE							
Sembcorp Industries Ltd	Ordinary shares	4,000	21,400	21,400	–	–	–
Dr Josephine Kwa Lay Keng							
Sembcorp Industries Ltd	Ordinary shares	–	6,300	6,300	–	–	–

Note 1: Of the 421,900 Sembcorp Industries Ltd (SCI) shares, 336,100 shares are held in the name of DBS Nominees Pte Ltd

Note 2: The actual number to be delivered will depend on the achievement of set targets over a 3-year performance period as indicated below. Achievement of targets below threshold level will mean no performance shares will be delivered, while achievement up to 150% will mean up to 1.5 times the number of conditional performance shares awarded could be delivered:

a. Period from 2017 to 2019
b. Period from 2018 to 2020
c. Period from 2019 to 2021

Note 3: The actual number to be delivered will depend on the achievement of set targets at the end of the 2-year performance period from 2017 to 2018. Achievement of targets below threshold level will mean no restricted shares will be delivered, while achievement up to 150% will mean up to 1.5 times the number of conditional restricted shares awarded could be delivered

For this period, 86,112 SCI shares (1st release of the 1/3 of 258,334 shares) were vested under the award to Neil McGregor on March 28, 2019 and the remaining 172,222 shares will be vested in 2020 and 2021

Note 4: With effect from FY2019, restricted shares will be granted based on the financial performance and corporate objectives achieved in the preceding year

In FY2019, 71,763 SCI shares (1st release of the 1/4 of 287,051 SCI shares) were vested under the award to Neil McGregor on March 28, 2019 and the remaining 215,288 shares will be vested in 2020 to 2022

Note 5: The 113,500 SCI shares and 466,500 Sembcorp Marine Ltd shares are held in the name of Citibank Nominees Singapore Pte Ltd

Note 6: Of the 81,300 SCI shares, 5,000 shares are held in the name of Bank of Singapore

Except as disclosed in this statement, no director who held office at the end of the financial year had interests in shares, debentures, warrants or share options of the Company, or of related corporations, either at the beginning of the financial year, or date of appointment if later, or at the end of the financial year.

There were no changes in any of the above mentioned interests in the Company between the end of the financial year and January 21, 2020.

Except as disclosed under the "Share-based incentive plans" section of this statement, neither at the end of, nor at any time during the financial year, was the Company a party to any arrangement whose objects are, or one of whose objects is, to enable the directors of the Company to acquire benefits by means of the acquisition of shares in or debentures of the Company or any other body corporate.

Except as disclosed in Notes B4(a) and G5(b) to the financial statements, since the end of the last financial year, no director has received or become entitled to receive, a benefit by reason of a contract made by the Company or a related corporation with the director, or with a firm of which he / she is a member, or with a company in which he / she has a substantial financial interest.

Share-based Incentive Plans

The Company's Performance Share Plan (SCI PSP 2010) and Restricted Share Plan (SCI RSP 2010) (collectively, the 2010 Share Plans) were approved and adopted by the shareholders at an Extraordinary General Meeting of the Company held on April 22, 2010.

The Executive Resource & Compensation Committee (the Committee) of the Company has been designated as the Committee responsible for the administration of the Share Plans. The Committee comprises the following members, all of whom are directors:

Ang Kong Hua *(Chairman)*
Margaret Lui
Tan Sri Mohd Hassan Marican
Nicky Tan Ng Kuang
Tham Kui Seng

The SCI RSP 2010 is the incentive scheme for directors and employees of the Group whereas the SCI PSP 2010 is aimed primarily at key executives of the Group.

The 2010 Share Plans are intended to increase the Company's flexibility and effectiveness in its continuing efforts to attract, retain and incentivise participants to higher standards of performance and encourage greater dedication and loyalty by enabling the Company to give recognition to past contributions and services; as well as motivating participants to contribute to the long-term prosperity of the Group.

The 2010 Share Plans use methods fairly common among major local and multinational companies to incentivise and motivate senior management and senior executives to achieve pre-determined targets which create and enhance economic value for the shareholders. They provide incentives to high performing senior management and senior executives to excel in their performance and encourage greater dedication and loyalty to the Company. Through the 2010 Share Plans, the Company is able to motivate senior management and senior executives to continue to strive for the Group's long-term shareholder value. In addition, the 2010 Share Plans aim to foster a greater ownership culture within the Group which align the interests of participants with the interests of shareholders, and to improve performance and achieve sustainable growth for the Company in the changing business environment. Generally, it is envisaged that the range of performance targets to be set under SCI PSP 2010 and the SCI RSP 2010 will be different, with the former emphasising stretched or strategic targets aimed at sustaining longer term growth.

While the 2010 Share Plans cater principally to Group executives, we recognised that there are other persons who can make significant contributions to the Group through their close working relationship with the Group. Such persons include employees of associated companies over which the Company has operational control.

A participant's awards under the 2010 Share Plans will be determined at the sole discretion of the Committee. In considering an award to be granted to a participant, the Committee may take into account, *inter alia*, the participant's performance during the relevant period, and his / her capability, entrepreneurship, scope of responsibility and skill set.

Other information regarding the 2010 Share Plans is as follows:

a. Performance Share Plan

Under SCI PSP 2010, the awards granted are conditional on performance targets set based on medium-term corporate objectives at the start of each rolling three-year performance qualifying period. For awards granted in 2017 and earlier, a specific number of performance shares will be awarded at the end of the three-year performance cycle depending on the extent of the achievement of the performance conditions established at the onset. In 2018, SCI PSP 2010 was updated after a review of the Group's long-term business plans. Following this review, for awards granted from 2018 onwards, depending on the extent of the achievement of performance conditions during a three-year period, 50% of the final performance shares will vest at the end of the three-year performance period, and the remaining 50% will vest in the subsequent year.

For awards granted from 2014 onwards, the performance levels were calibrated based on Wealth Added, Total Shareholder Return and Earnings Per Share. A minimum threshold performance must be realised to trigger an achievement factor, which in turn determines the number of shares to be finally awarded. Performance shares to be delivered will range from 0% to 150% of the conditional performance shares awarded.

Share-based Incentive Plans *(cont'd)*

a. Performance Share Plan *(cont'd)*

To create alignment between senior management and other employees at the time of vesting, SCI PSP 2010 has in place a plan trigger. Under this trigger mechanism, the performance shares for the other employees for the performance period 2017 to 2019 will be vested to the senior management participants only if the restricted shares for the performance period 2018 to 2019 are vested, subject to the achievement of the performance conditions for the respective performance periods.

For awards granted from 2018 onwards, the performance was calibrated based on Total Shareholder Return and transformation outcomes. The transformation criteria comprise goals on Return on Equity (excluding Sembcorp Marine Ltd), Total Renewable Capacity and implementation of digital initiatives. A minimum threshold performance must be realised to trigger an achievement factor, which in return determines the number of shares to be finally awarded. Performance shares to be delivered will range from 0% to 150% of the conditional performance shares awarded.

Senior management participants are required to hold a minimum percentage of the shares released to them under the SCI PSP 2010 to maintain a stake in the Company, for the duration of their employment or tenure with the Group. This percentage is based on a multiple of the individual participant's annual base salary. Any excess can be sold off, but in the event of a shortfall, they have a two calendar year period to meet the minimum percentage requirement.

i. Sembcorp Industries Ltd Performance Shares

The details of the performance shares of Sembcorp Industries Ltd awarded during the financial year since commencement of the Performance Share Plans (aggregate) are as follows:

		Movements during the year				
Performance shares participants	At Jan 1	Conditional performance shares awarded	Conditional performance shares lapsed	Performance shares lapsed arising from targets not met	Conditional performance shares released	At Dec 31
2019						
Director of the Company:						
Neil McGregor	1,067,553	740,000	–	–	–	1,807,553
Key executives of the Group	2,534,000	1,747,800	–	(770,000)	–	3,511,800
	3,601,553	2,487,800	–	(770,000)	–	5,319,353
2018						
Director of the Company:						
Neil McGregor	429,553	638,000	–	–	–	1,067,553
Key executives of the Group	1,973,750	1,344,000	(40,000)	(743,750)	–	2,534,000
	2,403,303	1,982,000	(40,000)	(743,750)	–	3,601,553

With the Committee's approval on the achievement factor for the achievement of the performance targets for the performance period 2016 to 2018 (2018: performance period 2015 to 2017), no performance shares were released via the issuance of treasury shares in 2019 (2018: nil).

In 2019, 770,000 (2018: 743,750) performance shares were lapsed for under-achievement of the performance targets for the performance period 2016 to 2018 (2018: 2015 to 2017).

The total number of performance shares in awards granted conditionally and representing 100% of targets to be achieved, but not released as at end 2019, was 5,319,353 (2018: 3,601,553). Based on the multiplying factor, the actual release of the awards could range from zero to a maximum of 7,979,029 (2018: 5,402,329) performance shares.

Share-based Incentive Plans *(cont'd)*

a. Performance Share Plan *(cont'd)*

ii. Performance shares of a listed subsidiary

The details of the performance shares of Sembcorp Marine Ltd awarded during the year are as follows:

	2019	2018
At January 1	4,088,000	4,733,000
Conditional performance shares awarded	–	1,168,000
Conditional performance shares lapsed	–	(598,000)
Performance shares lapsed arising from targets not met	(1,470,000)	(1,215,000)
At December 31	2,618,000	4,088,000

No performance shares of Sembcorp Marine Ltd were awarded to the directors of the Company.

With the Sembcorp Marine Ltd Executive Resource & Compensation Committee's approval on the achievement factor for the performance targets for the performance period 2016 to 2018 (2018: 2015 to 2017), no performance shares were released via the issuance of treasury shares (2018: nil).

The total number of performance shares in awards granted conditionally and representing 100% of targets to be achieved, but not released as at December 31, 2019, was 2,618,000 (2018: 4,088,000). Based on the multiplying factor, the actual release of the awards could range from zero to a maximum of 3,927,000 (2018: 6,132,000) performance shares.

b. Restricted Share Plan

Award granted until 2017

Under SCI RSP 2010, the awards granted up to 2017 were conditional on performance targets set based on corporate objectives at the start of each rolling two-year performance qualifying period. The performance criteria for the restricted shares are calibrated based on Return on Total Assets and Group Profit from Operations (both excluding Sembcorp Marine Ltd) for awards granted in 2017.

A minimum threshold performance must be realised to trigger an achievement factor, which in turn determines the number of shares to be finally awarded. Based on the criteria, restricted shares to be delivered will range from 0% to 150% of the conditional restricted shares awarded.

A specific number of restricted shares will be awarded at the end of the two-year performance cycle depending on the extent of achievement of the performance conditions established at the onset. There is a further vesting period of three years after the performance period, during which one-third of the awarded shares are released each year to managerial participants. Non-managerial participants will receive the equivalent in cash at the end of the two-year performance cycle, with no further vesting conditions.

Award granted from 2019

After comprehensive review of the Group's total remuneration structure in 2018, with effect from FY2019, shares will be granted to eligible employees under the SCI RSP 2010 based on financial performance and corporate objectives achieved in the preceding year. The performance criteria for FY2019 restricted shares awards granted are calibrated based on Earnings Before Interest Tax Depreciation and Amortisation (EBITDA), Return On Equity (ROE) (excluding Sembcorp Marine Ltd), and non-financial performance targets, comprising transformation milestones and adherence to environment, health and safety standards achieved by the Group for FY2018.

Senior management participants are required to hold a minimum percentage of the shares released to them under the Restricted Share Plan to maintain a stake in the Group, for the duration of their employment or tenure with the Group. A maximum cap is set based on a multiple of the individual participant's annual base salary. Any excess can be sold, but in the event of a shortfall, they have a two calendar year period to meet the minimum percentage requirement.

Share-based Incentive Plans *(cont'd)*

b. Restricted Share Plan *(cont'd)*

Award granted from 2019 *(cont'd)*

To align the interests of the non-executive directors with the interests of shareholders, up to 30% of the aggregate directors' fees approved by shareholders for a particular financial year may be paid out in the form of restricted share awards under the SCI RSP 2010.

From 2011, non-executive directors were not awarded any shares except as part of their directors' fees (except for Neil McGregor, who is the Group President & CEO, and who did not receive any directors' fees). In 2019 and 2018, the awards granted comprised fully paid shares outright with no performance and vesting conditions attached, but with a selling moratorium. Non-executive directors are required to hold shares (including shares obtained by other means) worth at least the annual base retainer; any excess may be sold as desired. A non-executive director can dispose of all of his shares one year after leaving the board.

The actual number of shares awarded to each non-executive director will be determined by reference to the volume-weighted average price of a share on the Singapore Exchange (SGX) over the 14 trading days from (and including) the day on which the shares are first quoted ex-dividend after the Annual General Meeting (AGM) (or, if the resolution to approve the final dividend is not approved, over the 14 trading days immediately following the date of the AGM). The number of shares to be awarded will be rounded down to the nearest hundred and any residual balance will be settled in cash. A non-executive director who steps down before the payment of the share component will receive all of his director's fees for the year (calculated on a pro-rated basis, where applicable) in cash.

For managerial participants, a quarter of the awards granted will vest immediately depending on the fulfilment of the criteria outlined above. The remaining three-quarters of the awards will vest over the following three years in equal tranches, subject to individual performance and fulfilment of service conditions at vesting.

The managerial participants of the Group will be awarded restricted shares under SCI RSP 2010, while the non-managerial participants of the Group will receive their awards in an equivalent cash value. This cash-settled notional restricted shares award for non-managerial participants is known as the Sembcorp Challenge Bonus.

Share-based Incentive Plans *(cont'd)*

b. Restricted Share Plan *(cont'd)*

Award granted from 2019 *(cont'd)*

i. Sembcorp Industries Ltd Restricted Shares

The details of the restricted shares of Sembcorp Industries Ltd awarded during the year are as follows:

		Movements during the year				
Restricted shares participants	At Jan 1	Conditional restricted shares awarded	Restricted shares lapsed due to under-achievement of targets	Conditional restricted shares released	Conditional restricted shares lapsed	At Dec 31
2019						
Directors of the Company:						
Ang Kong Hua	–	85,800	–	(85,800)	–	–
Neil McGregor	416,667	330,651	(158,333)	(201,475)	–	387,510
Margaret Lui	–	20,900	–	(20,900)	–	–
Tan Sri Mohd Hassan Marican	–	19,200	–	(19,200)	–	–
Tham Kui Seng	–	19,200	–	(19,200)	–	–
Dr Teh Kok Peng	–	20,400	–	(20,400)	–	–
Ajaib Haridass	–	20,800	–	(20,800)	–	–
Nicky Tan Ng Kuang	–	20,700	–	(20,700)	–	–
Yap Chee Keong	–	21,300	–	(21,300)	–	–
Jonathan Asherson OBE	–	17,400	–	(17,400)	–	–
Dr Josephine Kwa Lay Keng	–	6,300	–	(6,300)	–	–
Other executives of the Group	4,665,930	2,926,552	(1,028,667)	(2,799,470)	(140,955)	3,623,390
	5,082,597	3,509,203	(1,187,000)	(3,252,945)	(140,955)	4,010,900
2018						
Directors of the Company:						
Ang Kong Hua	–	62,100	–	(62,100)	–	–
Neil McGregor	416,667	2,500	–	(2,500)	–	416,667
Margaret Lui	–	16,700	–	(16,700)	–	–
Tan Sri Mohd Hassan Marican	–	14,900	–	(14,900)	–	–
Tham Kui Seng	–	14,700	–	(14,700)	–	–
Dr Teh Kok Peng	–	16,900	–	(16,900)	–	–
Ajaib Haridass	–	16,100	–	(16,100)	–	–
Nicky Tan Ng Kuang	–	14,700	–	(14,700)	–	–
Yap Chee Keong	–	16,000	–	(16,000)	–	–
Jonathan Asherson OBE	–	4,000	–	(4,000)	–	–
Dr Josephine Kwa Lay Keng	–	–	–	–	–	–
Other executives of the Group	9,311,249	–	(1,441,095)	(2,496,526)	(707,698)	4,665,930
	9,727,916	178,600	(1,441,095)	(2,675,126)	(707,698)	5,082,597

Share-based Incentive Plans *(cont'd)*

b. Restricted Share Plan *(cont'd)*

Award granted from 2019 *(cont'd)*

i. Sembcorp Industries Ltd Restricted Shares *(cont'd)*

As detailed in the 2018 Annual Report, with effect from 2019, shares will be granted to eligible employees under the SCI RSP 2010 based on financial performance and corporate objectives achieved in the preceding year.

For managerial participants, a quarter of the awards granted will vest immediately depending on the fulfilment of the criteria. The remaining three-quarters of the awards will vest over the following three years in equal tranches, subject to individual performance and fulfilment of service conditions at vesting.

With the Committee's approval on the achievement factor for the performance targets for the performance period 2017 to 2018, 1,532,662 restricted shares were released in 2019. For awards in relation to the performance period 2016 to 2017, 586,771 (2018: 765,993) restricted shares were released in 2019. For awards in relation to the performance period 2015 to 2016, 881,512 (2018: 1,019,562) restricted shares were released in 2019. For awards in relation to the performance period 2014 to 2015, 698,350 restricted shares were released in 2018. In 2019, there were 252,000 (2018: 178,600) shares released to non-executive directors. In 2018, there were an additional 12,621 shares released to employees due to sale of a subsidiary. Of the restricted shares released, 88,983 (2018: 55,437) restricted shares were cash-settled. The remaining restricted shares were released via the issuance of treasury shares.

In 2019, 1,187,000 (2018: 1,441,095) shares were lapsed due to under-achievement of the performance targets for the performance period 2017 to 2018 (2018: performance period 2016 to 2017).

The total number of restricted shares outstanding, including award(s) achieved but not released, as at end 2019, was 4,010,900 (2018: 5,082,597). With the change in the remuneration structure, with effect from 2019 award, the RSP balances represent 100% of targets achieved, but not released subject to individual performance and fulfilment of service conditions at vesting. The actual release of the awards is a maximum of 4,010,900 (2018: 4,489,401) restricted shares.

Sembcorp Challenge Bonus

With the Committee's approval on the achievement factor for performance targets for the performance period 2017 to 2018 (2018: performance period 2016 to 2017), a total of S$1.2 million, equivalent to 462,048 (2018: S$0.9 million, equivalent to 258,928) notional restricted shares, were awarded and paid.

ii. Restricted shares of a listed subsidiary

The details of the restricted shares of Sembcorp Marine Ltd awarded during the year are as follows:

Restricted shares participants	At Jan 1	Movements during the year: Conditional restricted shares awarded	Restricted shares lapsed arising from targets not met	Conditional restricted shares released	Conditional restricted shares lapsed	At Dec 31
2019						
Directors of the Company:						
Neil McGregor	–	–	–	–	–	–
Tan Sri Mohd Hassan Marican	–	95,000	–	(95,000)	–	–
Other participants	15,616,727	166,300	(11,159,921)	(1,795,106)	(455,025)	2,372,975
	15,616,727	261,300	(11,159,921)	(1,890,106)	(455,025)	2,372,975
2018						
Directors of the Company:						
Neil McGregor	–	15,700	–	(15,700)	–	–
Tan Sri Mohd Hassan Marican	–	75,200	–	(75,200)	–	–
Other participants	15,383,413	8,033,088	(6,078,150)	(1,096,803)	(624,821)	15,616,727
	15,383,413	8,123,988	(6,078,150)	(1,187,703)	(624,821)	15,616,727

Share-based Incentive Plans *(cont'd)*

b. Restricted Share Plan *(cont'd)*

Award granted from 2019 *(cont'd)*

ii. Restricted shares of a listed subsidiary *(cont'd)*

With the Sembcorp Marine Ltd Committee's approval on the achievement factor for performance targets for the performance period 2018, a total of 759,914 (2018: nil) restricted shares were released. For awards in relation to the performance period 2017 to 2018, a total of 377,226 restricted shares were released in 2019. For awards in relation to the performance period 2016 to 2017, a total of 312,823 (2018: 395,199) restricted shares were released in 2019. For awards in relation to the performance period 2015 to 2016, a total of 178,843 (2018: 198,575) restricted shares were released in 2019. For awards in relation to the performance period 2014 to 2015, a total of 318,129 restricted shares were released in 2018. In 2019, there were 261,300 (2018: 275,800) restricted shares released to non-executive directors. The restricted shares were either released via the issuance of treasury shares or the issuance of new shares.

In 2019, there were 5,338,217 (2018: nil) restricted shares that lapsed for under-achievement of performance targets for the performance period 2018. For the performance period 2017 to 2018 (2018: performance period 2016 to 2017), a total of 5,821,704 (2018: 6,078,150) Sembcorp Marine Ltd's restricted shares were lapsed due to under-achievement of performance targets.

The total number of Sembcorp Marine Ltd's restricted shares outstanding, including awards achieved but not released, as at December 31, 2019, was 2,372,975 (2018: 15,616,727). Of this, there was no (2018: 14,817,138) restricted shares in awards granted conditionally and representing 100% of targets to be achieved, but not released as at December 31, 2019. Based on the multiplying factor, the actual release of the conditional awards could range from zero to a maximum of 22,225,707 restricted shares as at December 31, 2018.

With the Sembcorp Marine Ltd Committee's approval on the achievement factor for performance targets for the performance period 2018, a total of S$1,091,088 (2018: S$nil), equivalent to 634,427 (2018: nil) notional restricted shares, were paid. For the performance period 2017 to 2018, (2018: performance period 2016 to 2017), a total of S$548,657 (2018: S$789,088), equivalent to 319,024 (2018: 354,774) notional restricted shares, were paid.

In 2019, there was no (2018: 2,520,117) notional restricted shares awarded (2018: awarded on August 23, 2018) for the Sembcorp Marine Challenge Bonus.

The total number of notional restricted shares in awards for the Sembcorp Marine Challenge Bonus granted conditionally and representing 100% of targets to be achieved, but not released as at December 31, 2019, was nil (2018: 4,684,737). Based on the multiplying factor, the number of notional restricted shares to be converted into the funding pool could range from zero to a maximum of nil (2018: 7,027,106).

c. Maximum Number of Shares Issuable

The maximum number of performance shares and restricted shares which could be delivered, when aggregated with the number of new shares issued and issuable in respect of all options granted, is within the 15% limit of the share capital of the Company on the day preceding the relevant date of the grant.

Directors’ Statement

Year ended December 31, 2019

Audit Committee

The members of the Audit Committee during the year and at the date of this report are:

Yap Chee Keong *(Chairman)*
Dr Teh Kok Peng
Ajaib Haridass
Jonathan Asherson OBE

The Audit Committee held five meetings during the financial year. In performing its functions, the Audit Committee met with the Company’s external and internal auditors to discuss the scope of their work, and the results of their examination and evaluation of the Company’s internal accounting control system.

The Audit Committee performed the functions specified in Section 201B of the Singapore Companies Act, Chapter 50, the Listing Manual of the SGX, and the Code of Corporate Governance.

The Audit Committee also reviewed the following:

- assistance provided by the Company’s officers to the external and internal auditors;
- quarterly financial information and annual financial statements of the Group and the Company prior to their submission to the directors of the Company for adoption; and
- interested person transactions (as defined in Chapter 9 of the Listing Manual of the SGX).

The Audit Committee has full access to management and is given the resources required for it to discharge its functions. It has full authority and the discretion to invite any director or executive officer to attend its meetings. The Audit Committee also recommends the appointment of the external auditors and reviews the level of audit and non-audit fees.

The Audit Committee is satisfied with the independence and objectivity of the external auditors and has recommended to the board of directors that the auditors, KPMG LLP, be nominated for re-appointment as auditors at the forthcoming AGM of the Company.

In appointing our auditors for the Company, subsidiaries and significant associated companies, we have complied with Rules 712 and 715 of the SGX Listing Manual.

Auditors

The auditors, KPMG LLP, have indicated their willingness to accept re-appointment.

On behalf of the Board of Directors

Ang Kong Hua
Chairman

Neil McGregor
Director

Singapore
March 4, 2020

Independent Auditors’ Report

Year ended December 31, 2019

Members of the Company
Sembcorp Industries Ltd

Report on the audit of the financial statements

Opinion

We have audited the financial statements of Sembcorp Industries Ltd (the “Company”) and its subsidiaries (the “Group”), which comprise the consolidated balance sheet of the Group and the balance sheet of the Company as at December 31, 2019, the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows of the Group for the year then ended, and notes to the financial statements, including a summary of significant accounting policies as set out on pages 128 to 270.

In our opinion, the accompanying consolidated financial statements of the Group and the balance sheet of the Company are properly drawn up in accordance with the provisions of the Singapore Companies Act, Chapter 50 (the Act), Singapore Financial Reporting Standards (International) (SFRS(I)s) and International Financial Reporting Standards (IFRSs) so as to give a true and fair view of the consolidated financial position of the Group and the financial position of the Company as at December 31, 2019 and of the consolidated financial performance, consolidated changes in equity and consolidated cash flows of the Group for the year ended on that date.

Basis for opinion

We conducted our audit in accordance with Singapore Standards on Auditing (SSAs). Our responsibilities under those standards are further described in the *Auditors’ responsibilities for the audit of the financial statements* section of our report. We are independent of the Group in accordance with the Accounting and Corporate Regulatory Authority (ACRA) *Code of Professional Conduct and Ethics for Public Accountants and Accounting Entities* (ACRA Code) together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ACRA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Report on the audit of the financial statements *(cont'd)*

Impairment assessment of property, plant and equipment, right-of-use assets and intangible assets – comprising goodwill, long-term contracts, design under development and intellectual property rights only (collectively, the shipyard and utilities non-financial assets)

(Refer to Notes D1, D2 and D4 to the financial statements: property, plant and equipment of S$11,739,000,000, right-of-use assets of S$464,000,000, goodwill of S$209,000,000, long-term contracts of S$132,000,000, design under development of S$50,000,000 and intellectual property rights of S$185,000,000)

Risk:

The Group's shipyard and utilities non-financial assets were subject to impairment test assessments, owing to the continued challenging market conditions impacting the Group's offshore and marine and utilities sectors. The Group's key assets and facilities are (i) the integrated yards, which include the individual yard locations in Singapore, the sub-contracting yards in Indonesia and the United Kingdom (the Singapore cash-generating unit (CGU)) (ii) the yard in Brazil (Brazil CGU) (iii) the utilities assets in China, India, Singapore and United Kingdom (UK).

At December 31, 2019, the Group's balance sheet includes goodwill amounting to S$209,000,000, predominantly allocated to six CGUs in the Energy segment. Goodwill is reviewed for impairment at least annually and as and when indicators of impairment occur.

An impairment loss exists when the net carrying amount of the assets is in excess of the recoverable amount. The recoverable amount of a CGU is the higher of the CGU's fair value less costs of disposal and its value-in-use (VIU). As the fair values of these assets are not readily determinable, the Group measures the recoverable amount using the discounted cash flow technique to derive the assets' VIU.

The determination of the recoverable amounts of these CGUs involves a high degree of judgement and is subject to significant estimation uncertainties, principally, the discount rates, the forecast order book (shipyards) as well as market demands, gross margin forecasts, plant load factors (power plants) and wastewater plant treatment capacity (wastewater treatment assets). The forecast order book includes a diversified portfolio of long-term contracts whose contract pricing takes into account prevailing market conditions and the outlook of the oil and gas industry, while the gross margin forecasts, plant load factors and wastewater plant treatment capacity take into account expected customer demand and forecasted tariff rates. These are inherently subject to estimation uncertainties as well as political and regulatory developments.

As the Brazil CGU is not yet fully operational, and there is limited track record of historical contract awards and performance, the Group has factored in the long-term fundamentals of the oil and gas sector in Brazil to project the future order book. Accordingly, the future order book considers the projected capital expenditure of state-owned and international oil majors covering exploration and production projects that would lead to new build orders, regulations governing local content requirements, as well as forecast movements in oil prices in the foreseeable future projected by industry analysts. The long-term returns of the Brazil CGU can also be significantly impacted by political risk.

Arising from the continued challenging economic and market conditions in the UK, an impairment loss totalling S$178,000,000 was recognised on UK Power Reserve assets in 2019 to write down the carrying amount of these assets to their estimated recoverable amounts. In addition, following an assessment of the wastewater plants' efficiency and effectiveness in meeting the new and more stringent effluent discharge standards that will come into force in Jiangsu, China in 2021, a review of recoverable amount of the related assets was performed and an impairment loss of S$23,000,000 was recognised. The outcome of the remaining impairment tests on the shipyard assets for the Singapore CGU, Brazil CGU and the utilities' CGUs located in China, India and Singapore shows that the recoverable amounts are currently in excess of the net carrying amounts attributable to these CGUs as at the reporting date.

Report on the audit of the financial statements *(cont'd)*

Impairment assessment of property, plant and equipment, right-of-use assets and intangible assets – comprising goodwill, long-term contracts, design under development and intellectual property rights only (collectively, the shipyard and utilities non-financial assets) *(cont'd)*

Our response:

We assessed the Group's process for identifying and reviewing the CGUs subject to impairment testing.

We, including our valuation specialists to the extent appropriate, reviewed the key assumptions supporting the value-in-use calculations to arrive at the recoverable amounts of these CGUs. We compared the forecast order book to firm commitments secured from customers, management approved budgets built from the Group's past and actual experiences, prevailing industry trends, and industry analysts' reports. We compared the plant load factors and gross margin forecasts to what has been achieved historically, as well as prevailing industry trends. We compared the discount rates to market observable data including market and country risk premiums and any asset-specific risk premium.

We also reviewed available qualitative information from industry analysts, projected capital expenditure by oil majors supporting the projection of orders, and regulations on local content requirements. We assessed the related disclosures on key assumptions applied in determining the recoverable amounts of the CGUs.

Our findings:

The Group has a process for identifying and reviewing the CGUs for impairment testing. The impairment test assessments incorporated the known relevant considerations as at the reporting date. The disclosures describing the inherent degree of estimation uncertainty and the sensitivity of the assumptions applied are appropriate. If unfavourable changes to these assumptions occur, this could lead to lower operating cash inflows and impairment outcomes which may in turn affect the financial position and performance of the Group.

Recognition of revenue and recoverability of trade receivables and contract balances in relation to contracts with customers in the Marine segment

(Refer to Note B2 to the financial statements: Turnover of S$2,881,000,000)
(Refer to Notes B2(c) and E1 to the financial statements: Trade receivables of S$1,436,000,000, Contract assets of S$1,462,000,000 and Contract costs of S$89,000,000)

Risk:

One of the Group's significant revenue streams is derived from long-term construction contracts in relation to ship building and conversion.

In accordance with SFRS(I) 15 *Revenue from Contracts with Customers*, the analysis of whether these contracts comprise one or more performance obligations, and whether the performance obligations are satisfied over time or at a point in time, are areas requiring critical judgement by the Group.

The Group accounts for revenue recognised over time from long-term construction contracts based on the percentage of completion method, which involves estimation uncertainties around the stage of physical activities completed as well as costs to complete the contracts.

Owing to the continued difficult market conditions impacting the offshore and marine sector, the recoverability of trade receivables and contract balances in relation to contracts with customers is inherently judgemental. In accordance with SFRS(I) 9 *Financial Instruments*, the Group is required to recognise loss allowances on expected credit losses on financial assets and contract assets. The determination of the loss allowances requires significant judgement and estimates to determine whether the financial asset is credit impaired, and the best estimate of the ultimate realisation of the amounts receivable from customers and contract assets from customer contracts.

Report on the audit of the financial statements *(cont'd)*

Recognition of revenue and recoverability of trade receivables and contract balances in relation to contracts with customers in the Marine segment *(cont'd)*

Our response:

- We reviewed the Group's estimation process (including the approval of project budget, monitoring of project costs and activities, and management's review of the project's stage of completion and milestones achieved with customers) used in determining the amounts of revenue recognised in the financial statements as well as in relation to determining the amounts of loss allowance recognised on the financial assets and contract assets.
- We reviewed the terms and conditions of contracts, including contract modifications, discussed with management, to assess if management's identification of performance obligations and timing of revenue recognition is appropriate.
- We reviewed the contractual terms and work status of the projects, along with discussions with management and checked that contract revenue was recognised according to the percentage of completion of each project measured by the stage of completion of physical activities.
- We reviewed the credit review assessment prepared by management for the customers with significant new contracts, and we analysed current on-going negotiations and settlements of significant contracts subject to modifications, to identify if the collectability of contract consideration is probable.
- We reviewed the significant inputs to management's assessment of the amounts of loss allowance recognised on expected credit losses, and considered the reasonableness of the inputs by reference to the recent credit review assessments prepared by management.
- We reviewed the re-forecast of each significant contract and enquired with management on any current on-going negotiations that may impair the recoverability of significant receivables and contract balances.
- We assessed the adequacy of disclosures in describing the areas of judgement and estimation uncertainties involving revenue recognition.

Our findings:

The Group has processes to determine the amounts of revenue recognised in the financial statements as well as to assess credit risk and determine the amount of credit loss allowance to be recognised on trade receivables and contract assets.

We found the basis of identifying the performance obligations and timing of satisfaction of performance obligations to be appropriate.

We found that the measurement of percentage of completion used by the Group for revenue recognition appropriately reflects the status of and progress of the projects; and revenue was recognised only when collectability of the amounts was assessed by management to be probable.

The judgements applied by management around the recovery of receivables and contract balances, as well as those contracts belonging to customers undergoing financial restructuring, were relevant under the facts and circumstances currently made available to the Group.

We found the disclosures in describing the areas of judgement and inherent degree of estimation uncertainties involved, to be appropriate.

Report on the audit of the financial statements *(cont'd)*

Litigation, claims and other contingencies
(Refer to Note C8 to the financial statements)
Update in relation to investigations of "Operacao Lava Jato" (Operation Car Wash)
(Refer to Note H7 to the financial statements)

Risk:

The Group is subject to operational, business and political risks in the countries in which it operates. These risks could give rise to litigation, claims and other contingencies (collectively, the contingencies) which could have a significant financial impact if the potential exposures were to materialise. Ad-hoc Committees / Taskforces, if formed for any specific purpose, may conduct independent investigations on allegations that have potential impact on the business and the Group's financial statements, and recommend decisions as considered appropriate in connection with the independent investigations.

The determination by management of whether, and how much, to provide and / or disclose for such contingencies is highly judgemental.

Update in relation to Operation Car Wash

In 2019 and 2020, the Group's subsidiary, Sembcorp Marine Ltd (SCM) has made announcements in relation to ongoing investigations related to Operation Car Wash in Brazil. These investigations involved allegations in Brazil of illegal payments made by Mr Guilherme Esteves De Jesus (GDJ) whom is connected to the consultant engaged by the subsidiaries of SCM, and acts of money laundering and corruption performed by GDJ and Mr Martin Cheah Kok Choon, former president of Estaleiro Jurong Aracruz Ltda, a subsidiary of SCM. Since 2015, SCM had formed an Ad-hoc Committee to conduct independent investigations on the allegations for potential impact on the business and the SCM Group's financial statements, and recommend decisions as considered appropriate in connection with the independent investigations. As at the date of the financial statements, investigations are still ongoing and the directors for SCM have determined that it is premature to predict the eventual outcome of this matter.

Our response:

We assessed the Group's process for identifying and monitoring significant adverse developments arising from contingencies and where appropriate, legal, regulatory and political developments. We have reviewed the terms of reference of Ad-hoc Committees formed.

We evaluated management's assessment of the likely outcome and potential exposures arising from all significant contingencies and allegations subject to on-going investigations; and considered the requirements for any provisions and related disclosures. Our work included:

- Holding discussions with management, the Group's legal counsel, the Audit Committee and the Ad-hoc Committee, and reviewing relevant documents;
- Assessment of the progress of all significant contingencies, including reviewing the Group's public announcements;
- Consideration of any evidence of legal disputes which we were made aware;
- Obtaining independent legal confirmation letters from and discussing with the Group's external lawyers to confirm the facts which we have been advised;
- Inquiries with the SCM Group's external legal counsel, together with our specialists, to understand the scope, approach and status of the Operation Car Wash investigations, and to confirm the facts which we have been advised; and
- Assessed the adequacy of disclosures in the financial statements in respect of this matter.

Report on the audit of the financial statements *(cont'd)*
Litigation, claims and other contingencies *(cont'd)*
Update in relation to investigations of "Operacao Lava Jato" (Operation Car Wash) *(cont'd)*

Our findings:
We found that the Group has a process for identifying and monitoring potential exposures arising from legal, regulatory and political developments as well as determination of the appropriate measurement and / or disclosures on such contingencies in the Group's financial statements.

From our audit procedures performed and representations obtained from management / Ad-hoc Committee representations, we found the liabilities recognised, where applicable, and disclosures on such contingencies in respect of the Operation Car Wash to be appropriate.

Acquisition of subsidiary and intellectual property rights
(Refer to Note G2 to the financial statements: Intangible assets of S$61,000,000, Negative goodwill of S$5,000,000 and Goodwill of S$1,000,000)

Risk:
In 2018, the Group acquired a subsidiary and intangible rights from Sevan Marine ASA (Sevan Marine). With the acquisition, the litigation between the Group and Sevan Marine relating to an infringement of intellectual property rights of the Group was also terminated.

In 2019, the Group completed its valuation and purchase price allocation exercise. Judgement is required in determining the allocation of the purchase price. In accounting for a business combination, estimates are also required in measuring the fair value of identifiable assets acquired and liabilities assumed, and settlement of the litigation.

Our response:
- We assessed the competency and objectivity of the independent professional firm that assisted management in the valuation and purchase price allocation exercise.
- We reviewed management's assessment of the purchase price allocation, reviewed the valuation technique adopted and significant inputs to the valuation model and performed a re-computation of the negative goodwill derived by management.
- We assessed the adequacy of disclosures in describing the areas of judgement and estimate in determining the allocation of the purchase price and measurement of the fair value of the identifiable assets acquired and liabilities assumed.

Our findings:
The judgements applied by management in the allocation of the purchase price and the estimates by management used in the valuation of the respective assets acquired and liabilities assumed were found to be fair. We found the disclosures in describing the areas of judgement and inherent degree of estimation uncertainties involved, to be appropriate.

Report on the audit of the financial statements *(cont'd)*
Other Information
Management is responsible for the other information contained in the annual report. Other information is defined as all information in the annual report other than the financial statements and our auditors' report thereon.

We have obtained the following items prior to the date of this auditors' report:

- Group FY2019 Highlights
- Chairman and CEO's Statement
- Group Financial Review
- Energy Review
- Marine Review
- Urban Review
- Directors' Statement

The following items (the Reports) are expected to be made available to us after that date:

- Our Value Creation Process
- Our Leadership
- Environmental, Social and Governance Review
- Supplementary Information
- Shareholding Statistics
- Additional Information on Directors Seeking Re-election
- Corporate Information

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditors' report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

When we read the Reports, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance and take appropriate actions in accordance with SSAs.

Report on the audit of the financial statements *(cont'd)*

Responsibilities of management and directors for the financial statements

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with the provisions of the Act, SFRS(I)s and IFRSs, and for devising and maintaining a system of internal accounting controls sufficient to provide a reasonable assurance that assets are safeguarded against loss from unauthorised use or disposition; and transactions are properly authorised and that they are recorded as necessary to permit the preparation of true and fair financial statements and to maintain accountability of assets.

In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The directors' responsibilities include overseeing the Group's financial reporting process.

Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

Report on the audit of the financial statements *(cont'd)*

Auditors' responsibilities for the audit of the financial statements *(cont'd)*

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the directors, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on other legal and regulatory requirements

In our opinion, the accounting and other records required by the Act to be kept by the Company and by those subsidiary corporations incorporated in Singapore of which we are the auditors have been properly kept in accordance with the provisions of the Act.

The engagement partner on the audit resulting in this independent auditors' report is Koh Wei Peng.

KPMG LLP

KPMG LLP
Public Accountants and
Chartered Accountants

Singapore
March 4, 2020

Financial Statements

Introduction

This is the financial statements of Sembcorp Industries Ltd and its Subsidiaries for the year ended December 31, 2019.

Over the past year, we have reviewed the content and structure of the financial statements for opportunities to make them less complex and more relevant to users. This included:

- a thorough review of content to eliminate immaterial disclosures that may undermine the usefulness of the financial statements by obscuring important information; and
- reorganisation of the notes to the financial statements into sections to assist users in understanding the Group's performance.

The purpose of these changes is to provide users with a clearer understanding of what drives financial performance and financial position of the Group and linkage to the Group's strategy, whilst still complying with the provisions of the Singapore Companies Act, Singapore Financial Reporting Standards (International) SFRS(I) and International Financial Reporting Standards (IFRS).

What's new in this report

Change in structure

Notes to the financial statements are split into 8 distinct sections to enable a better understanding of how the Group has performed.

We have included an introduction at the start of each section to explain its purpose and content. Accounting policies, estimates and critical accounting judgements applied to the preparation of the financial statements have been moved to where the related accounting balance or financial statement matter is discussed and we have refined wording of the policies to allow them to be easily understood by users of this report.

Information is only being included in the financial statements to the extent it is considered material and relevant to the understanding of the financial statements. A disclosure is considered material and relevant if:

- dollar amount is significant in value
- dollar amount is significant by nature
- financial results cannot be understood without specific disclosure
- critical to allow user to understand significant changes in group businesses

Consolidated Financial Statements

Notes to the Financial Statements

The supplementary information are unaudited and do not form part of the financial statements.

Balance Sheets
As at December 31, 2019

(S$ million)	Note	Group December 31, 2019	Group December 31, 2018	Company December 31, 2019	Company December 31, 2018
Non-current assets					
Property, plant and equipment	D1	11,739	11,672	309	328
Right-of-use assets	D2	464	–	100	–
Investment properties	D3	128	110	–	–
Investments in subsidiaries	G1	–	–	2,646	2,647
Associates and joint ventures	G4	1,696	1,741	–	–
Other financial assets	H3	266	262	–	–
Trade and other receivables	E1	2,170	2,366	349	273
Contract costs	B2(c)	2	*	–	–
Intangible assets	D4	630	779	26	24
Deferred tax assets	B3(b)	62	67	–	–
		17,157	16,997	3,430	3,272
Current assets					
Inventories	E2	386	513	4	7
Trade and other receivables	E1	2,048	2,311	83	96
Contract assets	B2(c)	1,501	1,022	–	10
Contract costs	B2(c)	90	329	–	–
Assets held for sale	B6	75	129	–	127
Other financial assets	H3	228	95	–	–
Cash and cash equivalents	E4	1,767	1,925	1,123	759
		6,095	6,324	1,210	999
Total assets		23,252	23,321	4,640	4,271
Current liabilities					
Trade and other payables	E3	2,844	2,968	244	130
Lease liabilities	D2	34	–	4	–
Contract liabilities	B2(c)	172	445	3	1
Provisions	H4	34	86	11	19
Liabilities held for sale	B6	31	–	–	–
Other financial liabilities	H3	50	62	–	–
Current tax payable		204	153	74	58
Interest-bearing borrowings	C6	2,643	1,862	–	–
		6,012	5,576	336	208
Net current assets		83	748	874	791

* Denotes financial value that is less than S$1 million

The accompanying notes form an integral part of these financial statements.

(S$ million)	Note	Group December 31, 2019	Group December 31, 2018	Company December 31, 2019	Company December 31, 2018
Non-current liabilities					
Deferred tax liabilities	B3(b)	348	425	29	50
Other long-term payables	E3	131	242	171	268
Lease liabilities	D2	470	–	116	–
Provisions	H4	142	163	10	16
Other financial liabilities	H3	44	43	–	–
Interest-bearing borrowings	C6	8,157	8,870	–	–
Contract liabilities	B2(c)	69	64	30	30
		9,361	9,807	356	364
Total liabilities		15,373	15,383	692	572
Net assets		7,879	7,938	3,948	3,699
Equity attributable to owners of the Company:					
Share capital	C2	566	566	566	566
Reserve for own shares	C2	(4)	(9)	(4)	(9)
Other reserves	C3	(319)	(239)	*	2
Revenue reserve		5,827	5,669	2,585	2,339
		6,070	5,987	3,147	2,898
Perpetual securities	C4	801	801	801	801
		6,871	6,788	3,948	3,699
Non-controlling interests	G3	1,008	1,150	–	–
Total equity		7,879	7,938	3,948	3,699

The accompanying notes form an integral part of these financial statements.

Consolidated Income Statement
Year ended December 31, 2019

(S$ million)	Note	Group 2019	Group 2018
Turnover	B1, B2	9,618	11,689
Cost of sales		(8,726)	(10,769)
Gross profit		892	920
General and administrative expenses		(447)	(408)
Other operating income		222	107
Non-operating income		32	50
Non-operating expenses		(134)	(2)
Finance income	C7	132	87
Finance costs	C7	(586)	(508)
Share of results of associates and joint ventures, net of tax		184	174
Profit before tax		295	420
Tax expense	B3	(78)	(88)
Profit for the year	B4	217	332
Profit attributable to:			
Owners of the Company		247	347
Non-controlling interests		(30)	(15)
Profit for the year		217	332
Earnings per share (cents):	B5		
Basic		11.81	16.98
Diluted		11.74	16.87

The accompanying notes form an integral part of these financial statements.

Consolidated Statement of Comprehensive Income
Year ended December 31, 2019

(S$ million)	Note	Group 2019	Group 2018
Profit for the year		217	332
Other comprehensive income			
Items that may be reclassified subsequently to profit or loss:			
Foreign currency translation differences for foreign operations		(94)	(160)
Exchange differences on monetary items forming part of net investment in foreign operation		(3)	(1)
Net change in fair value of cash flow hedges		36	50
Net change in fair value of cash flow hedges reclassified to profit or loss		(15)	(175)
Realisation of reserve upon liquidation / disposal of joint venture		(1)	–
Realisation of reserve upon liquidation / disposal of subsidiaries		(3)	19
Share of other comprehensive income of associates and joint ventures		(12)	31
Income tax relating to these items	B3(c)	(6)	23
		(98)	(213)
Items that may not be reclassified subsequently to profit or loss:			
Defined benefit plan actuarial gains and losses		7	(5)
Change in fair value of financial assets at fair value through other comprehensive income		40	(4)
Income tax relating to these items	B3(c)	(1)	1
		46	(8)
Other comprehensive income for the year, net of tax	B3(c)	(52)	(221)
Total comprehensive income for the year		165	111
Total comprehensive income attributable to:			
Owners of the Company		201	159
Non-controlling interests		(36)	(48)
Total comprehensive income for the year		165	111

The accompanying notes form an integral part of these financial statements.

Consolidated Statement of Changes in Equity

Year ended December 31, 2019

(S$ million)	Share capital	Reserve for own shares	Currency translation reserve	Capital reserve	Merger reserve	Share-based payments reserve	Fair value reserve	Hedging reserve	Revenue reserve	Total	Perpetual securities	Total	Non-controlling interests	Total equity
	Attributable to owners of the Company													
Group														
Balance at January 1, 2019	566	(9)	(390)	183	29	(8)	34	(87)	5,669	5,987	801	6,788	1,150	7,938
Adjustment on initial application of SFRS(I) 16	–	–	–	–	–	–	–	–	(27)	(27)	–	(27)	*	(27)
Adjusted balance at January 1, 2019	566	(9)	(390)	183	29	(8)	34	(87)	5,642	5,960	801	6,761	1,150	7,911
Total comprehensive income for the year														
Profit for the year	–	–	–	–	–	–	–	–	247	247	–	247	(30)	217
Other comprehensive income														
Foreign currency translation differences for foreign operations	–	–	(88)	–	–	–	–	–	–	(88)	–	(88)	(6)	(94)
Exchange differences on monetary items forming part of net investment in foreign operation	–	–	(3)	–	–	–	–	–	–	(3)	–	(3)	–	(3)
Net change in fair value of cash flow hedges	–	–	–	–	–	–	–	20	–	20	–	20	6	26
Net change in fair value of cash flow hedges reclassified to profit or loss	–	–	–	–	–	–	–	(8)	–	(8)	–	(8)	(3)	(11)
Net change in fair value of financial assets at fair value through other comprehensive income	–	–	–	–	–	–	40	–	–	40	–	40	–	40
Realisation of reserve upon disposal of joint venture	–	–	(1)	–	–	–	–	–	*	(1)	–	(1)	–	(1)
Realisation of reserve upon disposal / liquidation of subsidiaries	–	–	*	7	–	–	–	–	(7)	–	–	–	(3)	(3)
Defined benefit plan actuarial gains and losses	–	–	–	–	–	–	–	–	6	6	–	6	*	6
Share of other comprehensive income of associates and joint ventures	–	–	–	–	–	–	–	(12)	–	(12)	–	(12)	–	(12)
Total other comprehensive income for the year	–	–	(92)	7	–	–	40	–	(1)	(46)	–	(46)	(6)	(52)
Total comprehensive income for the year	–	–	(92)	7	–	–	40	–	246	201	–	201	(36)	165
Transactions with owners of the Company, recognised directly in equity														
Contribution by non-controlling interests	–	–	–	(3)	–	–	–	–	–	(3)	–	(3)	22	19
Capital reduction / distribution to non-controlling interests	–	–	–	–	–	–	–	–	–	–	–	–	(4)	(4)
Share-based payments	–	–	–	–	–	9	–	–	–	9	–	9	1	10
Purchase of treasury shares	–	(4)	–	–	–	–	–	–	–	(4)	–	(4)	–	(4)
Treasury shares transferred to employees	–	9	–	1	–	(10)	–	–	–	–	–	–	–	–
Acquisition of non-controlling interests	–	–	–	14	–	–	–	–	–	14	–	14	(105)	(91)
Perpetual securities distribution paid	–	–	–	–	–	–	–	–	–	–	(36)	(36)	–	(36)
Accrued perpetual securities distribution (Note C4)	–	–	–	–	–	–	–	–	(36)	(36)	36	–	–	–
Transfer of reserve	–	–	–	(46)	–	–	–	–	46	–	–	–	–	–
Dividend paid to owners (Note C5)	–	–	–	–	–	–	–	–	(71)	(71)	–	(71)	–	(71)
Dividend paid to non-controlling interests	–	–	–	–	–	–	–	–	–	–	–	–	(20)	(20)
Total transactions with owners	–	5	–	(34)	–	(1)	–	–	(61)	(91)	–	(91)	(106)	(197)
At December 31, 2019	566	(4)	(482)	156	29	(9)	74	(87)	5,827	6,070	801	6,871	1,008	7,879

The accompanying notes form an integral part of these financial statements.

Consolidated Statement of Changes in Equity

Year ended December 31, 2019

(S$ million)	Share capital	Reserve for own shares	Currency translation reserve	Capital reserve	Merger reserve	Share-based payments reserve	Fair value reserve	Hedging reserve	Revenue reserve	Total	Perpetual securities	Total	Non-controlling interests	Total equity
	Attributable to owners of the Company													
Group														
Balance at January 1, 2018	566	*	(265)	160	29	(9)	27	(27)	5,460	5,941	1,003	6,944	1,230	8,174
Adjustment on initial application of SFRS(I) 9, net of tax	–	–	–	–	–	–	*	–	(13)	(13)	–	(13)	(1)	(14)
Adjusted balance at January 1, 2018	566	*	(265)	160	29	(9)	27	(27)	5,447	5,928	1,003	6,931	1,229	8,160
Total comprehensive income for the year														
Profit for the year	–	–	–	–	–	–	–	–	347	347	–	347	(15)	332
Other comprehensive income														
Foreign currency translation differences for foreign operations	–	–	(155)	–	–	–	–	–	–	(155)	–	(155)	(5)	(160)
Exchange differences on monetary items forming part of net investment in foreign operation	–	–	(1)	–	–	–	–	–	–	(1)	–	(1)	–	(1)
Net change in fair value of cash flow hedges	–	–	–	–	–	–	–	82	–	82	–	82	(17)	65
Net change in fair value of cash flow hedges reclassified to profit or loss	–	–	–	–	–	–	–	(169)	–	(169)	–	(169)	2	(167)
Net change in fair value of financial assets at fair value through other comprehensive income	–	–	–	–	–	–	–	–	–	–	–	–	(4)	(4)
Realisation of reserve upon disposal / liquidation of subsidiaries	–	–	27	2	–	–	–	–	*	29	–	29	(10)	19
Reclassification of reserve upon disposal / liquidation of other financial asset	–	–	–	–	–	–	7	–	(7)	–	–	–	–	–
Defined benefit plan actuarial gains and losses	–	–	–	–	–	–	–	–	(4)	(4)	–	(4)	*	(4)
Share of other comprehensive income of associates and joint ventures	–	–	3	–	–	–	–	27	*	30	–	30	1	31
Total other comprehensive income for the year	–	–	(126)	2	–	–	7	(60)	(11)	(188)	–	(188)	(33)	(221)
Total comprehensive income for the year	–	–	(126)	2	–	–	7	(60)	336	159	–	159	(48)	111
Transactions with owners of the Company, recognised directly in equity														
Contribution by non-controlling interests	–	–	*	(6)	–	–	–	–	*	(6)	–	(6)	24	18
Share-based payments	–	–	–	(1)	–	11	–	–	–	10	–	10	1	11
Purchase of treasury shares	–	(17)	–	*	–	–	–	–	–	(17)	–	(17)	–	(17)
Treasury shares transferred to employees	–	8	–	1	–	(9)	–	–	–	–	–	–	–	–
Treasury shares of a subsidiary	–	–	–	–	–	(1)	–	–	–	(1)	–	(1)	1	–
Acquisition of non-controlling interests	–	–	1	27	–	–	–	–	–	28	–	28	(28)	–
Perpetual securities distribution paid	–	–	–	–	–	–	–	–	–	–	(245)	(245)	–	(245)
Accrued perpetual securities distribution (Note C4)	–	–	–	–	–	–	–	–	(43)	(43)	43	–	–	–
Dividend paid to owners (Note C5)	–	–	–	–	–	–	–	–	(71)	(71)	–	(71)	–	(71)
Dividend paid to non-controlling interests	–	–	–	–	–	–	–	–	–	–	–	–	(29)	(29)
Unclaimed dividends	–	–	–	–	–	–	–	–	*	*	–	*	–	*
Total transactions with owners	–	(9)	1	21	–	1	–	–	(114)	(100)	(202)	(302)	(31)	(333)
At December 31, 2018	566	(9)	(390)	183	29	(8)	34	(87)	5,669	5,987	801	6,788	1,150	7,938

The accompanying notes form an integral part of these financial statements.

Consolidated Statement of Cash Flows

Year ended December 31, 2019

(S$ million)	Group 2019	Group 2018
Cash flows from operating activities		
Profit for the year	217	332
Adjustments for:		
Dividend	*	*
Finance income	(132)	(87)
Finance costs	586	508
Depreciation and amortisation	682	595
Share of results of associates and joint ventures, net of tax	(184)	(174)
(Gain) / Loss on disposal of:		
– property, plant and equipment and other financial assets	(19)	(8)
– intangible assets	(2)	*
– joint venture and associate	*	(18)
– disposal of business	*	(15)
– assets held for sale	(70)	–
Gain on disposal and liquidation of investments in subsidiaries	(16)	(11)
Changes in fair value of financial instruments	8	(15)
Equity settled share-based compensation expenses	10	11
Allowance for:		
– impairment loss in value of assets and assets written off, net	96	16
– impairment of goodwill	65	1
– expected credit loss	7	3
– intangible assets	64	–
– impairment on assets reclassified to held for sale	64	–
Negative goodwill	(6)	*
Provision for fines	7	25
Inventories written down / (written-back) and allowance for stock obsolescence, net	*	(1)
Tax expense (Note B3(a))	78	88
Operating profit before working capital changes	1,455	1,250
Changes in working capital:		
Inventories	124	(9)
Receivables (Note (b))	239	(1,216)
Payables	(206)	(215)
Contract costs	188	2,160
Contract assets	(479)	(361)
Contract liabilities	(245)	(748)
	1,076	861
Tax paid	(99)	(122)
Net cash from operating activities	977	739

The accompanying notes form an integral part of these financial statements.

(S$ million)	Group 2019	Group 2018
Cash flows from investing activities		
Dividend received	229	167
Interest received	104	74
Proceeds from:		
– disposal of interests in subsidiaries, net of cash disposed	(10)	73
– divestment of asset held for sale	197	–
– sale of property, plant and equipment	27	11
– sale of intangible assets	7	*
– disposal of other financial assets and business	503	315
– disposal of joint ventures / associate	–	66
Loan repayment from related parties	10	25
Non-trade balances with related corporations, net of repayment	(2)	–
Acquisition of subsidiaries, net of cash acquired	–	(426)
Acquisition of additional investments in joint ventures and associates	(11)	(85)
Acquisition of other financial assets	(567)	(310)
Purchase of property, plant and equipment and investment properties (Note (a))	(925)	(1,107)
Purchase of intangible assets	(9)	(20)
Cash balances transferred to held for sale, net of advance received	(4)	–
Net cash used in investing activities	(451)	(1,217)

The accompanying notes form an integral part of these financial statements.

Consolidated Statement of Cash Flows

Year ended December 31, 2019

(S$ million)	Group 2019	Group 2018
Cash flows from financing activities		
Proceeds from share issued to non-controlling interests of subsidiaries	19	25
Proceeds from share options exercised with issue of treasury shares	–	*
Proceeds from share options exercised with issue of treasury shares of a subsidiary	–	1
Purchase of treasury shares	(4)	(17)
Purchase of treasury shares by a subsidiary	–	(1)
Repayment of lease liability	(35)	–
Proceeds from borrowings	4,007	3,011
Repayment of borrowings	(3,886)	(2,156)
Acquisition of non-controlling interests	(91)	(292)
Dividends paid to owners of the Company	(71)	(71)
Dividends paid to non-controlling interests of subsidiaries	(20)	(29)
(Payment) / receipt in restricted cash held as collateral	(27)	4
Perpetual securities distribution paid	(36)	(245)
Unclaimed dividends	–	*
Capital reduction paid to non-controlling interests	(4)	–
Interest paid	(544)	(486)
Net cash used in financing activities	(692)	(256)
Net decrease in cash and cash equivalents	(166)	(734)
Cash and cash equivalents at beginning of the year	1,923	2,682
Effect of exchange rate changes on balances held in foreign currency	(17)	(25)
Cash and cash equivalents at end of the year (Note E4)	1,740	1,923

a. During the year, the Group acquired property, plant and equipment with an aggregate cost of S$1,068 million (2018: S$1,146 million) of which S$48 million (2018: S$nil) was settled via offset of payables and dividend receivable from a joint venture (Note D1(xi)). S$24 million was advance paid to supplier in prior year and S$3 million (2018: S$4 million) relates to provision for restoration costs as disclosed in Note H4. Included in the Group's trade and other payables is an amount of S$256 million (2018: S$167 million) relating to accrued capital expenditure.

b. During the year, the Group acquired intangible assets with an aggregate cost of S$18 million (2018: S$20 million) of which S$9 million (2018: S$nil) was acquired by means of a swap of shares in Note B6(b).

c. Changes in receivables included an amount of S$58 million (2018: S$191 million) of service concession receivables from the Sirajganj Unit 4 power projects (2018: Myingyan and Sirajganj Unit 4 power projects) which was recognised in accordance with SFRS(I) INT 12 *Service Concession Arrangements* accounting guidelines. The receivables will be collected over the period of the concession contracts from the time the power plants commence commercial operations.

The accompanying notes form an integral part of these financial statements.

Notes to the Financial Statements

Year ended December 31, 2019

A. About These Financial Statements

Sembcorp Industries Ltd (the Company) is a company incorporated in the Republic of Singapore and has its registered office at 30 Hill Street #05-04, Singapore 179360.

The Company's immediate and ultimate holding company is Temasek Holdings (Private) Limited, a company incorporated in the Republic of Singapore.

The financial statements comprise the Company and its subsidiaries (together referred to as the Group and individually as Group entities) and the Group's interests in associates, joint ventures and joint operations.

The financial statements were authorised for issue by the Board of Directors on March 4, 2020.

A1. Basis of preparation

The financial statements have been prepared in accordance with the Singapore Financial Reporting Standards (International) (SFRS(I)) and International Financial Reporting Standards (IFRS). SFRS(I) comprise standards and interpretations that are equivalent to IFRS.

All references to SFRS(I) and IFRS are subsequently referred to as SFRS(I) in these financial statements unless otherwise specified.

The financial statements are presented in Singapore dollar which is the Company's functional currency. All financial information presented in Singapore dollars has been rounded to the nearest million unless otherwise stated. '*' denotes financial value that is less than S$1 million. The financial statements have been prepared on the historical cost basis except as otherwise described in the accounting policies below.

The preparation of the financial statements in conformity with SFRS(I) requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions, which are based on historical experience and various other factors believed to be reasonable under the circumstances, form the basis of judgement about carrying value of the assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

Throughout the notes to the financial statements, further information is provided about key management judgements and estimates that are considered material to the financial statements.

A. About These Financial Statements *(cont'd)*

A2. Summary of significant accounting policies

The accounting policies have been applied consistently by Group entities to all periods presented in these financial statements. Besides the accounting polices described below, other accounting policies are included in the respective notes to the financial statements.

i. Foreign currencies

Foreign currency transactions and balances

Transactions in foreign currencies are translated into the functional currency of individual entity at exchange rates at the dates of the transactions. At each reporting date, foreign currency monetary assets and liabilities are re-translated to the functional currency using foreign exchange rates at that date.

Non-monetary assets and liabilities in a foreign currency that are measured in terms of historical cost are translated using exchange rate at the date of the transaction while those measured at fair value are retranslated to the functional currency at exchange rates at the date the fair value was determined.

Foreign currency differences arising from the settlement or from translation of monetary items and arising on retranslation are recognised in profit or loss, except following retranslation which are recognised in other comprehensive income:

- Equity instruments designated as fair value through other comprehensive income (FVOCI) (except on impairment in which case foreign currency differences that have been recognised in other comprehensive income are reclassified to profit or loss);
- A financial liability designated as a hedge of a net investment in a foreign operation to the extent that the hedge is effective; or
- Qualifying cash flow hedges to the extent the hedge is effective.

Foreign operations

For the purpose of presenting consolidated financial statements, the assets and liabilities of entities with a functional currency other than Singapore dollar are expressed in Singapore dollar using exchange rates prevailing at the reporting period date. Income and expense items and cash flows are translated at the average exchange rates for each month and exchange differences arising are recognised directly in other comprehensive income.

On disposal of a foreign entity, the cumulative amount previously recognised in the consolidated statement of comprehensive income relating to that particular foreign operation is recognised in profit or loss.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated accordingly.

Net investment in a foreign operation

Exchange differences arising from monetary items that in substance form part of the Company's net investment in a foreign operation are recognised in the Company's profit or loss. Such exchange differences are reclassified to the foreign currency translation reserve in the consolidated statement of comprehensive income and are released to the consolidated income statement upon disposal of the investment as part of the gain or loss on disposal.

A. About These Financial Statements *(cont'd)*

A2. Summary of significant accounting policies *(cont'd)*

ii. Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company and its subsidiaries.

The financial statements of subsidiaries acquired or disposed during the financial year are included or excluded from the consolidated financial statements from their respective dates of obtaining control or ceasing control. Where necessary, adjustments are made to the financial statements of subsidiaries to ensure consistency of accounting policies with those of the Group. All intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated.

Acquisition of subsidiaries is accounted for using the acquisition method. The cost of an acquisition includes fair values of any contingent or deferred consideration arrangement and any pre-existing equity interest in the subsidiary. From January 1, 2017, acquisition-related costs are recognised in the profit and loss account as incurred whereas prior to this date, acquisition-related costs formed part of the cost of acquisition. The unwinding of any interest element of deferred consideration is recognised in profit and loss.

Any excess of the cost of business combination over the Group's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities represents goodwill. Any excess of the Group's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of business combination is recognised in the profit and loss account on the date of acquisition.

Business combinations that involve entities under common control are excluded from the scope of SFRS(I) 3. Such combinations are accounted at historical costs in a manner similar to the pooling-of-interest method, in the preparation of the consolidated financial statements. Under this method of accounting, the difference between the value of the share capital issued and the value of shares received is taken to the merger reserve.

Upon the loss of control, the Group derecognises the assets and liabilities of the subsidiary, any non-controlling interest and the other components of equity related to the subsidiary. Any surplus or deficit arising on the loss of control is recognised in profit or loss. If the group retains any interest in the previous subsidiary then such interest is measured at fair value at the date that control is lost. Subsequently, it is accounted for as an equity-accounted investee or financial assets at FVOCI depending on the level of influence retained.

Changes in the Group's interest in a subsidiary, from January 1, 2010 onwards, that do not result in a loss of control are accounted for as transactions with owners and therefore no adjustments are made to goodwill and no gain or loss is recognised in profit or loss. The difference between the change in the carrying amounts of the non-controlling interests (NCI) and the fair value of the consideration paid or received is recognised directly in equity and attributed to owners of the Company. Prior to January 1, 2010, any excess of the cost of acquisition of NCI over the carrying amount of the interest in the net assets acquired at the date of acquisition was recognised as goodwill.

On a transaction-by-transaction basis, the measurement of NCI is either at fair value or at the NCI's share of the fair value of the identifiable net assets of the acquiree.

Non-controlling interest

NCI are that part of the net results and of net assets of a subsidiary attributable to the interests which are not owned directly or indirectly by the owners of the Company. They are shown separately in the consolidated statements of comprehensive income, statement of changes in equity and balance sheet. Total comprehensive income is attributed to the NCI in a subsidiary based on their respective interest in a subsidiary, even if this results in the NCI having a deficit balance.

Adjustments to NCI arising from transactions that do not involve the loss of control are based on a proportionate amount of net assets of the subsidiary.

A. About These Financial Statements *(cont'd)*

A2. Summary of significant accounting policies *(cont'd)*

ii. Basis of consolidation *(cont'd)*

Associates and joint ventures

Associates and joint ventures are accounted for using the equity method of accounting from the date that significant influence commences until the date that significant influence ceases and are recognised initially at cost. The cost of investments includes transaction costs. When the Group's share of losses exceeds its interest in an equity-accounted investee, the carrying amount of the investment (including any other unsecured receivables, that in substance, form part of the Group's net investment in the associate) is reduced to zero, and the recognition of further losses is discontinued except to the extent that the Group has an obligation or made payments on its behalf to satisfy obligations of the associate that the Group has guaranteed or otherwise committed on behalf of.

The excess of the Group's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition is credited to profit or loss in the period of the acquisition. Where the audited financial statements are not yet available for the purpose of statutory filing, the share of results is arrived at from management financial statements.

Impairment for associates and joint ventures

An impairment loss in respect of an associate or joint venture shall be recognised if, and only if, the recoverable amount of the (associate or joint venture) investment is less than the carrying amount. An impairment loss is recognised in the profit or loss. An impairment loss is reversed if there has been a favourable change in the estimates used to determine the recoverable amount.

Joint operation

A joint operation is an arrangement in which the Group has joint control whereby the Group has rights to the assets, and obligations for the liabilities, relating to an arrangement. The Group accounts for each of its assets, liabilities and transactions, including its share of those held or incurred jointly, in relation to the joint operation.

iii. Service concession arrangements

The Group entered into service concession contracts with local governments or governing agency (the grantor) to design, build and operate (including maintenance of) water treatment plants or power generation plants, over an agreed period ranging from 22 to 30 years. At the end of the concession period, these assets are to be transferred to the grantor and any extension will be based on mutual agreements. These contractual arrangements fall within the scope of SFRS(I) INT 12 *Service Concession Arrangements*.

The Group recognises and measures revenue for building (construction services) and operating these assets as specified in the contracts in accordance with SFRS(I) 15 for the services performed. See accounting policies (c) in Note B2.

If the Group is paid for the construction services partly by financial assets and partly by intangible assets, then each component of the consideration is accounted for separately and recognised initially at fair value (Note E1 and D4(c) respectively).

A. About These Financial Statements *(cont'd)*

A2. Summary of significant accounting policies *(cont'd)*

iv. Adoption of new accounting policies

Amendments to SFRS(I) 9 and SFRS(I) 7 Interest Rate Benchmark Reform (IRBR)

The Group applied the IRBR SFRS(I) amendments retrospectively to hedging relationship that existed at January 1, 2019, or were designated thereafter and that are directly affected by IRBR. The amendments provide temporary relief from applying specific hedge accounting requirements to hedging relationships directly affected by IRBR. The reliefs have the effect that IRBR should not generally cause hedge accounting to terminate. The details of the accounting policies and related disclosures are in Note F2 on Hedges and financial instruments.

SFRS(I) 16 *Leases*

The Group has initially adopted SFRS(I) 16 *Leases* from January 1, 2019. A number of new standards are effective from January 1, 2019, but they do not have a material effect on the Group's financial statements.

SFRS(I) 16 introduces a single, on-balance sheet lease accounting model for lessees where lessee recognises right-of-use asset (ROU) representing its rights to use the underlying assets and lease liabilities representing its obligation to make lease payments. Lessor accounting remains similar to previous accounting policies.

The Group has applied the practical expedient to grandfather the definition of a lease on transition, and thus applied SFRS(I) 16 to all contracts entered into before January 1, 2019, and identified as leases in accordance with SFRS(I) 1-17 and SFRS(I) INT 4. The Group applied SFRS(I) 16 using the modified retrospective approach and the effect of adoption is recognised as an adjustment to the opening balance of revenue reserve at January 1, 2019, with no restatement of comparative information.

At transition, lease liabilities were measured at the present value of the remaining lease payments, discounted at the Group's incremental borrowing rate as at January 1, 2019. ROU are measured at either: (i) their carrying amount as if SFRS(I) 16 had been applied since the commencement date, discounted using the lessee's incremental borrowing rate at the date of initial application; or (ii) an amount equal to the lease liability adjusted by the amount of any prepaid or accrued lease payment.

The Group used the following practical expedients when applying SFRS(I) 16 to affected leases:

- Applied a single discount rate to a portfolio of leases with similar characteristics.
- Adjusted the right-of-use assets by the amount of SFRS(I) 1-37 onerous contract provision immediately before the date of initial application, as an alternative to an impairment review.
- Applied the exemption not to recognise ROU and liabilities for leases with term less than 12 months.
- Excluded initial direct costs from measuring the ROU at the date of initial application.
- Used hindsight when determining the lease term if the contract contains options to extend or terminate the lease.

A. About These Financial Statements *(cont'd)*

A2. Summary of significant accounting policies *(cont'd)*

iv. Adoption of new accounting policies *(cont'd)*

Impacts on financial statements

As at January 1, 2019, the adoption of SFRS(I) 16 resulted in the following key effects at the Group and the Company:

(S$ million)	Group January 1, 2019	Company January 1, 2019
Property, plant and equipment	(75)	–
Right-of-use assets	483	110
Deferred tax asset	*	–
Prepayment	(27)	–
Lease liabilities	(509)	(130)
Other payables	101	–
Revenue reserve	27	20
Non-controlling interests	*	–

When measuring lease liabilities, the Group and the Company discounted lease payments using its incremental borrowing rate at January 1, 2019. The weighted-average rate applied is 4.22%.and 3.64% respectively.

(S$ million)	Group January 1, 2019	Company January 1, 2019
Operating lease commitment at December 31, 2018	578#	108
Discounted using the incremental borrowing rate at January 1, 2019	396	86
Finance lease liabilities recognised as at December 31, 2018	3	–
Recognition exemption for:		
– Short-term leases	(5)	(4)
– Leases of low-value assets	*	–
Extension and termination options reasonably certain to be exercised	118	48
Lease liabilities recognised at January 1, 2019	512	130

Revised due to certain rent payments (including contingent based on future market indices) included in the operating lease commitment disclosure in 2019 which should be excluded under SFRS(I) 1-17.

B. Our Performance

B1. Segments information

The principal activities of the Company are those of an investment holding company, as well as the corporate headquarter and the production and supply of utilities services, terminalling and storage of petroleum products and chemicals.

The management examines the Group's performance both from business activities and geographic perspective and has identified four reportable segments of its business according to the key subsidiaries. The Group's President & CEO regularly reviews and monitors the segment turnover, operating results and assets of these segments separately for decisions making, resource allocation and performance assessment.

The principal activities of key subsidiaries are as follows:

i. Energy *(previously known as "Utilities")*

The Energy segment's principal activities are in the provision of power and water to industrial, commercial and municipal customers. Key activities in the power sector include power generation, process steam production, as well as natural gas importation. In the water sector, the business offers wastewater treatment as well as the production of reclaimed, desalinated and potable water and water for industrial use. In addition, the business also provides on-site logistics, solid waste management and specialised project management, engineering, and procurement services;

ii. Marine

The Marine segment focuses principally on providing integrated solutions for the offshore and marine industry. Key capabilities include rigs & floaters; repairs & upgrades; offshore platforms and specialised shipbuilding;

iii. Urban *(previously known as "Urban Development")*

The Urban segment owns, develops, markets and manages integrated urban developments comprising industrial parks as well as business, commercial and residential space in Asia; and

iv. Others / Corporate

The Others / Corporate segment comprises businesses mainly relating to minting, design and construction activities, offshore engineering and others.

B. Our Performance *(cont'd)*

B1. Segments information *(cont'd)*

a. Operating segments

Information regarding the results of each reportable segment is included below.

(S$ million)	Energy	Marine	Urban	Others / Corporate	Elimination	Total
2019						
Turnover						
External sales	6,138	2,883	280	317	–	9,618
Inter-segment sales	32	*	*	13	(45)	–
Total	6,170	2,883	280	330	(45)	9,618
Results						
Segment results	603	(141)	102	1	–	565
Share of results of associates and joint ventures, net of tax	114	(2)	75	(3)	–	184
Profit from operations	717	(143)	177	(2)	–	749
Finance income	38	93	5	157	(161)	132
Finance costs	(489)	(130)	(5)	(123)	161	(586)
	266	(180)	177	32	–	295
Tax (expense) / credit	(45)	37	(58)	(12)	–	(78)
Non-controlling interests	(26)	58	(2)	–	–	30
Net profit for the year	195	(85)	117	20	–	247
Assets						
Segment assets	12,872	8,407	498	4,869	(5,185)	21,461
Associates and joint ventures	920	15	705	56	–	1,696
Tax assets	46	40	7	2	–	95
Total assets	13,838	8,462	1,210	4,927	(5,185)	23,252
Liabilities						
Segment liabilities	9,655	6,214	191	3,946	(5,185)	14,821
Tax liabilities	451	35	51	15	–	552
Total liabilities	10,106	6,249	242	3,961	(5,185)	15,373
Capital expenditure[1]	701	375	1	8	–	1,085
Significant non-cash items						
Depreciation and amortisation	423	245	1	13	–	682
Allowance for impairment in value of assets and assets written off, net	154	4	–	*	–	158
Impairment of goodwill	65	–	–	–	–	65
Allowance for expected credit loss	6	*	1	*	–	7
Impairment on assets reclassified to held for sale	64	–	–	–	–	64
Provision for fines and related other provision	7	–	–	–	–	7

[1] Segment capital expenditure is the total cost incurred during the year to acquire property, plant and equipment, and intangible assets other than goodwill.

B. Our Performance *(cont'd)*

B1. Segments information *(cont'd)*

a. Operating segments *(cont'd)*

(S$ million)	Energy	Marine	Urban	Others / Corporate	Elimination	Total
2018						
Turnover						
External sales	6,536	4,888	5	260	–	11,689
Inter-segment sales	33	–	*	54	(87)	–
Total	6,569	4,888	5	314	(87)	11,689
Results						
Segment results	728	(58)	*	(3)	–	667
Share of results of associates and joint ventures, net of tax	92	(2)	94	(10)	–	174
Profit from operations	820	(60)	94	(13)	–	841
Finance income	35	55	1	101	(105)	87
Finance costs	(425)	(101)	(5)	(82)	105	(508)
	430	(106)	90	6	–	420
Tax (expense) / credit	(98)	22	*	(12)	–	(88)
Non-controlling interests	(20)	36	(4)	3	–	15
Net profit for the year	312	(48)	86	(3)	–	347
Assets						
Segment assets	12,617	8,483	698	3,568	(3,892)	21,474
Associates and joint ventures	946	67	666	62	–	1,741
Tax assets	65	34	4	3	–	106
Total assets	13,628	8,584	1,368	3,633	(3,892)	23,321
Liabilities						
Segment liabilities	9,230	6,164	494	2,809	(3,892)	14,805
Tax liabilities	493	62	1	22	–	578
Total liabilities	9,723	6,226	495	2,831	(3,892)	15,383
Capital expenditure[1]	818	342	*	7	–	1,167
Significant non-cash items						
Depreciation and amortisation	380	201	1	13	–	595
Allowance for impairment in value of assets and assets written off, net	10	5	–	1	–	16
Inventories written back, net	(2)	1	–	*	–	(1)
Impairment of goodwill	–	–	–	1	–	1
Allowance for / (write-back of) expected credit loss	2	3	(2)	*	–	3
Provision for fines and related other provision	25	–	–	–	–	25

[1] Segment capital expenditure is the total cost incurred during the year to acquire property, plant and equipment, and intangible assets other than goodwill.

B. Our Performance *(cont'd)*

B1. Segments information *(cont'd)*

b. Geographical segments

The Group's geographical segments are presented in ten principal geographical areas: Singapore, China, India, Rest of Asia, Middle East & Africa, UK, Norway, Rest of Europe, Brazil, USA and Other Countries. In presenting information on the basis of geographical segments, segment revenue is based on the geographical location of customers. Segment assets and total assets are based on the geographical location of the assets.

(S$ million)	Note	Singapore	China	India	Rest of Asia	Middle East & Africa (N4)	UK	Norway	Rest of Europe	Brazil	USA	Other Countries	Total
2019													
Revenue from external customers	N1	3,955	511	1,625	350	81	671	668	508	359	825	65	9,618
Total assets	N2	9,429	2,015	6,650	1,644	355	969	136	195	1,716	4	139	23,252
Non-current assets		5,838	1,527	5,493	1,366	315	719	122	186	1,541	3	47	17,157
Capital expenditure	N3	457	25	462	5	*	69	*	*	62	*	5	1,085
2018													
Revenue from external customers	N1	4,204	219	1,687	647	116	649	1,628	963	243	1,186	147	11,689
Total assets	N2	9,322	2,126	6,482	1,659	359	1,044	147	255	1,721	4	202	23,321
Non-current assets		5,534	1,533	5,266	1,488	324	814	137	196	1,520	2	183	16,997
Capital expenditure		384	20	513	1	3	145	*	*	89	*	12	1,167

Segment analysis:

N1: The Group's revenue are predominantly from Singapore 41% (2018: 36%), followed by India 17% (2018:14%).

N2: 40% (2018: 40%) and 28% (2018: 28%) of the Group's total assets are located in Singapore and India, respectively.

N3: Capital expenditure in 2019 relates mainly to additional renewable energy capacity in Singapore and India, as well as, the Tuas Boulevard yard from the Marine business.

N4: Post divestment of the Energy's municipal water plants in South Africa in December 2018, the Group has no presence in Africa.

B. Our Performance *(cont'd)*

B2. Turnover

This note explains how our Group's revenue from contracts with customers are measured and recognised.

Accounting policies

Revenue is measured based on consideration specified in a contract with customer. The Group recognises revenue when it transfers control over a good or service to a customer.

For all revenue contracts with customers, the Group accounts for modifications to the scope or price (or both) of a contract, as separate contracts, if the modifications add distinct goods or services at their stand-alone selling prices. For contract modifications that add distinct goods or services but not at their stand-alone selling prices, the Group applies a new transaction price, combining the remaining consideration with the consideration promised on the modification, to all remaining performance obligations. For contract modifications that do not add distinct goods or services, the Group accounts for the modification as continuation of the original contract and recognises as a cumulative adjustment to revenue at the date of the modification.

Revenue from contracts with customers

a. Sale of electricity, utilities and gases and related services

The sale of electricity, utilities and gas and the related services are determined to be a series of distinct goods satisfied over time. This is because the customers simultaneously receive and consume the benefits provided by the Group. Invoices are generated monthly based on the output delivered to the customers. No significant element of financing is deemed present as the sales are typically made with a credit term of 30 days, consistent with market practice.

Revenue from these sales is recognised based on price (including variable considerations) specified in the contracts. Variable considerations (e.g. off specification delivery) are reviewed and estimated monthly. A refund liability (included in provisions) is recognised for off specification delivery and outage, if any.

When the period between the satisfaction of a performance obligation and payment by the customer exceeds one year, the Group adjusts the consideration for time value of money and recognises a financing component.

Contract liability is recognised when advance from customers are received in relation to connection and capacity charges for delivery of utilities or if the payments received from customers exceed the revenue recognised. The contract liability is transferred to profit or loss over the period stipulated in the contract.

If the value of the goods transferred or services rendered for the contract exceeds payments from customers, a contract asset is recognised. The contract asset is transferred to receivables when the entitlement to payment becomes unconditional.

B. Our Performance *(cont'd)*

B2. Turnover *(cont'd)*

Accounting policies *(cont'd)*

Revenue from contracts with customers *(cont'd)*

b. Ships and rigs repair, building, conversion, overhaul and construction of infrastructure and related engineering services

The Group builds specialised assets for customer through fixed price contracts. Revenue is recognised when control over the specialised asset has been transferred to the customer. The Group also perform repair works based on customer's specification and control is transferred progressively when the services are rendered. Revenue is recognised over time by reference to the progress towards completing the repair works.

i. Contracts with enforceable right to payment

For contracts where the Group has contractual enforceable rights to payment, revenue is recognised over time by reference to the Group's progress towards completing the construction of the specialised asset. The stage of completion is typically assessed by reference to either surveys of work performed (output method), or the cost incurred to date relative to total estimated cost (input method) depending on which method is commensurate with the pattern of transfer of control to the customer. Costs incurred that are not related to the contract or that do not contribute towards satisfying a performance obligation are excluded from the measure of progress and instead are expensed as incurred.

Any increases or decreases in estimated revenue or costs due to change in circumstances are reflected in the profit or loss in the period in which the changes become known by management.

ii. Contracts with no enforceable right to payment

For contracts where the Group does not have enforceable right to payment, revenue is recognised only upon delivery of the specialised asset to customer. On signing of the contract, customer is usually required to make an advance payment that is not refundable if the contract is cancelled. The advance payment is presented as contract liability.

The Group recognises a financing component using a discount rate at contract inception if the delivery of the goods and payment by the customer exceed one year. If the period between the delivery and payment is one year or less, the Group elects the practical expedient not to adjust for significant financing component.

For contracts with standard warranty terms on the performance of the asset, a warranty provision is estimated based on historical data, from known and expected warranty work and contractual obligation to be performed after completion. The warranty expense incurred could be higher or lower than the provision made.

The customer is invoiced on a milestone payment schedule. If the value of the goods transferred by the Group exceed the payments received, a contract asset is recognised. If the payments received exceed the value of the goods transferred, a contract liability is recognised.

The Group capitalises costs incurred in fulfilling the contract as contract costs assets only if (a) these costs can be specifically identified as costs related directly to a contract or an anticipated contract; (b) these costs generate or enhance resources that will be used in satisfying performance obligations in the future; and (c) these costs are expected to be recovered. Otherwise, such costs are expensed to profit or loss immediately.

Capitalised contract costs are subsequently amortised on a systematic basis as the Group recognises the related revenue over time. An impairment loss is recognised in the profit or loss to the extent that the carrying amount of capitalised contract costs exceeds the expected remaining consideration less any directly related costs not yet recognised as expenses.

B. Our Performance *(cont'd)*
B2. Turnover *(cont'd)*

Accounting policies *(cont'd)*

Revenue from contracts with customers *(cont'd)*

c. Service concession revenue

Revenue relating to construction services under a service concession arrangement is recognised over time and when the performance obligations are satisfied.

Operation or service revenue is recognised in the period in which the services are provided by the Group, consistent with the Group's accounting policy on recognising revenue on sale of electricity, utilities and gases and related services (see Note B2(a) above). When the Group provides more than one service in a service concession arrangement, the consideration received is allocated with reference to the relative stand-alone selling prices of the services delivered (see Note A2 (iii)).

d. Sales of development properties

The Group develops and sells residential projects to customers through fixed-price contracts. For such contracts, the Group does not have enforceable rights to payment arising from the contractual terms. Revenue is recognised at a point in time when the rights to payment become enforceable. Revenue is recognised when the control over the residential project has been transferred to the customers and customers have accepted in accordance with sales contract.

e. Sales of other goods

For certain sale of goods contracts, revenue is recognised at a point in time when the goods are transferred to customers.

Charter hire and rental income

Charter hire and rental income receivable under operating lease is recognised in profit or loss on a straight-line basis over the term of the lease. Lease incentives granted are recognised as an integral part of total rental income, over the term of the lease.

Contingent rentals are recognised as income in the accounting period in which they are earned.

Dividend and finance income

Dividend income is recognised in profit or loss on the date that the Group's right to receive payment is established.

Finance income is recognised in profit or loss as it accrues, using the effective interest rate method. It includes interest income from non-current receivables.

B. Our Performance *(cont'd)*
B2. Turnover *(cont'd)*

Key estimates and judgements

The Group has applied judgement and estimates in its revenue recognition of long-term contracts. The key estimates and judgements applied are:

Performance obligation

Significant judgement is required in determining whether the performance obligations are distinct. Such considerations include the Group's assessment of whether the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customers and whether the Group's promise to transfer the good or service to the customer is separately identifiable apart from other promises in the contracts. The Group has assessed that long-term contracts with customers have a single performance obligation in view that the services in the contracts are not distinct and / or are integrated.

Variable considerations

For contracts with variable considerations (i.e. liquidated damages, or where customers can contractually rescind the delivery of utilities and gas which do not meet the specifications), the Group has applied judgement in determining the transaction price, based on evaluation of any potential risks and factors which may affect the completion or delivery of the contracts, in accordance with the contractual obligations.

Percentage of completion

For revenue recognised over time, the percentage of completion for certain contracts is assessed by reference to the contract costs incurred till date in proportion to the total estimated contract costs for each contract. In making these estimates, management has relied on the expertise of surveying engineers and also past experience of completed projects. The estimated total costs is reviewed every reporting period and adjusted where necessary, with the corresponding effect of change being recognised prospectively from the date of change.

Onerous contracts

The Group conducts critical review of all its long-term construction contracts regularly. Allowance is made to account for onerous contracts. The Group monitors and reviews the progress of all long-term land development and construction contracts, taking into consideration inputs from internal project managers and external customers in estimating these total contract costs to complete as well as in the evaluation of any potential risks and factors which may affect contract price, cost and timely completion of these contracts. The review also encompasses the cost analysis process whereby both actual costs incurred and future costs to complete are critically examined.

Cost allocation method on long-term land development contracts

Land development costs incurred are capitalised as work-in-progress and allocated to the respective parcels of land based on the relative sales method.

Fulfilment costs

Significant judgement is required to determine if the contract costs recognised are expected to be recovered. Such judgement includes assessment of the evaluation of any potential risks and factors which may affect the customers' ability to take delivery of the rig, ship and construction. The review also encompasses the analysis of the industry outlook and the customers' financial health.

B. Our Performance *(cont'd)*
B2. Turnover *(cont'd)*
Information regarding the turnover are included below:

(S$ million)	Note	Group 2019	Group 2018
Revenue from contracts with customers	(a)	9,613	11,634
Charter hire and rental income		5	55
		9,618	11,689

No revenue was recognised in 2019 and 2018 from performance obligations satisfied or partially satisfied in previous periods due to change in estimate of the transaction price.

Construction and engineering related activities for the Energy segment include service concession revenue. Included in service concession revenue is interest revenue of S$73 million (2018: S$53 million).

Revenue from contracts with customers

a. Disaggregation of revenue from contracts with customers

In the following table, revenue from contracts with customers is disaggregated by primary geographical markets, major product / service lines and timing of revenue recognition. The table also includes a reconciliation of the disaggregated revenue with the Group's reportable segments.

(S$ million)	Reportable segments Energy	Marine	Urban[1]	Others / Corporate	Total
2019					
Primary geographical markets					
Singapore	3,493	170	–	291	3,954
China	219	15	277	1	512
India	1,614	12	–	*	1,626
Rest of Asia	194	129	1	23	347
Middle East & Africa	68	13	–	–	81
UK	496	175	–	*	671
Norway	–	668	–	–	668
Rest of Europe	–	507	–	*	507
Brazil	–	358	–	–	358
USA	–	824	–	1	825
Other Countries	54	10	–	*	64
Total	6,138	2,881	278	316	9,613
Major product / service lines					
Energy products and related services (including electricity, gas and steam)	5,436	–	–	–	5,436
Water products and related services	207	–	–	–	207
Ship and rig repair, building, conversion and related services	–	2,840	–	–	2,840
Construction and engineering related activities	190	–	–	272	462
Others	305	41	278	44	668
Total	6,138	2,881	278	316	9,613
Timing of revenue recognition					
Over time	6,130	2,613	–	271	9,014
At a point in time	8	268	278	45	599
Total	6,138	2,881	278	316	9,613

[1] Revenue for the Urban business in 2019 was mostly from the sale of Nanjing Riverside Grandeur residential property in China.

B. Our Performance *(cont'd)*
B2. Turnover *(cont'd)*
Revenue from contracts with customers *(cont'd)*

a. Disaggregation of revenue from contracts with customers *(cont'd)*

(S$ million)	Reportable segments Energy	Marine	Urban	Others / Corporate	Total
2018					
Primary geographical markets					
Singapore	3,814	154	–	233	4,201
China	216	2	–	1	219
India	1,685	1	–	*	1,686
Rest of Asia	200	421	3	21	645
Middle East & Africa	109	7	–	–	116
UK	454	195	–	*	649
Norway	3	1,627	–	*	1,630
Rest of Europe	–	913	–	–	913
Brazil	–	243	–	–	243
USA	–	1,185	–	*	1,185
Other Countries	55	92	–	*	147
Total	6,536	4,840	3	255	11,634
Major product / service lines					
Energy products and related services (including electricity, gas and steam)	5,694	–	–	–	5,694
Water products and related services	247	–	–	–	247
Ship and rig repair, building, conversion and related services	–	4,808	–	–	4,808
Construction and engineering related activities	246	–	–	210	456
Others	349	32	3	45	429
Total	6,536	4,840	3	255	11,634
Timing of revenue recognition					
Over time	6,517	2,441	1	209	9,168
At a point in time	19	2,399	2	46	2,466
Total	6,536	4,840	3	255	11,634

B. Our Performance *(cont'd)*
B2. Turnover *(cont'd)*
Revenue from contracts with customers *(cont'd)*

b. Transaction price allocated to remaining performance obligations

The following table includes revenue expected to be recognised in the future related to performance obligations that are unsatisfied (or partially unsatisfied) at reporting date. This is estimated based on the expected progress of the projects or expected energy output.

(S$ million)	Within the next 12 months	Between 1 to 5 years	More than 5 years	Total
2019				
Segment				
Energy	1,375	4,621	2,121	8,117
Marine	989	577	–	1,566
Urban	–	–	–	–
Others	338	712	40	1,090
Total	2,702	5,910	2,161	10,773
2018				
Segment				
Energy	1,522	5,413	2,247	9,182
Marine	2,175	913	–	3,088
Urban	285	–	–	285
Others	368	511	2	881
Total	4,350	6,837	2,249	13,436

Accounting policies

The Group applies the practical expedient in paragraph 121 of SFRS(I) 15 and does not disclose information about its remaining performance obligations if:

- the performance obligation is part of a contract that has an original expected duration of one year or less; or
- the Group has a right to invoice a customer in an amount that corresponds directly with its performance to-date, then it recognises revenue in that amount.

Estimated amounts of considerations which are variable in nature are not included in the disclosure of transaction price allocated to the remaining performance obligations.

B. Our Performance *(cont'd)*
B2. Turnover *(cont'd)*
Revenue from contracts with customers *(cont'd)*

c. Assets and liabilities related to contracts with customers

The Group and the Company has recognised the following assets and liabilities related to contracts with customers:

	Group		Company	
(S$ million)	2019	2018	2019	2018
Contract assets	1,501	1,022	–	10
Current contract liabilities	172	445	3	1
Non-current contract liabilities	69	64	30	30
Total contract liabilities	241	509	33	31

Significant changes in contract assets

The contract assets mainly relates to the Group's conditional rights to consideration for work completed or utilities delivered but not yet billed at reporting date on the long-term contracts for ship and rig building, conversion and repair, and infrastructure construction. The contract assets are transferred to trade receivables when the rights become unconditional.

Significant changes in the contract assets balances during the period are as follows:

	Group		Company	
(S$ million)	2019	2018	2019	2018
Transfer of contract assets recognised at the beginning of the year to trade receivables	(736)	(460)	10	–
Recognition of revenue, net of transfer to trade receivables during the year	1,207	818	(10)	10
Cumulative catch-up adjustments arising from:				
– Changes in measurement of progress	2	2	–	–
– Contract modifications	3	1	–	–

Significant changes in contract liabilities

The contract liabilities primarily relate to the advance consideration received from customers for which revenue is recognised over time and at a point in time. For revenue recognised over time, the balance at year end will be recognised over the period stipulated in the contract.

B. Our Performance *(cont'd)*

B2. Turnover *(cont'd)*

Revenue from contracts with customers *(cont'd)*

c. Assets and liabilities related to contracts with customers *(cont'd)*

Significant changes in the contract liabilities balances during the year are as follows:

(S$ million)	Group 2019	Group 2018	Company 2019	Company 2018
Revenue recognised that was included in the contract liabilities balance at the beginning of the year	(478)	(1,141)	(3)	(1)
Increases due to cash received, excluding amounts recognised as revenue during the year	268	388	6	18
Disposal of subsidiary	(23)	–	–	–
Write-off of contract liabilities to other income	(2)	–	(2)	–
Currency translation changes	(4)	(8)	–	–
Cumulative catch-up adjustments arising from:				
– Changes in measurement of progress	(2)	(2)	–	–
– Contract modifications	(1)	(2)	–	–

Contract costs

(S$ million)	December 31, 2019	December 31, 2018
Group		
Current assets		
Costs to secure contracts	1	*
Fulfilment cost	89	329
	90	329
Non-current assets		
Costs to secure contracts	2	*

i. Costs to secure contracts

Management expects the incremental costs of securing contracts to be recoverable. The Group has therefore capitalised them in the amount of S$3 million (2018: less than S$1 million) as at December 31, 2019.

ii. Fulfilment cost

Costs incurred relating to rig and shipbuilding and construction that are to be sold upon completion are capitalised as fulfilment cost for future performance obligations. These costs are expected to be recoverable and are amortised to profit or loss when the related revenue is recognised. In 2019, S$560 million (2018: S$2,292 million) was amortised to cost of sales and there was no impairment losses (2018: S$nil). During the year, engineering designs under development of S$50 million (2018: S$nil) was reclassified from contract costs to intangible assets (Note D4(a)).

B. Our Performance *(cont'd)*

B3. Taxation

This note explains how our Group tax charge arises. The deferred tax section of the note also provides information on our expected future tax charges and sets out the tax assets held across the Group together with our view on whether we expect to be able to make use of these in future.

Accounting policies

Tax expense comprises current and deferred tax. Tax expense is recognised in profit or loss except to the extent that it relates to business combinations, or to items recognised directly in equity, in which case it is recognised in equity or in other comprehensive income.

The Group has determined that interest and penalties related to income taxes, including uncertain tax treatments, do not meet the definition of income taxes, and therefore accounted for them under SFRS(I) 1-37 *Provisions, Contingent Liabilities and Contingent Assets*.

Current tax is the expected tax payable or recoverable in respect of the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for accounting purposes and for taxation purposes. Deferred tax is not recognised for the following temporary differences: the initial recognition of goodwill, the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss, and differences relating to investments in subsidiaries, joint ventures and associates to the extent that the Group is able to control the timing of the reversal of the temporary difference and it is probable that they will not reverse in the foreseeable future.

Deferred tax is measured at the tax rates that are expected to apply to the temporary differences when they reverse, based on the tax rates and tax laws that have been enacted or substantively enacted by the reporting date.

Key estimates and judgements

The Group is subjected to taxes in numerous jurisdictions. Significant judgement is involved in determining the group-wide provision for taxes. In determining the amount of current and deferred taxes, the Group takes into account current understanding and interpretation of existing tax laws and judgement as to whether the tax balances will be utilised and / or reversed in foreseeable future. The eventual taxes paid or received may vary, such differences will be charged to profit or loss in the period when determination is made.

B. Our Performance *(cont'd)*

B3. Taxation *(cont'd)*

a. Tax expenses

i. Current tax expense

(S$ million)	Group 2019	Group 2018
Current tax expense		
Current year	137	107
Over provided in prior years	(17)	(39)
Foreign withholding tax	17	27
	137	95
Deferred tax expense		
Movements in temporary differences	(78)	(27)
(Over) / Under provided in prior years	(12)	28
Effect of changes in tax rates	(1)	(8)
	(91)	(7)
Land appreciation tax		
Current year	32	–
Tax expense	78	88
Reconciliation of effective tax rate		
Profit for the year	217	332
Total tax expense	78	88
Share of results of associates and joint ventures, net of tax	(184)	(174)
Profit before share of results of associates and joint ventures, and tax expense	111	246
Tax using Singapore tax rate of 17%	19	42
Effect of changes in tax rates	(1)	(8)
Effect of different tax rates in foreign jurisdictions	21	19
Tax incentives and income not subject to tax	(42)	(38)
Expenses not deductible for tax purposes	55	52
Utilisation of deferred tax benefits not previously recognised	(9)	(53)
Over provided in prior years	(29)	(11)
Deferred tax benefits not recognised[#]	37	76
Foreign withholding tax	17	27
Land appreciation tax	32	–
Effect of tax reduction on land appreciation tax	(8)	–
Tax adjustment on changes in undistributed profits from foreign entities[#]	(12)	(17)
Others	(2)	(1)
Tax expense	78	88

[#] Comparative balances have been revised to conform to current year presentation.

B. Our Performance *(cont'd)*

B3. Taxation *(cont'd)*

b. Deferred tax assets and liabilities

Accounting policies

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax liabilities and assets on a net basis.

A deferred tax asset is recognised for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Key estimates and judgements

Certain subsidiaries of the Group have tax benefits arising from unutilised tax losses, tax credits and deductible temporary differences, which are available for set-off against future taxable profits. Of these, the utilisation of these tax benefits, for which deferred tax asset was recognised, is premised on these subsidiaries' ability to generate taxable profits in the foreseeable future. This is, however, highly dependent on macroeconomic conditions impacting the offshore and marine sector, expected movements and recovery of oil prices, and financial strength of the subsidiaries' customers, which would then significantly affect the realisability of these deferred tax assets.

B. Our Performance *(cont'd)*

B3. Taxation *(cont'd)*

b. Deferred tax assets and liabilities *(cont'd)*

Movements in deferred tax assets and liabilities (prior to offsetting of balances) during the year are as follows:

(S$ million)	At January 1	Recognised in profit or loss (Note B3(a))	Recognised in equity (Note B3(c))	Acquisition of subsidiaries (Note G2)	Disposal of subsidiaries (Note G2)	Transfer to held for sale	Translation adjustments	At December 31
Group								
2019								
Deferred tax liabilities								
Property, plant and equipment	485	(38)	–	–	(1)	(1)	*	445
Other financial assets	28	*	*	–	–	–	*	28
Trade and other receivables	26	(1)	–	–	–	–	–	25
Intangible assets	81	(19)	–	–	–	–	(1)	61
Other items	15	(12)	1	*	–	(1)	2	5
Total	635	(70)	1	*	(1)	(2)	1	564
Deferred tax assets								
Property, plant and equipment	(168)	2	–	–	–	5	1	(160)
Inventories	(3)	1	–	–	–	–	–	(2)
Trade receivables	2	(6)	–	–	–	1	*	(3)
Trade and other payables	(26)	(3)	*	–	–	1	*	(28)
Tax losses	(3)	(6)	–	–	–	2	1	(6)
Provisions	(49)	3	–	–	–	*	1	(45)
Other financial liabilities	(34)	(1)	6	–	–	–	*	(29)
Retirement benefit obligations	6	*	–	–	–	–	*	6
Other items	(2)	(11)	*	–	–	1	*	(12)
Total	(277)	(21)	6	–	–	10	3	(279)

(S$ million)	At January 1	Recognised in profit or loss (Note B3(a))	Recognised in equity (Note B3(c))	Acquisition of subsidiaries (Note G2)	Disposal of subsidiaries (Note G2)	Translation adjustments	At December 31
Group							
2018							
Deferred tax liabilities							
Property, plant and equipment	492	(6)	–	21	(9)	(13)	485
Other financial assets	39	–	(11)	–	–	–	28
Trade and other receivables	24	2	–	–	–	–	26
Intangible assets	64	(4)	–	24	–	(3)	81
Other items	16	–	(1)	–	–	*	15
Total	635	(8)	(12)	45	(9)	(16)	635
Deferred tax assets							
Property, plant and equipment	(171)	3	–	–	–	–	(168)
Inventories	(4)	1	–	–	–	–	(3)
Trade receivables	(2)	4	–	–	–	–	2
Trade and other payables	(20)	(6)	–	–	–	–	(26)
Tax losses	(13)	5	–	–	–	5	(3)
Provisions	(29)	(20)	–	–	–	–	(49)
Other financial liabilities	(22)	–	(12)	–	–	–	(34)
Retirement benefit obligations	–	6	–	–	–	–	6
Other items	(10)	8	–	–	–	–	(2)
Total	(271)	1	(12)	–	–	5	(277)

B. Our Performance *(cont'd)*
B3. Taxation *(cont'd)*
b. Deferred tax assets and liabilities *(cont'd)*

(S$ million)	At January 1, 2018	Recognised in profit or loss	At December 31, 2018	Recognised in profit or loss	At December 31, 2019
Company					
Deferred tax liabilities					
Property, plant and equipment	59	(2)	57	(21)	36
Deferred tax assets					
Provisions	(6)	(1)	(7)	–	(7)

Deferred tax liabilities and assets are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred taxes relate to the same taxation authority. The amounts determined after appropriate offsetting included in the balance sheets are as follows:

	Group		Company	
(S$ million)	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
Deferred tax liabilities	348	425	29	50
Deferred tax assets	(62)	(67)	–	–
	286	358	29	50

As at December 31, 2019, a deferred tax liability of S$14 million (2018: S$16 million) for potential taxable temporary differences arising from undistributed retained earnings related to investment in subsidiaries and joint ventures were not recognised.

Deferred tax assets have not been recognised in respect of the following items, which are available to set off against future taxable income subject to the tax provisions and agreement by the relevant tax authorities of the various jurisdictions:

	Group	
(S$ million)	December 31, 2019	December 31, 2018
Deductible temporary differences	133	173
Tax losses	1,656	1,547
Capital allowances	49	21
	1,838	1,741

Tax losses of the Group amounting to S$44 million (2018: S$253 million) will expire between 2020 and 2027 (2018: 2019 and 2026). The remaining tax losses, capital allowances and deductible temporary differences do not expire under current tax legislation.

Deferred tax assets have not been recognised under the following circumstances:

i. Where they qualify for offset against the tax liabilities of member companies within the Group under the Loss Transfer System of Group Relief but the terms of the transfer have not been ascertained as at year end; or

ii. Where it is uncertain that future taxable profit will be available against which certain subsidiaries of the Group can utilise the benefits.

B. Our Performance *(cont'd)*
B3. Taxation *(cont'd)*
c. Other comprehensive income

Tax effects relating to each component of other comprehensive income:

	Group					
	2019			2018		
(S$ million)	Before tax	Tax expense	Net of tax	Before tax	Tax expense	Net of tax
Foreign currency translation differences for foreign operations	(94)	–	(94)	(160)	–	(160)
Exchange differences on monetary items forming part of net investment in a foreign operation	(3)	–	(3)	(1)	–	(1)
Share of other comprehensive income of associates and joint ventures	(12)	–	(12)	31	–	31
Cash flow hedges: net movement in hedging reserves (Note (i))	21	(6)	15	(125)	23	(102)
Financial assets at FVOCI: net movement in fair value reserve (Note (ii))	40	–	40	(4)	*	(4)
Realisation of reserve upon disposal of joint venture	(1)	–	(1)	–	–	–
Realisation of reserve upon disposal / liquidation of subsidiaries	(3)	–	(3)	19	–	19
Defined benefit plan actuarial gains and losses	7	(1)	6	(5)	1	(4)
Other comprehensive income	(45)	(7)	(52)	(245)	24	(221)

	Group	
(S$ million)	2019	2018
i. Cash flow hedges:		
Net change in fair value of hedging instruments	36	50
Amount reclassified to profit or loss	(15)	(175)
Tax expense	(6)	23
Net movement in the hedging reserve during the year recognised in other comprehensive income	15	(102)
ii. Financial assets as FVOCI:		
Changes in fair value	40	4
Tax expense	–	*
Net changes in fair value during the year recognised in other comprehensive income	40	4

B. Our Performance *(cont'd)*
B4. Profit for the year

Accounting policies

Government grants related to asset are credited to a deferred asset grant account at fair value when there is reasonable assurance that the grants will be received and the Group will comply with the conditions attaching to it. These grants are then recognised in profit or loss as "Other Income" on the straight-line basis over the estimated useful lives of the relevant assets.

Non-monetary government grants and assets received are valued at fair value or nominal amounts.

Grants that compensate the Group for expenses already incurred are recognised in profit or loss as "Other Income" on a systematic basis in the same periods in which the expenses are recognised.

Detailed below are the key amounts recognised in arriving at our profit for the year:

		Group	
(S$ million)	Note	2019	2018
a. Expenses			
Allowance for / (write-back of) impairment losses (net)			
– property, plant and equipment	D1	81	5
– intangible assets	D4	64	–
– receivables and contract assets		7	3
Inventories written back		*	(1)
Amortisation of intangible assets	D4	54	47
Audit fees paid / payable			
– auditors of the Company		2	2
– other member firms of KPMG International		2	2
– other auditors		1	1
Non-audit fees paid / payable			
– auditors of the Company		1	1
– other member firms of KPMG International		*	1
– other auditors		1	1
Depreciation			
– property, plant and equipment	D1	584	547
– right-of-use assets	D2	43	–
– investment properties	D3	1	1
Operating lease expenses		–	22
Property, plant and equipment written off		13	11
Intangible assets written off	D4	*	*
Bad debts written off		*	*
Provision for fines and other related provision		7	25
Net change in fair value of cash flow hedges		(10)	(70)
Staff costs			
Staff costs		852	787
Included in staff costs are:			
Equity-settled share-based payments		10	11
Cash-settled share-based payments		(1)	2
Contributions to:			
– defined benefit plan		1	1
– defined contribution plan		67	49

B. Our Performance *(cont'd)*
B4. Profit for the year *(cont'd)*

		Group	
(S$ million)	Note	2019	2018
b. Other operating income and (expenses)			
Grants received			
– income related		4	7
Gain on disposal of property, plant and equipment		15	4
Gain on disposal of asset held for sale		70	–
Net exchange loss		(11)	(22)
Net change in fair value of cash flow hedges		(1)	(2)
Net change in fair value of fair value hedges		4	(1)
Net change in fair value of financial assets at FVTPL (designated on initial recognition)		(2)	*
Net change in fair value of financial assets at FVTPL (mandatorily measured)		(9)	18
Gain from derecognition of financial assets		4	4
c. Non-operating income and (expenses)			
Gross dividend income from financial assets at FVOCI		*	*
Gain on disposal / liquidation of:			
– subsidiaries		16	11
– joint venture / associate		*	18
– business		–	15
Allowance for impairment losses			
– goodwill	D4	(65)	(1)
– joint venture		(1)	–
– assets reclassified to held for sale	B6	(64)	–
Negative goodwill		6	*

B. Our Performance *(cont'd)*

B5. Earnings per share

The Group presents basic and diluted earnings per share for its ordinary shares.

(S$ million)	Group 2019	Group 2018
i. Profit attributable to owners of the Company:		
Profit attributable to equity holders of the Company	247	347
Less: Profit attributable to perpetual security holders of the Company	(36)	(43)
Profit attributable to owners of the Company	211	304
ii. Weighted average number of ordinary shares *(in million)*:		
Issued ordinary shares at January 1	1,784	1,787
Effect of share options exercised, performance shares and restricted shares released	3	1
Effect of own shares held	(1)	(2)
Weighted average number of ordinary shares	1,786	1,786
Adjustment for dilutive potential ordinary shares		
– performance shares	7	3
– restricted shares	4	7
Weighted average number of ordinary shares adjusted for all dilutive potential shares	1,797	1,796
Earnings per ordinary share (cents)		
– basic[1]	11.81	16.98
– diluted[2]	11.74	16.87

[1] Basic earnings per share is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company (excluding perpetual security holders) by the weighted average number of ordinary shares outstanding during the year, adjusted for own shares held.

[2] Diluted earnings per ordinary share is by dividing the weighted average number of ordinary shares outstanding adjusted for the effects of all dilutive potential ordinary shares. The Company has two categories of dilutive potential ordinary shares: performance shares and restricted shares.

B. Our Performance *(cont'd)*

B6. Assets or disposal groups held for sale

Accounting policies

Assets (or disposal groups) are classified as assets held for sale and measured at the lower of carrying amount and fair value less costs to sell if they are expected to be recovered principally through a sale transaction rather than through continuing use.

Any impairment losses on initial classification and subsequent gains or losses on re-measurement are recognised in profit or loss. Subsequent increases in fair value less costs to sell are recognised in profit or loss (not exceeding the accumulated impairment loss that has been previously recognised).

		December 31, 2019			December 31, 2018
(S$ million)	Note	Carrying amount immediately before impairment	Impairment allocation	Carrying amount after impairment allocation	Carrying amount
Group					
Assets held for sale					
Property, plant and equipment	D1, (a), (c), (d)	91	(56)	35	127
Interest in associate	(b)	–	–	–	2
Right-of-use assets	(c)	1	–	1	–
Intangible assets	D2, (c)	13	(8)	5	–
Deferred tax assets	(c)	10	–	10	–
Trade and other receivables	(c)	19	–	19	–
Inventories	(c)	1	–	1	–
Cash and cash equivalents	(c)	4	–	4	–
		139	(64)	75	129
Liabilities held for sale					
Borrowings	(c)	6	–	6	–
Lease liabilities	(c)	1	–	1	–
Trade and other payables	(c)	21	–	21	–
Deferred tax liabilities	(c)	2	–	2	–
Current tax payable	(c)	1	–	1	–
		31	–	31	–
Company					
Property, plant and equipment	D1, (a)	–	–	–	127

The non-recurring fair value measurement for the assets or disposal groups held for sale has been categorised as a Level 3 fair value hierarchy.

B. Our Performance *(cont'd)*

B6. Assets or disposal groups held for sale *(cont'd)*

a. On August 25, 2017, the Company entered into a sale and purchase agreement to sell certain utilities assets to a customer for a consideration of US$113 million (approximately S$152 million). On August 8, 2018, the sale and purchase agreement was amended to sell additional utilities assets to the customer for a consideration of US$30 million (approximately S$41 million). The assets were classified as asset held for sale as the assets were available for immediate sale in their present condition and measured at its carrying amount as at December 31, 2018 and December 31, 2017, respectively. The sale has been completed in October 2019.

b. On January 15, 2019, the Group's subsidiaries, Sembcorp Marine Repairs and Upgrades Pte. Ltd. (SMRU) and Semb-Eco Pte. Ltd. (Semb-Eco) entered into a share swap agreement with Ecospec Global Technology Pte. Ltd. (EGT) and its shareholders. Consequently, EGT will cease to be an associate of the Group.

c. On February 6, 2020, the Group announced that certain wholly-owned subsidiaries of Sembcorp Utilities Pte Ltd have agreed to sell 100% of their interest in the water business in Chile for a total consideration of CLP27.8 billion (approximately S$49 million) to the Spanish construction and engineering service SACYR S.A. group of companies. Accordingly, the assets and liabilities were classified as assets held for sale and liabilities held for sale respectively as the disposal group was available for immediate sale in its present condition. It was measured at fair value less cost to sell as at December 31, 2019.

   Arising from the announced divestment, an impairment of S$64 million was charged under non-operating expenses (see Note B4) in 2019. In addition, a currency translation loss recognised in the foreign currency translation reserve will be taken to profit or loss upon completion of the sale in 2020. As at December 31, 2019, the accumulated currency translation loss was S$30 million.

d. In 2019, the Group's subsidiary, SES Engineering (M) Sdn Bhd reclassified a workshop in Malaysia from property, plant and equipment to assets held for sale.

C. Our Funding

C1. Capital structure

Capital management

The Group maintains a disciplined approach to capital management. Optimising our portfolio as well as maintaining investor, creditor and market's confidence and to sustain future development and growth while at the same time maintaining an appropriate dividend policy to the shareholders.

The Group's policy is to borrow centrally using a mixture of long-term and short-term capital market issues and borrowing facilities to meet anticipated funding requirements. These borrowings, together with cash generated from operations, are loaned internally or contributed as equity to certain subsidiaries.

Capital is defined as equity attributable to the equity holders.

The Group's debt-to-capitalisation ratio as at the balance sheet date was as follows:

	Group	
(S$ million)	2019	2018
Debt	10,800	10,732
Total equity	7,879	7,938
Total debt and equity	18,679	18,670
Debt-to-capitalisation ratio	0.58	0.57

There were no changes in the Group's approach to capital management during the year. The debt amount does not include the lease liabilities of S$504 million on balance sheet, consequent to the adoption of SFRS(I) 16.

Some of its subsidiaries are required to maintain a certain ratio of net borrowings to net assets and certain level of leverage ratio as required under the loan arrangement with banks. These externally imposed capital requirements have been complied with as at the respective reporting dates.

C2. Share capital and treasury shares

Accounting policies

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issuance of new ordinary shares and share options are deducted against the share capital account, net of any tax effects.

	Number of shares	
	Issued Share Capital	Treasury Shares
At January 1, 2019	1,787,547,732	3,100,138
Treasury shares purchased	–	2,030,100
Treasury shares transferred pursuant to restricted share plan	–	(3,163,962)
At December 31, 2019	1,787,547,732	1,966,276

The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at meetings of the Company. All shares rank equally with regard to the Company's residual assets.

C. Our Funding *(cont'd)*

C2. Share capital and treasury shares *(cont'd)*

Issued and paid up capital

As at December 31, 2019, the Company's issued and paid up capital excluding treasury shares comprised 1,785,581,456 (December 31, 2018: 1,784,447,594) ordinary shares.

Treasury shares

During the year, the Company acquired 2,030,100 (2018: 5,800,000) ordinary shares in the Company by way of on-market purchases. 3,163,962 (2018: 2,742,689) treasury shares were re-issued pursuant to the Restricted Share Plan (RSP).

As at December 31, 2019, 1,966,276 (December 31, 2018: 3,100,138) treasury shares were held that may be re-issued upon the vesting of performance shares and restricted shares under the Performance Share Plan (PSP) and RSP respectively.

C3. Other reserves

		Group		Company	
(S$ million)	Note	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
Distributable					
Reserve for own shares	(a)	(4)	(9)	(4)	(9)
Non-distributable					
Currency translation reserve	(b)	(482)	(390)	–	–
Capital reserve	(c)	156	183	(158)	(149)
Merger reserve	(d)	29	29	–	–
Share-based payments reserve	(e)	(9)	(8)	158	151
Fair value reserve	(f)	74	34	–	–
Hedging reserve	(g)	(87)	(87)	–	–
		(323)	(248)	(4)	(7)

a. Reserve for own shares

Accounting policies

When the ordinary shares are reacquired by the Company, the consideration paid is recognised as deduction from equity, presented as reserve for own shares. Reacquired shares are classified as treasury shares.

When the treasury shares are subsequently sold or re-issued, the cost of the treasury shares is reversed from reserve for own shares account and the realised gain or loss on the transaction is presented as a change in equity of the Company. No gain or loss is recognised in profit or loss.

At December 31, 2019, the Company held 1,966,276 (2018: 3,100,138) of its own uncancelled shares as treasury shares.

C. Our Funding *(cont'd)*

C3. Other reserves *(cont'd)*

Type of other reserves	Nature
b. Foreign currency translation reserve	Comprises of: i. foreign exchange differences arising from translation of the financial statements of foreign entities, ii. effective portion of the hedging instrument which is used to hedge against the Group's net investment in foreign entities and iii. translation of foreign currency loan used to hedge or form part of the Group's net investments in foreign entities.
c. Capital reserve	Comprises of: i. acquisitions and disposals with non-controlling interests that do not result in a change of control, capitalisation of accumulated profits for the issue of bonus shares, capital reserve (net of goodwill) on consolidation and equity accounting, ii. asset revaluation reserve, capital redemption reserve, convertible loan stock reserve, iii. transfer from revenue reserve in accordance with the regulations of the foreign jurisdiction in which the Group's subsidiaries, associates and joint ventures operate, and treasury shares of a subsidiary and iv. recognition of call options issued to non-controlling interests of subsidiaries.
d. Merger reserve	The difference between the values of shares issued by the Company in exchange for the value of shares acquired in respect of the acquisition of subsidiaries accounted for under the pooling-of-interest method.
e. Share-based payments reserve	Represents the cumulative value of services received from employees recorded on grant of equity-settled share options, performance shares and performance based restricted shares.
f. Fair value reserve	Includes the cumulative net change in the fair value of equity investments designated at FVOCI until the investments are derecognised. This does not include impairment losses recognised in profit or loss prior to January 1, 2018.
g. Hedging reserve	The effective portion of the cumulative net change in the fair value of cash flow hedging instruments related to hedged transactions that have not yet occurred.

C. Our Funding *(cont'd)*

C4. Perpetual securities

Accounting policies

The perpetual securities do not have a maturity date and the Company is able to elect to defer making a distribution, subject to the terms and conditions of the securities issue. Accordingly, the Company is not considered to have a contractual obligation to make principal repayments or distributions in respect of its perpetual securities issue and the perpetual securities are classified and presented as equity. Distributions are treated as dividends which will be directly debited from equity. Incremental costs directly attributable to the issuance of perpetual securities are deducted against the proceeds from the issue.

On August 21, 2018, the Company has redeemed and cancelled S$200 million, 5% subordinated perpetual securities.

On June 22, 2017, the Company issued subordinated perpetual securities with an aggregate principal amount of S$200 million. Incremental costs incurred amounting to S$1 million was recognised in equity as a deduction from proceeds.

On May 20, 2015, the Company issued subordinated perpetual securities with an aggregate principal amount of S$600 million. Incremental costs incurred amounting to S$3 million was recognised in equity as a deduction from proceeds.

On August 21, 2013, the Company issued subordinated perpetual securities with an aggregate principal amount of S$200 million. Incremental costs incurred amounting to S$1 million was recognised in equity as a deduction from proceeds.

Such perpetual securities bear distributions at a rate of 3.70% to 4.75% per annum, payable semi-annually. Subject to the relevant terms and conditions in the offering memorandum, the Company may elect to defer making distributions on the perpetual securities, and is not subject to any limits as to the number of times a distribution can be deferred.

As a result, the perpetual securities do not meet the definition for classification as a financial liability under SFRS(I) 1-32 *Financial Instruments: Presentation*. The whole instrument is presented within equity, and distributions are treated as dividends.

During the financial year, distributions amounting to S$36 million (2018: S$43 million) were accrued to perpetual security holders.

As at December 31, 2019, S$7 million (2018: S$7 million) worth of perpetual securities was held by a related corporation.

C5. Dividends

Accounting policies

Dividends on ordinary shares are recognised when they are approved for payments. Dividends on ordinary shares and redeemable preference share capital classified as equity are accounted for as movements in revenue reserve.

(S$ million)	Group and Company 2019	2018
Dividend paid		
Interim one-tier tax exempt dividend of 2 cents per share in respect of year 2019 (2018: 2 cents per share in respect of year 2018)	36	36
Final one-tier tax exempt dividend of 2 cents per share in respect of year 2018 (2018: 2 cents per share in respect of year 2017)	35	35
	71	71

Subject to the approval by the shareholders at the next Annual General Meeting, the directors have proposed a final ordinary one-tier tax exempt dividend of 3 cents per share (2018: one-tier tax exempt dividend of 2 cents per share) amounting to an estimated net dividend of S$54 million (2018: S$36 million) in respect of the year ended December 31, 2019, based on the number of issued shares as at December 31, 2019.

The proposed dividend of 3 (2018: 2) cents per share has not been included as a liability in the financial statements.

C. Our Funding *(cont'd)*

C6. Interest-bearing borrowings

(S$ million)	Note	Group December 31, 2019	December 31, 2018
Current liabilities			
Non-convertible debentures		4	–
Secured term loans	(i)	670	686
Unsecured term loans	(ii)	1,969	1,174
Bank overdrafts	E4	–	1
Finance lease liabilities	(iii)	–	1
		2,643	1,862
Non-current liabilities			
Non-convertible debentures		195	202
Secured term loans	(i)	3,020	3,063
Unsecured term loans	(ii)	3,442	5,603
Finance lease liabilities	(iii)	–	2
Secured bonds	(iv)	1,500	–
		8,157	8,870
Total interest-bearing borrowings (measured at amortised cost)		10,800	10,732

Included in interest-bearing borrowings are S$795 million (2018: S$840 million) of loans taken with a related corporation.

Effective interest rates and maturity of liabilities (excluding finance lease liabilities)

(%)	Effective interest rate 2019	2018
Group		
Floating rate loans	1.70 – 12.80	1.60 – 11.25
Fixed rate loans	0.77 – 11.48	0.77 – 11.48
Bonds and notes	2.94 – 4.25	2.94 – 4.25
Debentures	9.65 – 12.00	9.65 – 12.00

C. Our Funding *(cont'd)*

C6. Interest-bearing borrowings *(cont'd)*

i. Secured term loans

The secured term loans are collaterised by the following assets:

(S$ million)	Note	Group Net Book Value December 31, 2019	Group Net Book Value December 31, 2018
Property, plant and equipment	D1(i)	5,159	4,827
Investment properties	D3	16	–
Unit trusts and funds	H3	78	55
Trade and other receivables	E1	1,228	1,285
Intangible assets	D4	*	*
Inventories	E2	95	142
Cash and cash equivalents	E4	338	293
Equity shares of a subsidiary		185	155

ii. Unsecured term loans

Included in the unsecured term loans are the following medium term notes of the Group:

The Company jointly with Sembcorp Financial Services Pte Ltd (SFS), a wholly-owned subsidiary of the Company, have established a S$2.5 billion Multicurrency Debt Issuance Programme (the Programme). Under the Programme, the Company, together with SFS and certain other subsidiaries of the Company (the Issuing Subsidiaries), may from time to time issue Notes and Securities under the Programme subject to availability of funds from the market. The obligations of the Issuing Subsidiaries under the Programme are fully guaranteed by the Company.

As at December 31, 2019 and December 31, 2018, SFS has the following outstanding medium term notes issued under the Programme:

(S$ million)	Nominal interest rate	Year of issue	Year of maturity	Principal amount December 31, 2019	Principal amount December 31, 2018
S$ medium term notes	3.7325%	2010	2020	300	300
S$ medium term notes	4.25%	2010	2025	100	100
S$ medium term notes	3.64%	2013	2024	200	200
S$ medium term notes	2.94%	2014	2021	100	100
S$ medium term notes	3.593%	2014	2026	150	150
				850	850

Apart from the medium term notes issued by SFS, the Company has S$800 million outstanding perpetual securities of which S$200 million was issued in 2013 and another S$600 million in 2015 under the Programme. The perpetual securities are accounted as equity of the Group.

As at December 31, an amount of S$165 million (2018: S$165 million) medium term notes was held by a related corporation.

C. Our Funding *(cont'd)*

C6. Interest-bearing borrowings *(cont'd)*

ii. Unsecured term loans *(cont'd)*

Sembcorp Marine Ltd (SCM), a subsidiary of the Company has a S$2 billion Multicurrency Multi-Issuer Debt Issuance Programme (the Programme) pursuant to which SCM, together with its subsidiaries, Jurong Shipyard Pte Ltd, Sembcorp Marine Repairs & Upgrades Pte Ltd and Sembcorp Marine Offshore Platforms Pte Ltd (formerly known as SMOE Pte Ltd) (the Issuing SCM Subsidiaries), may from time to time issue notes (the Notes) and / or perpetual securities (the Perpetual Securities), and together with the Notes (the Securities), denominated in Singapore dollars and / or any other currency as the relevant Issuer and the relevant dealer may agree. The obligations in respect of Securities issued by the Issuing Subsidiaries will be unconditionally and irrevocably guaranteed by SCM.

Under the Programme, SCM or any of the Issuing SCM Subsidiaries may from time to time issue notes in series or tranches in Singapore Dollars or any other currency. Such notes are listed on the Singapore Exchange Securities Trading Limited and are cleared through the Central Depository (Pte) Ltd. The notes are redeemable at par.

As at December 31, 2019 and December 31 2018, Jurong Shipyard Pte Ltd, a subsidiary of SCM, has the following outstanding medium term notes under the Programme:

(S$ million)	Nominal interest rate	Year of issue	Year of maturity	Principal amount
S$ medium term notes	2.95%	2014	2021	275
S$ medium term notes	3.85%	2014	2029	325
				600

As at December 31, 2019, an amount of S$168 million (2018: S$168 million) medium term notes was held by a related corporation.

iii. Finance lease liabilities

The Group has obligations under finance leases that are payable as follows:

(S$ million)	December 31, 2018 Payments	December 31, 2018 Interest	December 31, 2018 Principal
Group			
Within 1 year	1	*	1
After 1 year but within 5 years	2	*	2
After 5 years	–	–	–
Total	3	*	3

Under the terms of the lease agreements, no contingent rents are payable. The interest rates range from 4.85% to 10.25% per annum in 2018. Following the adoption of SFRS(I) 16 on January 1, 2019, the finance lease liabilities were reclassified to lease liabilities.

C. Our Funding *(cont'd)*

C6. Interest-bearing borrowings *(cont'd)*

iv. Secured bonds

In June 2019, the Company's wholly-owned subsidiary, Sembcorp Financial Services Pte. Ltd (SFS), entered into a subscription agreement with DBS Bank to issue S$1.5 billion 3.55% per annum guaranteed bonds due 2024. Proceeds from the issuance of bonds were used to fund the S$2.0 billion 5-year subordinated loan facility provided by SFS to Sembcorp Marine Financial Services Pte. Ltd. ("SMFS"), a subsidiary of SCM Group, to retire SCM Group's S$1.5 billion of borrowings and for working capital and general corporate purposes. SCI acts as a guarantor for the bonds issuance. At balance sheet date, an amount of S$200,000,000 fixed fee guaranteed bonds was subscribed by a related corporation.

Reconciliation of movements of liabilities to cash flows arising from financing activities:

	2019				2018			
(S$ million)	Accrued interest payable (Note E3)	Interest-bearing borrowings# (Note C6)	Lease liabilities (Note D2)	Total	Accrued interest payable (Note E3)	Interest-bearing borrowings# (Note C6)	Finance lease liabilities (Note D2)	Total
Balance at January 1	42	10,728	3	10,773	43	9,843	4	9,890
Recognised on adoption of SFRS(I) 16 (see Note A2(iv))	–	–	509	509	–	–	–	–
Revised balance at January 1	42	10,728	512	11,282	43	9,843	4	9,890
Cash flows								
Cash payments	–	(3,886)	(35)	(3,921)	–	(2,156)	–	(2,156)
Cash proceeds	–	4,007	–	4,007	–	3,011	–	3,011
Interest paid	(531)	–	(13)	(544)	(486)	–	–	(486)
Non-cash items								
Acquisition of subsidiary	–	–	–	–	–	244	1	245
Disposal of subsidiaries / disposal group held for sale	*	(17)	(2)	(19)	–	(2)	(2)	(4)
Interest expenses, including amortisation of capitalised transaction costs	546	5	18	569	484	2	–	486
New lease (2018: finance lease)	–	–	31	31	–	–	1	1
Write-off of lease liabilities	–	–	(7)	(7)	–	–	–	–
Foreign exchange movement	*	(37)	*	(37)	1	(214)	(1)	(214)
	546	(49)	40	537	485	30	(1)	514
Balance at December 31	57	10,800	504	11,361	42	10,728	3	10,773

Excluding bank overdraft (2018: finance lease liabilities and bank overdraft)

C. Our Funding *(cont'd)*
C7. Net interest expense

Accounting policies

Finance income is recognised in profit or loss as it accrues, using the effective interest rate method.

Finance costs comprise interest expense on borrowings, unwinding of the discounts on provision, amortisation of capitalised transaction costs, transaction costs written off and termination of interest rate swaps. Interest income, interest expense and similar charges are expensed in profit or loss in the period using the effective interest method, except to the extent that they are capitalised as being directly attributable to the acquisition, construction or production of a qualifying asset. The interest component of finance lease payments is recognised in profit or loss using the effective interest method. Termination of interest rate swaps are recognised in profit or loss.

In calculating the interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset (when the assets is not credit-impaired) or to the amortised cost of the liability. However, for financial assets that have become credit-impaired subsequent to initial recognition, interest income is calculated by applying the effective interest rate to the amortised financial asset. If the asset is no longer credit-impaired, then the calculation of interest income reverts to gross basis.

		Group	
(S$ million)	Note	2019	2018
Finance income			
Finance income from financial assets measured at amortised cost			
– associates and joint ventures		6	7
– bank and others		101	69
Significant financing component from contracts with customers		25	11
		132	87
Finance costs			
Interest paid and payable to, measured at amortised cost			
– banks and others		535	469
Amortisation of capitalised transaction costs		12	17
Unwind of discount on restoration costs	H4	3	3
Significant financing component from contracts with customers		3	4
Interest rate swaps:			
– changes in fair value through profit or loss		14	15
– ineffective portion of changes in fair value		1	*
Interest expense on amortisation of lease liability	D2	18	–
		586	508

C. Our Funding *(cont'd)*
C8. Contingent liabilities

Key estimates and judgements

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

Group

The Group has provided guarantees to banks to secure banking facilities provided to joint ventures. These financial guarantee contracts are accounted for as insurance contracts. The principal risk to which the Group and the Company is exposed is credit risk in connection with guarantee contracts it has issued. The credit risk represents the loss that would be recognised upon a default by the parties to which the guarantees were given on behalf of. To mitigate this risk, management continually monitors the risk and has established processes including performing credit evaluations of the parties it is providing the guarantee on behalf of.

There are no terms and conditions attached to the guarantee contracts that would have a material effect on the amount, timing and uncertainty of the Group's and Company's future cash flows.

Estimates of the Group's and Company's obligation arising from financial guarantee contracts may be affected by future events, which cannot be predicted with any certainty. The assumptions made may well vary from actual experience so that the actual liability may vary considerably from the best estimates. As of balance sheet date, there is no provision made in respect of the obligations.

As at the balance sheet date, the Group had the following contingent liabilities:

	Group	
(S$ million)	December 31, 2019	December 31, 2018
Guarantees given to banks to secure banking facilities provided to:		
– Joint ventures	123	212
– Others	121	121
Performance guarantees to external parties	377	372

The periods in which the financial guarantees expire are as follows:

	Group	
(S$ million)	December 31, 2019	December 31, 2018
Less than 1 year	94	83
Between 1 to 5 years	93	116
More than 5 years	57	134
	244	333

The Group's subsidiaries are involved in certain tax disputes, where the amount of potential exposure has been estimated to be approximately S$63 million (2018: S$52 million). Due to the nature of these tax disputes, the potential outcome and obligation is uncertain. No provisions have been recorded in this regard.

C. Our Funding *(cont'd)*

C8. Contingent liabilities *(cont'd)*

Company

a. The Company has provided guarantees to banks to secure banking facilities provided to a wholly-owned subsidiary, SFS. In July 2019, an additional S$1.5 billion guarantees were provided for the 5-year secured bond issued by SFS to fund a part of the S$2 billion subordinated loan facilities provides to SMFS (Note C6(iv)). These financial guarantee contracts are accounted for as insurance contracts.

Intra-group financial guarantees comprise guarantees granted by the Company to banks in respect of banking facilities amounting to S$6,194 million (2018: S$5,034 million), which include S$3,409 million (2018: S$2,436 million) drawn down as at balance sheet date. The periods in which the financial guarantees expire are as follows:

	Company	
(S$ million)	December 31, 2019	December 31, 2018
Less than 1 year	480	14
Between 1 to 5 years	2,579	1,772
More than 5 years	350	650
	3,409	2,436

b. The Company has provided corporate guarantees of S$130 million (2018: S$117 million) to a subsidiary, Sembcorp Cogen Pte Ltd (SembCogen) for the following:

i. Long-term contract (End User Agreement) dated January 15, 1999 with a fellow subsidiary, Sembcorp Gas Pte Ltd (SembGas) to purchase natural gas over the period of 22 years.

ii. Two long-term agreements entered in 2010 for the purchase of a total 42 BBtud (Billion British thermal units per day) of liquefied natural gas (LNG) from BG Singapore Gas Marketing Pte Ltd (BG). The agreements have a term of 10 years and SembCogen has an option to extend the term by 2 successive periods of 5 years each subject to fulfilment of conditions set in the agreements. The obligations of SembCogen under the LNG purchase agreements are currently secured by corporate guarantees issued by the Company in favour of BG.

C9. Commitments

A commitment is a contractual obligation to make a payment in the future, mainly in relation to leases and agreements to buy assets such as network infrastructure and IT systems. These amounts are not recorded in the consolidated balance sheet since we have not yet received the goods or services from the supplier. The amounts below are the minimum amounts that we are committed to pay.

Commitments not provided for in the financial statements are as follows:

a. Capital commitments

		Group	
(S$ million)	Note	2019	2018
– Commitments in respect of contracts placed		278	886
– Commitments in respect of a civil settlement in China	H5	45	–
– Uncalled capital and commitments to subscribe for additional shares in joint ventures and other investments		66	63
		389	949

C. Our Funding *(cont'd)*

C9. Commitments *(cont'd)*

b. Non-cancellable operating leases

As Lessees

Operating leases under SFRS(I) 1-17

The Group's commitments under non-cancellable operating leases are mainly land and buildings with lease term expiring within 5 months to 31 years. These leases have varying escalation clauses to reflect market rentals and renewal options for lease period of 3 to 30 years at rental rates based on prevailing market rates. There is no significant contingent rental on these leases.

	Group	Company
(S$ million)	December 31, 2018	December 31, 2018
Lease payments due:		
Within 1 year	39	12
Between 1 and 5 years	101	33
After 5 years	600	63
	740	108

Lease payments on the above leases are usually adjusted annually to reflect market rentals.

From January 1, 2019, the Group has recognised right-of-use assets for these leases, except for short-term and low-value leases, see Note D2 and Note A1 for further information.

As Lessors

The Group leases out its investment properties and marine vessels. The lease agreement provides for additional lease payments annually based on changes to a price index. Non-cancellable operating lease rentals are receivable as follows:

Operating leases under SFRS(I) 16

(S$ million)	Group 2019
Lease receivable:	
Within 1 year	12
One to two years	3
Two to three years	3
Three to four years	2
Four to five years	2
More than 5 years	5
	27

Operating leases under SFRS(I) 1-17

(S$ million)	Group 2018
Lease receivable:	
Within 1 year	6
Between 1 and 5 years	10
More than 5 years	2
	18

D. Our Assets

D1. Property, plant and equipment

Accounting policies

Property, plant and equipment (PPE) are measured at cost less accumulated depreciation and impairment losses. The cost initially recognised includes acquisition costs and costs directly attributable to bringing the assets to the location and to a working condition for their intended use and capitalised borrowing costs. Cost also includes transfers from equity of any gain or loss on qualifying cash flow hedges of foreign currency purchases of PPE. The estimated costs to be incurred for restore the asset upon expiry of the lease agreement also form part of the cost of the PPE.

i. Subsequent expenditure

Subsequent expenditure is recognised in the carrying amount of the asset when it is probable that future economic benefits will flow to the Group and its costs can be measured reliably. The costs of day-to-day servicing of PPE are recognised as an expense when incurred. For items subject to regular overhauls, the overhaul costs incurred are capitalised and the carrying amounts of replaced components are written off to profit or loss.

ii. Depreciation

Depreciation is based on the cost of an asset less its residual value, being the estimated net amount obtain from disposal. Depreciation is recognised as an expense in profit or loss on a straight-line basis over their estimated useful lives of each major component of an item of PPE, unless it is included in the carrying amount of another asset.

The estimated useful lives for the current and comparative years are as follows:

Leasehold land and wet berthage	Lease period of 3 to 60 years
Buildings	3 to 50 years
Improvements to premises	3 to 30 years
Quays and dry docks	6 to 60 years
Infrastructure	8 to 60 years
Plant and machinery	3 to 30 years
Marine vessels	7 to 31 years
Tools and workshop equipment	3 to 10 years
Furniture, fittings and office equipment	1 to 10 years
Motor vehicles	2 to 10 years

No depreciation is provided on freehold land and capital work-in-progress.

Fully depreciated assets are retained in the financial statements until they are no longer in use.

iii. Impairment

The carrying value of assets is reviewed at least annually and when there is a trigger or an indication of impairment. Impairment occurs when the carrying value of assets or its smallest identifiable, independent asset group that generates cash flows, cash-generating unit (CGU) is greater than the present value of the net cash flows they are expected to generate.

iv. Reversals of impairment

Impairment losses recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed only to the extent that the assets' carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

v. Disposals

Gains or losses arising from the retirement or disposal of PPE are determined as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in profit or loss on the date of retirement or disposal.

Key estimates and judgements

The recoverable amount of an asset or CGU is the greater of its value in use (VIU) and its fair value less costs to sell. In assessing VIU, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU.

The carrying value of property, plant and equipment is tested for impairment whenever there is any objective evidence or indication that the property, plant and equipment may be impaired. This determination and derivation of the relevant inputs requires significant judgement. Such impairment would take into account the market value of the asset, changes to the technological, market, economic or legal environment in which the Group operates, market interest rates, evidence of obsolescence or physical damage to the property, plant and equipment and changes to the expected usage to the property, plant and equipment.

The assets' depreciation methods, estimated useful lives and residual values, are reviewed annually and adjusted prospectively where appropriate. The review takes into consideration on factors such as changes in the expected level of usage and technological developments.

Impairment assessment of the Group's shipyards

Owing to the continuing difficult market conditions impacting the offshore and marine sector, there were indications that the Group's subsidiary, Sembcorp Marine Ltd's (SCM) shipyards (the CGU) might be impaired. Under the Group's formal impairment assessment of the individual CGUs in: (i) Singapore (yards in Singapore, together with their sub-contracting yards in Indonesia and the United Kingdom); and (ii) Brazil, the recoverable amounts for the Group's individual CGUs were determined using the VIU calculations.

The VIU calculation for the Group's CGUs used discounted cash flow projections which took into account management's assessment of the forecasted orderbook over a period of 5 years for Singapore and Brazil (the "projection periods"), with applicable growth rates for Singapore and Brazil beyond the projection periods (up to a maximum of 40 years). Key drivers supporting the recoverable amounts include: forecasted orderbook, project margins which are projected with reference to historical experience, and long-term growth rate of less than 5%.

The cash flows are projected based on the Group's historical experience, market observable data surrounding the state-owned and international oil majors' capital commitment and projected capital expenditures in oil and gas production and exploration activities, regulations relating to local content requirements in Brazil, market expectations and developments for contract order prices, and other external analysts' forecast reports in oil price movements and demands for drilling and production solutions. These cash flows are then discounted using the applicable discount rates based on their pre-tax weighted average cost of capital of 9.43% (2018: 6.60%) and 11.82% (2018: 12.46%) for the Singapore CGU and Brazil CGU respectively; and the Group assessed that no impairment loss is required for these individual CGUs.

The forecasted orderbook and the forecasted margins assumed in the VIU calculation are, however, subject to estimation uncertainties that may have a significant risk of resulting in material adjustments in any future periods affected.

The estimation uncertainties of the forecasted orderbook of the Singapore cash generating unit is, however, reduced by a certain level of orderbooks already secured by the Group. Nevertheless, there are remaining estimation uncertainties surrounding the remaining unsecured orderbook, and forecast project margins, that may result in significant adjustments in the future periods.

Certain phases of the Brazil CGU are presently undergoing yard construction and the yard will gradually ramp up to its full operational capacity over the years. The Group has factored in the long-term fundamentals of the oil and gas industry in Brazil in their forecast. Changes in the recoverable amount are sensitive to impairment loss if the forecast orderbook and the forecasted margins beyond the near term were to deviate from the original forecast or if discount rate were to increase by 1.8%. The recoverable amount of the Brazil CGU is further subject to political risk and will be reviewed at regular intervals.

Changes to the assumptions used in relation to the above key drivers, such as delays and / or decrease in orderbook, and reduction in project margins could lead to lower operating cash inflows and material impairment outcomes, which might in turn affect the financial position and performance of the Group.

D. Our Assets *(cont'd)*

D1. Property, plant and equipment *(cont'd)*

The Group continues to invest in renewable power equipment and shipyard facilities' steam, electricity generating equipment and water treatments equipment and related infrastructure assets and shipyards facilities including berthage form the majority of our tangible assets. All assets are depreciated over their useful economic lives.

(S$ million)	Note	Leasehold and freehold land, wet berthage and buildings	Improvements to premises	Quays and dry docks	Infrastructure	Plant and machinery	Marine vessels	Tools and workshop equipment	Furniture, fittings and office equipment	Motor vehicles	Capital work-in-progress	Total
Group												
Cost / Valuation												
Balance at January 1, 2019		1,826	66	1,525	146	10,248	283	67	204	91	1,506	15,962
Translation adjustments		(10)	(1)	(5)	(10)	(50)	(3)	*	(2)	*	(11)	(92)
Additions	(xi)	3	2	1	6	110	48	6	11	4	877	1,068
Reclassification		213	47	93	16	680	–	1	2	*	(1,052)	–
Transfer to intangible assets		–	–	–	–	*	–	–	*	*	(1)	(1)
Transfer to other financial assets		(6)	(8)	–	–	(5)	–	–	*	*	*	(19)
Transfer to right-of-use assets		(63)	–	(42)	–	–	–	–	(2)	–	(4)	(111)
Disposals / Write-offs		(5)	(2)	–	–	(50)	(1)	*	(3)	(6)	*	(67)
Transfer to assets held for sale	B6	(15)	–	–	(64)	(51)	–	–	(2)	*	–	(132)
Disposal of subsidiaries	G2	(22)	(4)	–	–	(26)	–	–	(3)	(6)	*	(61)
Balance at December 31, 2019		1,921	100	1,572	94	10,856	327	74	205	83	1,315	16,547
Accumulated depreciation and impairment losses												
Balance at January 1, 2019		564	52	340	47	2,937	77	61	159	53	–	4,290
Translation adjustments		(3)	*	*	(3)	5	(1)	*	(1)	*	*	(3)
Depreciation for the year	B4(a)	56	3	66	10	411	10	4	16	8	–	584
Reclassification		(1)	2	–	–	(1)	–	–	*	*	–	–
Transfer to intangible assets		–	–	–	–	–	–	–	*	*	–	*
Transfer to other financial assets		*	(1)	–	–	(1)	–	–	*	*	–	(2)
Transfer to right-of-use assets		(15)	–	(21)	–	–	–	–	*	–	–	(36)
Disposals / Write-offs		(1)	(2)	–	–	(26)	*	*	(3)	(6)	–	(38)
Transfer to assets held for sale	B6	(6)	–	–	(24)	(10)	–	–	(1)	*	–	(41)
Disposal of subsidiaries	G2	(5)	*	–	–	(15)	–	–	(3)	(4)	–	(27)
Impairment losses	(iv), (v), (vi), B4(a)	1	*	–	–	74	–	–	*	–	6	81
Balance at December 31, 2019		590	54	385	30	3,374	86	65	167	51	6	4,808
Carrying amounts												
At January 1, 2019		1,262	14	1,185	99	7,311	206	6	45	38	1,506	11,672
At December 31, 2019		1,331	46	1,187	64	7,482	241	9	38	32	1,309	11,739

D. Our Assets *(cont'd)*

D1. Property, plant and equipment *(cont'd)*

(S$ million)	Note	Leasehold and freehold land, wet berthage and buildings	Improvements to premises	Quays and dry docks	Infrastructure	Plant and machinery	Marine vessels	Tools and workshop equipment	Furniture, fittings and office equipment	Motor vehicles	Capital work-in-progress	Total
Group												
Cost / Valuation												
Balance at January 1, 2018		1,771	67	1,513	184	9,575	279	64	201	93	1,252	14,999
Translation adjustments		(11)	*	4	(6)	(456)	3	*	(1)	*	(12)	(479)
Additions		5	*	8	9	81	1	3	7	5	1,027	1,146
Reclassification		81	*	*	(34)	749	–	*	2	*	(798)	–
Transfer from inventory		–	–	–	–	8	–	–	–	–	–	8
Transfer to investment properties	D3	(5)	–	–	–	–	–	–	–	–	–	(5)
Disposals / Write-offs		(5)	(1)	*	–	(33)	–	*	(2)	(2)	(4)	(47)
Transfer to assets held for sale	B6	–	*	–	–	(36)	–	–	*	–	–	(36)
Acquisition of subsidiaries	(iii)	1	–	–	–	367	–	–	–	1	42	411
Disposal of subsidiaries		(11)	*	–	(7)	(7)	–	–	(3)	(6)	(1)	(35)
Balance at December 31, 2018		1,826	66	1,525	146	10,248	283	67	204	91	1,506	15,962
Accumulated depreciation and impairment losses												
Balance at January 1, 2018		512	51	293	41	2,631	60	57	145	51	–	3,841
Translation adjustments		*	*	*	(2)	(49)	1	*	*	*	–	(50)
Depreciation for the year	B4(a)	58	2	47	11	388	11	4	18	8	–	547
Transfer to investment properties	D3	(2)	–	–	–	*	–	–	*	–	–	(2)
Disposals / Write-offs		(1)	(1)	*	–	(18)	–	*	(2)	(2)	–	(24)
Transfer to assets held for sale	B6	–	*	–	–	(9)	–	–	*	–	–	(9)
Disposal of subsidiaries		(3)	*	–	(3)	(6)	–	–	(2)	(4)	–	(18)
Impairment losses	(vii), B4(a)	*	–	–	–	*	5	–	–	*	–	5
Balance at December 31, 2018		564	52	340	47	2,937	77	61	159	53	–	4,290
Carrying amounts												
At January 1, 2018		1,259	16	1,220	143	6,944	219	7	56	42	1,252	11,158
At December 31, 2018		1,262	14	1,185	99	7,311	206	6	45	38	1,506	11,672

D. Our Assets *(cont'd)*

D1. Property, plant and equipment *(cont'd)*

(S$ million)	Note	Leasehold and freehold land, wet berthage and buildings	Improvements to premises	Quays and dry docks	Plant and machinery	Furniture, fittings and office equipment	Motor vehicles	Capital work-in-progress	Total
Company									
Cost									
Balance at January 1, 2019		20	8	8	678	17	2	39	772
Additions		*	*	–	11	2	1	2	16
Reclassification		–	–	–	39	*	–	(39)	–
Transfer from / (to) other category of assets		–	–	–	–	–	–	(1)	(1)
Disposals		*	(1)	–	(5)	*	*	–	(6)
Balance at December 31, 2019		20	7	8	723	19	3	1	781
Accumulated depreciation and impairment losses									
Balance at January 1, 2019		11	8	4	405	15	1	–	444
Depreciation for the year		1	*	*	30	1	*	–	32
Disposals		*	(1)	–	(3)	*	*	–	(4)
Balance at December 31, 2019		12	7	4	432	16	1	–	472
Carrying amounts									
At January 1, 2019		9	–	4	273	2	1	39	328
At December 31, 2019		8	–	4	291	3	2	1	309
Company									
Cost									
Balance at January 1, 2018		20	8	8	709	16	2	4	767
Additions		*	*	*	5	1	*	36	42
Reclassification		–	–	–	1	*	–	(1)	–
Transfer from inventory		–	–	–	1	–	–	–	1
Disposals		*	*	*	(2)	*	*	–	(2)
Transfer to assets held for sale	B6	–	*	–	(36)	–	–	–	(36)
Balance at December 31, 2018		20	8	8	678	17	2	39	772
Accumulated depreciation and impairment losses									
Balance at January 1, 2018		10	8	4	383	14	1	–	420
Depreciation for the year		1	*	*	32	1	*	–	34
Transfer to assets held for sale	B6	–	*	–	(9)	–	–	–	(9)
Disposals		*	*	*	(1)	*	*	–	(1)
Balance at December 31, 2018		11	8	4	405	15	1	–	444
Carrying amounts									
At January 1, 2018		10	–	4	326	2	1	4	347
At December 31, 2018		9	–	4	273	2	1	39	328

D. Our Assets *(cont'd)*
D1. Property, plant and equipment *(cont'd)*
Group

i. Property, plant and equipment with the following net book values have been pledged to secure loan facilities granted to subsidiaries:

(S$ million)	Note	Group December 31, 2019	Group December 31, 2018
Freehold land and buildings		168	105
Leasehold land and buildings		52	33
Plant and machinery		4,680	4,484
Capital work-in-progress		216	159
Other assets		43	46
	C6(i)	5,159	4,827

ii. During the year, interest and direct staff costs amounting to S$51 million (2018: S$51 million) and S$8 million (2018: S$8 million), respectively were capitalised as capital work-in-progress. Included in these amounts are capitalised interest costs calculated using a capitalisation rate from 3.27% to 7.00% (2018: 1.92% to 4.75%).

iii. Property, plant and equipment arising from the acquisition of subsidiaries was at fair value at the acquisition date.

iv. In 2019, an impairment of S$22 million was recognised in cost of sales following an assessment of the plants' efficiency and effectiveness in meeting the new and more stringent effluent discharge standards that will come into force in Jiangsu, China in 2021. The Group used 4 years cash flow projections, representing the re-assessed estimated remaining useful life of the plant, with no terminal value considered and a pre-tax discount rate of 7.1% to determine the recoverable amount of the plants. Revenue is projected based on contracts secured with customers along with likely renewals and in consideration of treatment capacity of the plant. Inflation rates ranging from 0% to 3% has been used to project overheads and other general expenses. Expected capital expenditure for replenishment of parts and scheduled maintenance costs have been included in the projections in accordance with plant maintenance program.

v. In 2019, the market conditions in UK continue to be challenging and UK Power Reserve Limited's ("UKPR") performance was weak. Based on the expected value-in-use (VIU) as at December 31, 2019, the Group has recognised an impairment of S$52 million in cost of sales, with respect to plant and equipment. The key assumptions used in determining the VIU are included in the table for impairment testing for goodwill in Note D4.

vi. In 2019, management reviewed the economics of two of the wind power projects under development in India, which were impacted by the changes in the renewables market dynamics. Consequently the value-in-use of the related development costs is estimated to be S$nil as at December 31, 2019. Accordingly, an impairment loss of S$6 million was recognised in cost of sales.

vii. In 2019, property, plant and equipment included additional provision for restoration costs amounting to S$3 million (2018: S$4 million) (Note H4).

viii. The 5-year time charter contract of the Group's marine accommodation vessel ended in 2018. As the Group expects to recover the value of the accommodation vessel through continuing use on a charter basis, the Group used the discounted cash flow projections to determine the recoverable amount. The cash flows projection took into account the expected renewal rates based on prevailing market conditions. The renewal rates assumed a certain level of discount from the current contractual rates but added 2% annual inflationary adjustment till the end of the economic useful life of the vessel. The assumed operating cost is based on approved budget and adjusted for inflation at 2% per annum throughout the cash flow periods. The utilisation rate is assumed to be at 95% throughout the cash flow periods; and the terminal value is based on the expected scrap value at the end of the economic useful life. These cash flows are then discounted using the weighted average cost of capital determined to be at 10.78% (2018: 12.66%). Based on the Group's assessment of the recoverable amount of the marine accommodation vessel which amounted to S$267 million (2018: S$196 million), no impairment loss (2018: impairment loss of S$5 million) was recognised in profit or loss. Any unfavourable changes to the above assumptions would lead to additional impairment.

D. Our Assets (cont'd)
D1. Property, plant and equipment (cont'd)
Group *(cont'd)*

ix. A subsidiary in India has entered into an agreement to convert an existing leasehold land upon which its property, plant and equipment reside, to freehold land. The subsidiary has fully paid for the conversion of the leasehold land based on the freehold rate. As at December 31, 2019, the land has not been transferred to the subsidiary. Pursuant to the current lease agreement, it is provided that in the event that the land is not transferred, the lessor is obliged to renew the lease for a further period on mutually agreed terms and conditions. No impairment, revision of useful life or provision for restoration cost has been recorded as at December 31, 2019, as the alienation of this leasehold land is in progress (approved by the Chief Minister and awaiting final approval of the Group of Ministers).

x. The Group leases out its marine vessel under an operating lease arrangement. Non-cancellable operating lease rentals receivables are included in Note C9(b) non-cancellable operating leases.

xi. The acquisition of marine vessel in 2019 was settled via an offset of payables and dividends receivable from a joint venture.

Change in estimates

During the year ended December 31, 2019, the Group revised its estimates for the useful lives of certain asset within marine vessel from 25 years to 31 years after conducting an operational review of its useful lives. The effect of these changes on depreciation expense in current and future periods on assets currently held is as follows:

(S$ million)	2019	2020	2021	2022	2023	Later
Group						
(Decrease) / increase in depreciation expense and (increase) / decrease in profit before tax	(1)	(2)	(2)	(2)	(2)	9

As part of the Group's transformation and yard consolidation strategy in the Marine business segment, the Group is scheduled to move out completely from its yard at Tanjong Kling Road (Tanjong Kling Yard) by end 2019 and return the yard to the Government ahead of its original schedule. Accordingly, the Group has revised its estimates for the useful lives of certain assets at Tanjong Kling Yard in 2018. The effect of these changes on depreciation expense in current and future periods on assets currently held is as follows:

(S$ million)	2019	2020	2021	2022	2023	Later
Group						
Increase / (decrease) in depreciation expense and decrease / (increase) in profit before tax	44	(10)	(9)	(9)	(9)	(18)

D. Our Assets *(cont'd)*
D2. Right-of-use assets and leases

Accounting policies

This note provides information for leases where the Group is a lessee. For leases where the Group is a lessor, assets are measured at cost less accumulated depreciation and impairment losses. Income is recognised in accordance to Note B2 charter hire and rental income.

The Group determines whether an arrangement is or contains a lease at inception. Contracts may contain both lease and non-lease components. The Group allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices.

Until 2018, leases of property, plant and equipment were classified as either finance leases or operating leases, see Notes C9, D1 and D3 for details. From January 1, 2019, leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group.

Assets and liabilities arising from a lease are initially measured on present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable
- variable lease payment that are based on an index or a rate, initially used at the commencement date
- the extension option if the Group is reasonably certain to exercise that option
- the exercise price of a purchase option if the Group is reasonably certain to exercise that option
- amounts expected to be payable by the Group under residual value guarantees, and
- payments of penalties for terminating the lease, if the leases term reflects the Group exercising that option

The Group assesses at lease commencement date whether it is likely to exercise the extension options and reassesses when there is a significant event or significant changes in circumstances within its control.

The Group leasing activities and how these are accounted for

The Group leases land and building from non-related parties. The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, the lessee's incremental borrowing rate is used.

The Group is exposed to potential future increases in variable lease payments based on an index or rate, which are not included in the lease liability until they take effect. When adjustments to lease payments based on an index or rate take effect, the lease liability is reassessed and adjusted against the right-of-use asset.

Lease payments are allocated between principal and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. The policy on impairment and reversal of impairment is consistent with property, plant and equipment as disclosed in Note D1.

Payment associated with short-term leases and leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less while low-value assets comprise of office equipment.

Key estimates and judgements

The Group considers all facts and circumstances that create an economic incentive to exercise an extension option, extension options are only included in the lease term if the lease is reasonably certain to be extended. If the Group should exercise the extension option, the potential future lease payments would result in an increase in lease liability.

D. Our Assets *(cont'd)*
D2. Right-of-use assets and leases *(cont'd)*
i. Amounts recognised in the balance sheets
Group

(S$ million)	December 31, 2019	January 1, 2019#
Right-of-use assets		
Leasehold land and buildings	396	414
Plant and machinery	9	11
Marine vessels	52	55
Motor vehicles	1	*
Furniture, fittings and office equipment	6	3
	464	483

In the previous year, the Group and the Company only recognised lease assets and lease liabilities in relation to leases that were classified as finance leases' under SFRS(I) 1-17 Leases. The assets were presented in property, plant and equipment and the liabilities as part of the Group's and the Company's borrowings. For adjustments recognised on adoption of SFRS(I) 16 on January 1, 2019, please refer to Note A2(iv).

Lease liabilities recognised in the balance sheets:

(S$ million)	December 31, 2019
Current	34
Non-current	470
	504
Maturity analysis	
Within 1 year	34
After 1 year but within 5 years	112
After 5 years	358
Total	504

During the year, cost of S$75 million was transferred from property, plant and equipment and remaining additions to the right-of-use assets were S$32 million.

D. Our Assets *(cont'd)*

D2. Right-of-use assets and leases *(cont'd)*

i. Amounts recognised in the balance sheets *(cont'd)*

Company

(S$ million)	December 31, 2019	January 1, 2019#
Right-of-use assets		
Leasehold land and buildings	68	76
Plant and machinery	32	34
Motor vehicles	*	–
	100	110

In the previous year, the Group and the Company only recognised lease assets and lease liabilities in relation to leases that were classified as finance leases' under SFRS(I) 1-17 Leases. The assets were presented in property, plant and equipment and the liabilities as part of the Group's and the Company's borrowings. For adjustments recognised on adoption of SFRS(I) 16 on January 1, 2019, please refer to Note A2(iv).

Lease liabilities recognised in the balance sheets:

(S$ million)	December 31, 2019
Current	4
Non-current	116
	120
Maturity analysis	
Within 1 year	4
After 1 year but within 5 years	16
After 5 years	100
Total	120

During the year, additions to the right-of-use assets were S$1 million.

ii. Amounts recognised in profit or loss

(S$ million)	Group 2019
Depreciation charge of right-of-use assets	
Leasehold land and buildings	36
Plant and machinery	2
Marine vessels	3
Motor vehicles	1
Furniture, fittings and office equipment	1
	43
Interest expense (included in finance cost)	18
Expense relating to short-term leases (included in cost of goods sold and administrative expenses)	7
Expense relating to leases of low-value assets that are not shown above as short-term leases (included in administrative expenses)	4
Expense relating to variable lease payments not included in lease liabilities (included in administrative expenses)	*

The total cash outflow for leases in 2019 was S$48 million.

D. Our Assets *(cont'd)*

D3. Investment properties

The Group holds certain properties for rental yields and for capital appreciation.

Accounting policies

Investment properties are initially recognised at cost and subsequently carried at cost less accumulated depreciation and accumulated impairment losses. Depreciation is recognised in profit or loss on a straight-line basis over the estimated useful lives ranging from 20 to 60 years or the lease period of 15 to 16 years. The assets' depreciation methods, useful lives and residual values are reviewed annually and adjusted if appropriate. No depreciation is provided on the freehold land.

Cost includes expenditure that is directly attributable to the acquisition of the investment properties.

Investment properties are subject to renovations or improvements at regular intervals. The cost of major renovations and improvements is capitalised as additions when it increases the future economic benefits, embodied in the specific asset to which it relates, and its costs can be measured reliably. The carrying amounts of the replaced components are written off to profit or loss. The cost of maintenance, repairs and minor improvements is recognised as an expense when incurred.

On disposal of investment properties, the difference between the net disposal proceeds and the carrying amount of the asset is recognised in profit or loss.

D. Our Assets *(cont'd)*
D3. Investment properties *(cont'd)*

(S$ million)	Note	Group: Investment properties	Group: Investment properties work-in-progress	Group: Total
Cost				
Balance at January 1, 2019		50	80	130
Translation adjustments		(2)	*	(2)
Additions		*	21	21
Reclassification		98	(98)	–
Balance at December 31, 2019		146	3	149
Accumulated depreciation and impairment losses				
Balance at January 1, 2019		20	–	20
Translation adjustments		*	–	*
Depreciation for the year	B4(a)	1	–	1
Balance at December 31, 2019		21	–	21
Carrying amounts				
At January 1, 2019		30	80	110
At December 31, 2019		125	3	128
Cost				
Balance at January 1, 2018		45	63	108
Translation adjustments		*	(3)	(3)
Additions		*	20	20
Transfer from property, plant and equipment	D1	5	–	5
Balance at December 31, 2018		50	80	130
Accumulated depreciation and impairment losses				
Balance at January 1, 2018		17	–	17
Translation adjustments		*	–	*
Depreciation for the year	B4(a)	1	–	1
Transfer from property, plant and equipment	D1	2	–	2
Balance at December 31, 2018		20	–	20
Carrying amounts				
At January 1, 2018		28	63	91
At December 31, 2018		30	80	110

D. Our Assets *(cont'd)*
D3. Investment properties *(cont'd)*

Amounts recognised in profit or loss

(S$ million)	Group 2019	Group 2018
Rental income	8	8
Operating expenses arising from rental of investment properties	5	5

The fair value of the investment properties as at the balance sheet date is S$175 million (2018: S$154 million). The fair values are mostly determined by independent professional valuers using a combination of investment income method and direct or market comparison techniques, including adjustments to reflect the specific use of the investment properties. Such valuation is derived from observable market data from an active and transparent market. In the absence of current prices in an active market, the fair values are determined by considering the aggregate of the estimated cash flow expected to be received from renting out the properties or Directors' valuation. A yield that reflects the specific risks inherent in the cash flows is then applied to the net annual cash flows to obtain the fair values.

Investment properties of S$16 million (2018: S$nil) have been pledged to secure loan facilities.

The Group leases out its investment properties. The lease agreement provides for additional lease payments annually based on changes to a price index. Non-cancellable operating lease rentals receivable are included in Note C9(b).

D. Our Assets *(cont'd)*

D4. Intangible assets

The balance sheets contain significant intangible assets, mainly in relation to goodwill, intellectual property rights and long-term contracts. Goodwill, which arises when business acquired at a higher amount than the fair value of its net assets primarily due to the synergies expected to create, is not amortised but is subject to annual impairment reviews. The intellectual property rights and long-term contracts are amortised over the estimated life of the rights and contracts.

Accounting policies

a. Goodwill

Goodwill is measured at cost less accumulated impairment losses. The goodwill cost represents the excess of:

- the fair value of the consideration transferred; plus
- the recognised amount of any non-controlling interests in the acquiree; plus
- if the business combination is achieved in stages, the fair value of the pre-existing equity interest in the acquiree, less the net amount recognised (generally fair value) of the identifiable assets acquired and liabilities assumed.

When the excess is negative, a negative goodwill is recognised immediately in profit or loss.

Goodwill is tested for impairment on an annual basis.

Goodwill that has previously been taken to reserves is not taken to profit or loss when (i) the business is disposed of or discontinued or (ii) the goodwill is impaired. Similarly, negative goodwill that has previously been taken to reserves is not taken to profit or loss when the business is disposed of or discontinued.

b. Intellectual property rights

Intellectual property rights are measured at cost less accumulated amortisation and accumulated impairment losses. Amortisation is recognised in profit or loss on a straight-line basis over the estimated useful life of 10 to 15 years.

c. Service concession arrangements

The Group recognises an intangible asset arising from a service concession arrangement, when it has a right to charge for usage of the concession infrastructure. This intangible asset is measured at fair value upon initial recognition by reference to the fair value of the services provided. Subsequent to initial recognition, the intangible asset is measured at cost, which includes capitalised borrowing costs, less accumulated amortisation and accumulated impairment losses.

The estimated useful life of an intangible asset in a service concession arrangement is the period when the Group has a right to charge the public for the usage of the infrastructure to the end of the concession period.

Amortisation is recognised in profit or loss on a straight-line basis over the estimated useful lives of 25 to 30 years.

Accounting policies *(cont'd)*

d. Long-term contracts

Long-term revenue and supplier contracts are fair valued using cash flow projections over the contractual period of 1 to 30 years. Amortisation is recognised in profit or loss on a straight-line basis over the contractual period.

e. Water rights

Water rights are perpetual in nature. Water rights are measured at cost less accumulated impairment losses. Water rights are tested for impairment annually.

f. Other intangible assets

Other intangible assets with a finite life are measured at cost less accumulated amortisation and accumulated impairment losses. Expenditure on internally generated goodwill is recognised in profit or loss as an expense as incurred. Other intangible assets are amortised on a straight-line basis from the date the asset is available for use and over its estimated useful lives ranging from 3 to 30 years.

g. Subsequent expenditure

Subsequent expenditure on capitalised intangible assets is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates and its costs can be measured reliably. All other expenditures are expensed as incurred.

h. Impairment

For goodwill and intangible assets that have indefinite useful lives or that are not yet available for use, the recoverable amount is estimated and tested for impairment annually and as and when indicators of impairment occur.

i. Reversals of impairment

An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the assets' carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

Key estimates and judgements

The Group performs regular (at least annually) technical, commercial and management review to confirm the continued intent to develop the engineering designs for the offshore solutions. Where there is no longer an intention to continue the development, the carrying amount of the design under development is expensed off to profit or loss immediately. When the design is available for use, the capitalised costs will be reclassified within intangible assets and commence amortisation.

D. Our Assets *(cont'd)*

D4. Intangible assets *(cont'd)*

(S$ million)	Note	Goodwill	Service concession arrangements	Long-term contracts	Intellectual property rights	Water rights	Design under development	Others	Total
Group									
Cost									
Balance at January 1, 2019		298	84	229	284	10	–	60	965
Translation adjustments		(1)	(3)	4	*	*	–	(3)	(3)
Additions	(c)	–	1	–	9	*	–	8	18
Acquisition of subsidiaries	(c)	1	–	–	6	–	–	–	7
Disposal of subsidiary		(1)	–	–	–	–	–	(1)	(2)
Disposal		–	(9)	–	–	*	–	(23)	(32)
Transfer from / (to) assets held for sale	B6	–	(10)	–	–	(10)	–	*	(20)
Transfer from other category of asset	(a)	–	–	–	–	–	50	1	51
Write-off	B4(a)	–	*	–	–	–	–	*	*
Other		2	–	(1)	–	–	–	–	1
Balance at December 31, 2019		299	63	232	299	*	50	42	985
Accumulated amortisation and impairment losses									
Balance at January 1, 2019		26	31	18	78	*	–	33	186
Translation adjustments		–	(2)	3	*	–	–	(1)	*
Amortisation charge for the year	B4(a)	–	5	15	26	*	–	8	54
Disposal of subsidiary		(1)	–	–	–	–	–	(1)	(2)
Disposal		–	(4)	–	–	*	–	(1)	(5)
Transfer from / (to) assets held for sale	B6	–	(7)	–	–	*	–	*	(7)
Transfer from other category of asset		–	–	–	–	–	–	*	*
Reclass within intangible asset		–	–	–	10	–	–	(10)	–
Impairment losses	B4(c), (b)	65	–	64	–	–	–	–	129
Write-off	B4(a)	–	*	–	–	–	–	*	*
Balance at December 31, 2019		90	23	100	114	*	–	28	355
Carrying amounts									
At January 1, 2019		272	53	211	206	10	–	27	779
At December 31, 2019		209	40	132	185	*	50	14	630

a. During the year, engineering design under development of S$50 million (2018: S$nil) was reclassified from contract costs to intangible assets as management had re-assessed that the costs incurred met the criteria for recognition as development costs as this relate to technical knowledge gained from development activities that are not contract specific and will give rise to future economic benefits.

b. The Group recognised impairment loss on goodwill of S$65 million in non-operating expenses and long-term contracts of S$64 million in cost of sales.

c. With the completion of the share swap agreement with RGT in B6(b), Semb-Eco, Semb-Eco Technology Pte. Ltd. and Semb-Eco R&D Pte. Ltd. became wholly-owned subsidiaries of the Group. In conjunction with the share swap, S$9 million intellectual property rights were added.

D. Our Assets *(cont'd)*
D4. Intangible assets *(cont'd)*

(S$ million)	Note	Goodwill	Service concession arrangements	Long-term contracts	Intellectual property rights	Water rights	Others	Total
Group								
Cost								
Balance at January 1, 2018		224	155	94	229	10	41	753
Translation adjustments		(18)	(10)	(18)	–	–	5	(41)
Additions		–	3	–	–	–	17	20
Acquisition of subsidiaries		93	–	153	55	–	–	301
Disposal of subsidiary		–	(64)	–	–	–	(3)	(67)
Write-off	B4(a)	(1)	–	–	–	–	–	(1)
Balance at December 31, 2018		298	84	229	284	10	60	965
Accumulated amortisation and impairment losses								
Balance at January 1, 2018		26	54	11	56	–	25	172
Translation adjustments		–	(3)	(1)	–	–	–	(4)
Amortisation charge for the year	B4(a)	–	7	8	22	–	10	47
Disposal of subsidiary		–	(27)	–	–	–	(2)	(29)
Impairment losses	B4(c)	1	–	–	–	–	–	1
Write-off	B4(a)	(1)	–	–	–	–	–	(1)
Balance at December 31, 2018		26	31	18	78	–	33	186
Carrying amounts								
At January 1, 2018		198	101	83	173	10	16	581
At December 31, 2018		272	53	211	206	10	27	779

Intangible assets of less than S$1 million (2018: less than S$1 million) have been pledged to secure loan facilities.

D. Our Assets *(cont'd)*
D4. Intangible assets *(cont'd)*

(S$ million)	Goodwill	Others	Total
Company			
Cost			
Balance at January 1, 2019	19	18	37
Additions	–	4	4
Disposals	–	*	*
Transfer from / (to) other category of assets	–	1	1
Balance at December 31, 2019	19	23	42
Accumulated amortisation and impairment losses			
Balance at January 1, 2019	–	13	13
Amortisation charge for the year	–	3	3
Balance at December 31, 2019	–	16	16
Carrying amounts			
At January 1, 2019	19	5	24
At December 31, 2019	19	7	26
Cost			
Balance at January 1, 2018	19	15	34
Additions	–	3	3
Balance at December 31, 2018	19	18	37
Accumulated amortisation and impairment losses			
Balance at January 1, 2018	–	9	9
Amortisation charge for the year	–	4	4
Balance at December 31, 2018	–	13	13
Carrying amounts			
At January 1, 2018	19	6	25
At December 31, 2018	19	5	24

D. Our Assets *(cont'd)*

D4. Intangible assets *(cont'd)*

Amortisation

The amortisation of intangible assets is analysed as follows:

	Group	
(S$ million)	2019	2018
Cost of sales	48	41
Administrative expenses	6	6
Total	54	47

Service concession arrangements

The subsidiaries in Chile, Panama, South Africa and China have service concession agreements with the local municipalities in Chile; Panama; Mbombela and Ilembe in South Africa; and Fuzhou, Xinmin and Yanjiao in People's Republic of China to supply drinking water to the local communities. In 2019, the subsidiaries in Xinmin China (2018: the subsidiaries in South Africa) which have service concession agreements have been disposed.

Under these arrangements, the charges for use of these assets are adjusted regularly in accordance to the agreed cost reference and escalation formula in the concession agreement and approved by the respective local authorities. (Note A2(iii)).

Long-term contracts

India

The subsidiaries in India have long-term power purchase agreements (PPAs) with the local Electricity Board and commercial customers.

The significant terms of the above PPAs are as follows:

- A subsidiary in India has a long-term contract to provide 500 megawatts of power to the Andhra Pradesh Power distribution companies for a period of 25 years.
- The subsidiaries in the renewables sector in India have long-term contracts with India's State Electricity Boards in Gujarat, Karnataka, Maharashtra, Rajasthan and Tamil Nadu, with tenures ranging from 10 to 30 years. These subsidiaries also sell electricity to commercial customers with tenures ranging from 10 to 25 years.

United Kingdom (UK)

The subsidiaries in the UK acquired in 2018, have contracted with the National Grid of the UK to generate electricity through a portfolio of diesel and gas generators in multiple sites across the UK and supplier contracts with tenures ranging from 1 to 15 years. The majority of these contracts provide fixed rate cash flows relating to plant availability (Capacity Market contracts).

In 2019, the Group has recognised an impairment of S$64 million. See Note D4(a) for key assumptions used.

Intellectual property rights

Intellectual property rights relate to acquired patents for the Jurong Espadon Drillship, Satellite Services Platform offshore designs, re-deployable modularised LNG and LPG solutions, and all of Sevan Marine ASA and HiLoad LNG ASA intellectual property rights.

Water rights

The water rights mainly have infinite useful lives and are perpetual in nature. The water rights as established in the acquisition contracts were obtained from the General Water Directorate (DGA), a regulatory body under the Ministry of Public Works in Chile. The rights allow the Group to extract water from the specific water sources and supply water to end customers.

Other intangible assets

Other intangible assets comprise carbon allowances, software, development rights and golf club membership.

D. Our Assets *(cont'd)*

D4. Intangible assets *(cont'd)*

Goodwill

Group

Impairment testing for goodwill

For the purpose of impairment testing, goodwill is allocated to the Group's operating divisions which represent the lowest level within the Group at which the goodwill is monitored for internal management purposes.

The aggregate carrying amounts of goodwill allocated to each unit are as follows:

	Group	
(S$ million)	December 31, 2019	December 31, 2018
Cash-generating Unit (CGU)		
SUT Division	19	19
Sembcorp Gas Pte Ltd	42	42
SEIL (Project I) (formerly known as Sembcorp Energy India Ltd)	24	25
SEIL (Project II) (formerly known as Sembcorp Gayatri Power Limited)	41	41
Sembcorp Green Infra Limited and its subsidiaries	38	38
UKPR	27	83
Sembcorp Cogen Pte Ltd	–	–
Multiple units with insignificant goodwill	18	24
	209	272

The recoverable amounts for SUT Division, Sembcorp Gas Pte Ltd, SEIL (Project I), Sembcorp Green Infra Limited and its subsidiaries, SEIL (Project II) and UKPR were determined using value-in-use calculations. Cash flow projections used in the value-in-use calculations were prepared based on management's past experience in operating the business and forward market outlook over the long-term nature of the utilities and power business. Pre-tax discount rates between 5.0% to 11.0% (2018: 5.6% to 12.3%) had been used.

Impairment testing for goodwill

Goodwill acquired in a business combination is allocated to groups of CGUs that are expected to benefit from the synergies of the combination. Subject to an operating segment ceiling test, CGUs to which goodwill has been allocated are aggregated so that the level at which impairment testing is performed reflects the lowest level at which goodwill is monitored for internal reporting purposes.

At the balance sheet date, based on the following key assumptions, except for UKPR, the recoverable amounts of the respective CGUs exceeded their carrying amounts.

D. Our Assets *(cont'd)*

D4. Intangible assets *(cont'd)*

a. Key assumptions on recoverable amounts on respective CGUs

	SUT Division	Sembcorp Gas Pte Ltd	SEIL (Project I) (formerly known as Sembcorp Energy India Ltd)	SEIL (Project II) (formerly known as Sembcorp Gayatri Power Limited)	Sembcorp Green Infra Limited and its subsidiaries	UKPR
Cash flow projections period	Remaining useful life of plants assumed 21 years (2018: 20 years)	Remaining contractual period of existing contracts	Remaining useful life of plants assumed 21 years (2018: 22 years)	Remaining useful life of plants assumed 22 years (2018: 23 years)	Remaining useful life of plants assumed 30 years (2018: 28 years)	Estimated remaining useful life of the plants ranging from 2020 to 2039
Terminal value	None	None	None	None	None	None
Revenue and margins	Based on contracts secured along with likely renewals and forecasted demand for industrial utilities and services; as well as forecasted margins	Based on estimated sales and purchases of gas quantities derived from the contractual period of existing contracts	Based on combination of long-term and short-term contracts secured at contracted tariffs as well as electricity spot prices. Contract renewals are assumed based on estimated demand and supply as well as margin	Primarily based on the forecasted combination of long-term and short-term contracts and electricity spot prices with reference to estimated demand and supply of electricity as well as margin	Based on long-term contracts secured at contracted tariffs. New contracts and contract renewals are assumed based on estimated demand and supply as well as margin	Based on market supply and demand forecast on the estimated electricity and at forecasted margins
Expected capital expenditure	In accordance with plant maintenance programme	In accordance with plant maintenance programme and pipeline servicing	In accordance with plant maintenance programme	In accordance with plant maintenance programme	In accordance with plant maintenance programme	In accordance with plant maintenance programme
Inflation rate assumptions used to project overheads and other general expenses	1.3% to 1.4% (2018: 1.0% to 1.8%)	1.3% to 1.4% (2018: 1.0% to 1.8%)	4% (2018: 4%)	4% (2018: 4%)	4% (2018: 4%)	2.5% (2018: 2.5%)
Others	NA	Forward USD / SGD exchange rate and High Sulphur Fuel Oil (HSFO) prices with reference to forward quotes were assumed in the forecast performance	Cash flows are estimated based on the premise that the conversion of the leasehold land, which the subsidiary has already paid in full, will be converted to freehold (Note D1(ix))	NA	NA	A combination of economic and industry factors including an increase in energy capacity and a reduction in underlying demand due to energy efficiency and reduced industrial production

In 2019, the impairment reviews performed for UKPR resulted in impairment losses on property, plant and equipment of S$52 million and long-term customer contracts of S$64 million for certain individual CGUs, as well as an impairment of S$62 million in goodwill which has been allocated to a group of CGUs. Total impairment charge recognised for the year amounted to S$178 million.

An increase in the after-tax discount rate from 7.0% to 8.2% would result in an overall additional impairments of S$51 million.

Company

The Company's goodwill relates to goodwill of SUT on the acquisition of the SUT Division in 2008.

E. Working Capital

E1. Trade and other receivables

Trade and other receivables mainly consist of amounts owed to the Group by customers and amounts paid to the Group's suppliers in advance. Trade receivables are shown net of an allowance for bad or doubtful debts.

Accounting policies

Trade receivables are recognised initially at the amount of consideration that is unconditional, unless they contain significant financing components, where they are recognised at fair value. The carrying value of trade receivables is reduced by appropriate allowances for estimated irrecoverable amounts. Estimated irrecoverable amounts are based on the impairment policies and the calculation of the loss allowance are provided in Note F4.

The Group classified its other financial assets at amortised cost only if (i) the asset is held within a business model whose objective is to collect the contractual cash flows and (ii) the contractual term give rise to cash flows that are solely payments of principal and interest. Such assets are subsequently measured at amortised costs using the effective interest method. The amortised costs is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment losses are recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.

In the service concession arrangements, the Group recognises a financial asset arising from its construction services when it has an unconditional contractual right to receive fixed and determinable amounts of payments irrespective of the output produced. The consideration receivable is measured initially at fair value and subsequently measured at amortised cost using the effective interest method.

		December 31, 2019			December 31, 2018		
(S$ million)	Note	Non-current	Current	Total	Non-current	Current	Total
Group							
Trade receivables		1,055	1,188	2,243	965	1,252	2,217
Service concession receivables	(a)	1,017	38	1,055	1,061	13	1,074
Amounts due from related parties	G5	30	56	86	40	128	168
Staff loans		–	*	*	–	*	*
Deposits		6	21	27	77	13	90
Sundry receivables	(b)	–	101	101	–	94	94
Unbilled receivables	(c)	–	415	415	–	422	422
Loan receivables	(e)	–	14	14	137	209	346
Recoverables		–	38	38	–	22	22
Interest receivables		–	10	10	–	7	7
		2,108	1,881	3,989	2,280	2,160	4,440
Loss allowance	F4	(10)	(191)	(201)	(10)	(197)	(207)
Financial assets at amortised costs	F4, (d)	2,098	1,690	3,788	2,270	1,963	4,233
Prepayments	(f)	45	99	144	79	105	184
Other receivables	(g)	–	16	16	–	–	–
Employee defined benefit asset	H2	10	–	10	*	–	*
Advances to suppliers		–	227	227	–	221	221
Tax recoverable		17	16	33	17	22	39
		2,170	2,048	4,218	2,366	2,311	4,677

E. Working Capital *(cont'd)*

E1. Trade and other receivables *(cont'd)*

		December 31, 2019			December 31, 2018		
(S$ million)	Note	Non-current	Current	Total	Non-current	Current	Total
Company							
Trade receivables		–	15	15	–	26	26
Amounts due from related parties	G5	345	13	358	268	11	279
Deposits		–	2	2	–	2	2
Unbilled receivables	(c)	–	49	49	–	53	53
Recoverables		–	–	–	–	1	1
		345	79	424	268	93	361
Loss allowance	(g)	–	*	*	–	–	–
Financial assets at amortised costs	F4	345	79	424	268	93	361
Prepayments	(f)	4	4	8	5	3	8
Advances to suppliers		*	*	*	–	*	*
		349	83	432	273	96	369

a. Service concession receivables

Through its subsidiaries, the Group have service concession agreements with the local government and governing agency. The agreements in Chile, Panama and Singapore are for supply of treated water while the agreements in Myanmar and Bangladesh are for supply of electricity. The power plants in Myanmar and Bangladesh have commenced commercial operations in phases from October 2018 and in 2019. The Group recorded construction revenue and profits of S$58 million and S$29 million (2018: S$181 million and S$9 million), respectively.

The guaranteed sum receivables from the grantors for the construction of the underlying assets are discounted at interest rates ranging from 3.6% to 8.5%.

As at December 31, 2018, management was finalising the land lease agreement with the relevant authority for the power plant constructed in Myanmar. As at December 31, 2019, the agreement has been finalised.

b. Sundry receivables

Sundry receivables represent mainly GST receivables and miscellaneous receivables.

c. Unbilled receivables

Unbilled receivables represent revenue accrued for sale of utilities commodities and services. Included in the Company's unbilled receivables are amounts of S$22 million (2018: S$17 million) due from related companies.

d. Trade and other receivables

Trade and other receivables of S$1,228 million (2018: S$1,285 million) have been pledged to secure loan facilities. Included in the pledged amount is S$428 million (2018: S$390 million) that relates to the underlying assets of the service concession arrangements.

e. Loan receivables

In 2018, the non-current loan receivables relates to loan extended to a customer. During the year, the Group monetised these receivables at a face value, through a non-recourse assignment to a bank.

E. Working Capital *(cont'd)*

E1. Trade and other receivables *(cont'd)*

f. Prepayments

Prepayments are charged to profit or loss on a straight-line basis over the prepaid period. They relate primarily to:

Group

i. Connection fees prepaid under the Generation Connection and Use of System Agreement for the use of the transmission lines to a related corporation amounted to S$24 million (2018: S$26 million);

ii. Service fees prepaid under the Gasoil Supply and Storage Agreement for the usage of the tank; and

iii. Capacity charges prepaid for the use of gas delivery pipelines, prepaid insurance premium, transport tariff recoverable and maintenance of plant.

Company

i. Connection and capacity charges prepaid for the use of pipelines and pipe racks.

g. Other receivables

Other receivables represent amount settled with a vendor in the form of strategic spares expected to be received in 2020.

E. Working Capital *(cont'd)*

E2. Inventories

Accounting policies

i. Inventories

Finished goods, consumable materials and spares are stated at the lower of cost and net realisable value. Costs are assigned to individual items of inventory on the basis of weighted average costs. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and applicable variable selling expense.

Key estimates and judgements

Key source of estimation uncertainty – determination of net realisable value of inventories

The net realisable value of inventories of subsidiaries in the Marine sector is estimated by reference to contract prices. However, such net realisable value may not be the actual realisable value, arising from contract modifications, if any, which may result in other variable considerations. Such contract modifications may significantly affect the eventual realisable value of inventories and there is a significant risk of resulting in a material adjustment to the carrying amounts of inventories in future.

ii. Development properties

Properties held for sale are stated at the lower of cost and net realisable value. Cost includes cost of land and construction, related expenditure and financing charges incurred during the period of development. Net realisable value represents the estimated selling price less costs to be incurred in selling the property.

Key estimates and judgements

Critical accounting judgements in applying the Group's accounting policies – classification of development properties

In assessing the classification of development properties, management considers its intention with regards to the use of the properties, i.e. held with the intention of development and sale in the ordinary course of business or for rental and capital appreciation. Where there is a change in intended use, a change in classification may be required.

	Group		Company	
(S$ million)	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
Raw materials and consumables	225	243	*	2
Finished goods	183	175	7	8
	408	418	7	10
Allowance for inventory obsolescence	(22)	(25)	(3)	(3)
	386	393	4	7
Properties under development	*	120	–	–
	386	513	4	7
Amounts recognised in profit or loss				
– Inventories recognised as an expense in cost of sales	1,927	1,695	–	–
– Inventories (written back) / written down and allowance for stock obsolescence	*	1	–	–

Inventories of S$95 million (2018: S$142 million) have been pledged to secure loan facilities.

E. Working Capital *(cont'd)*

E3. Trade and other payables

Trade and other payables mainly consist of amounts the Group owes to its suppliers that have been invoiced or are accrued. They also include taxes and social security amounts due in relation to the Group's role as an employer.

Accounting policies

Trade and other payables (excluding advance payments from customers, deferred grants, deferred income and retirement benefit obligations) are classified as financial liabilities measured at amortised costs. Trade payables are not interest-bearing and are stated at their nominal value.

		Group		Company	
(S$ million)	Note	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
Current liabilities					
Trade payables		1,012	1,094	7	14
Advance payments from customers		17	17	*	*
Amounts due to related parties	G5	22	14	102	2
Accrued capital and operating expenditure	(a)	1,487	1,571	116	109
Deposits		33	34	*	*
Accrued interest payable		57	42	–	–
Other creditors		216	196	19	5
		2,844	2,968	244	130
Non-current liabilities					
Deferred grants	(b)	2	4	*	*
Amounts due to related parties	G5	–	–	145	245
Other long-term payables	(c)	73	171	26	23
Deferred income		51	62	*	–
Retirement benefit obligation	H2	5	5	–	–
		131	242	171	268

a. Included in the Company's accrued operating expenses are amounts of S$53 million (2018: S$43 million) due to related companies.

b. Deferred grants relate to government grants for capital assets.

c. Other long-term payables include retention monies of subsidiaries, long-term employee benefits and accrued operating and maintenance services which will be billed only after the initial payment-free period, which is more than one year.

E. Working Capital *(cont'd)*

E4. Cash and cash equivalents

Accounting policies

Cash and cash equivalents which comprise cash balances and bank deposits are classified as financial assets measured at amortised costs. For the purpose of the statement of cash flows, cash and cash equivalents are presented net of bank overdrafts which are repayable on demand. Bank overdrafts are shown within interest-bearing borrowings in current liabilities on the balance sheets.

The majority of the Group's cash is held in bank deposits or money market funds which have a maturity of three months or less to enable us to meet our short-term liquidity requirements.

		Group		Company	
(S$ million)	Note	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
Fixed deposits with banks		380	323	–	–
Cash and bank balances		1,387	1,602	1,123	759
Cash and cash equivalents in the balance sheets		1,767	1,925	1,123	759
Restricted bank balances		(27)	(1)	–	–
Bank overdrafts	C6	–	(1)	–	–
Cash and cash equivalents in the consolidated statement of cash flows		1,740	1,923	1,123	759
Cash and cash equivalents inclusive of placement with:					
– A subsidiary		–	–	1,122	756
– A related corporation		283	424	1	3

Fixed deposits with banks of the Group earn interest at rates ranging from 0.65% to 9.00% (2018: 0.10% to 9.00%) per annum.

Included in the Group's cash and cash equivalents in the balance sheet is an amount of S$338 million (2018: S$293 million) over which banks have a first charge in the event that the respective subsidiaries do not meet the debt servicing requirement.

F. Our Financial Instruments and Risks Management

F1. Market risk

This note details the treasury management and financial risk management objectives and policies, as well as the exposure and sensitivity of the Group to credit, liquidity, interest and foreign exchange risk, and the policies in place to monitor and manage these risks.

In the last couple of years, we have embarked on transitioning our Governance Assurance Framework (GAF) to Integrated Assurance Framework (IAF) to place greater emphasis on multi-level line of defense (LOD) model. Through the IAF structure, the respective LODs work together to ensure that key financial, operational, compliance and IT risks are reviewed and tested using a robust assurance process. Under the IAF, a pragmatic and collaborative approach to risk and controls assessment has been established, with common and consistent criteria to assess the risks and the adequacy and effectiveness of the internal controls.

Most of our key markets, being the first LOD, have implemented the IAF, which requires them to work with the second LOD comprising business lines, subject matter experts and corporate functions, to perform a thorough review and assessment of their risks and internal controls.

Clear escalation procedures and key risk indicators have been established and aligned with the Group's risk appetite.

The proactive management of key risks and controls strengthens not only the Group's reporting and monitoring capabilities, but also cultivates a risk culture of accountability and ownership.

Key themes of the IAF included cyber security, plant availability and reliability, health and safety, regulatory and compliance, people and talent management, fraud and governance.

Financial risk management objectives and policies

The Group's day-to-day operations, new investment opportunities and funding activities introduce financial risks, which are actively managed by management with Board oversight. These risks are grouped into the following categories:

- Market: The risk that fluctuations in commodity prices, foreign exchange and interest rates adversely impact the Group's results.
- Liquidity: The risk that the Group will not be able to meet the financial obligations as they fall due.
- Credit: The risk that a counterparty will not fulfil its financial obligations under a contract or other arrangement.

The Board has adopted the Group Treasury Policies and financial authority limits to manage these risks. The Group Treasury Policies set out the parameters for financing structure, liquidity, counterparty risk management, foreign exchange risk management and use of derivative transactions. Derivative transactions are permitted only if it involves underlying assets or liabilities.

F. Our Financial Instruments and Risks Management *(cont'd)*

F1. Market risk *(cont'd)*

Financial risk management objectives and policies (cont'd)

Market risk is the possibility that changes in interest rates, foreign exchange rates, price of unit trust, equity securities and commodities will adversely affect the value of the Group's assets, liabilities or expected future cash flows. The objective of market risk management is to manage and reduce the above exposures within acceptable parameters.

i. Interest rate risk

The Group's interest rate exposure is primarily in relation to its fixed rate borrowings (fair value risk), variable-rate borrowings and cash and cash equivalents (cash flow risk).

The Group's policy is to target at least 50% of its debt portfolio with fixed interest rate. This is achieved partly by entering into fixed-rate instruments and partly by borrowing at variable rate and using interest rate swaps and cross currency swaps to hedge the variability in cash flows attributable to the floating interest rates.

On the basis that the variable rate net debt position at December 31, 2019 (both issued and hedged) and assuming other factors (principally foreign exchange rates and commodity prices) remained constant and that no further interest rate management action was taken, an increase in interest rates of 1% would have at Group level, decreased profit before tax (PBT) by S$23 million and increased equity by S$17 million (2018: decreased PBT by S$38 million and increased equity by S$33 million, based on the floating rate position at December 31, 2018). At Company level, PBT would have increased by S$11 million (2018: increased PBT by S$8 million) and no impact to equity. A 1% decrease in interest rates would have the opposite effect for both Group and Company.

ii. Foreign currency risk

The Group is exposed to currency risk on foreign currency denominated borrowings and investments; and foreign currency denominated commercial transactions.

The Group limits its exposure to changes in foreign exchange rates through forward foreign exchange contracts and cross currency interest rate swaps. In certain circumstances, borrowings are left in a foreign currency, or swapped from one foreign currency to another, to hedge expected future business cash flows in that currency. Significant foreign currency denominated transactions undertaken in the normal course of operations are managed on a case-by-case basis.

F. Our Financial Instruments and Risks Management *(cont'd)*

F1. Market risk *(cont'd)*

Financial risk management objectives and policies (cont'd)

ii. Foreign currency risk (cont'd)

The summary of quantitative data about the Group's exposure to foreign currency risk (excluding the Group's net investments hedge in its subsidiaries in United Kingdom (UK)) based on its risk management policy was as follows:

(S$ million)	SGD	USD	EURO	GBP	INR	BRL	Others
Group							
2019							
Financial assets							
Cash and cash equivalents	19	272	36	1	–	5	43
Loan to an associate	–	–	–	66	–	–	–
Trade and other receivables	58	2,491	15	136	975	20	193
Other financial assets	–	85	–	–	–	–	–
	77	2,848	51	203	975	25	236
Financial liabilities							
Trade and other payables	125	1,186	66	243	*	70	89
Interest-bearing borrowings	–	351	–	–	–	–	102
Lease liabilities	26	48	–	–	–	*	1
	151	1,585	66	243	*	70	192
Net financial assets / (liabilities)	(74)	1,263	(15)	(40)	975	(45)	44
Add: Firm commitments and highly probable forecast transactions in foreign currencies	(1)	(242)	(128)	(9)	–	–	(41)
Add: Contract assets	–	1,140	77	–	–	–	14
Less: Cross currency swap / foreign exchange forward contracts	17	(1,126)	(95)	–	(959)	–	(4)
Net currency exposure	(58)	1,035	(161)	(49)	16	(45)	13
2018							
Financial assets							
Cash and cash equivalents	25	257	7	10	–	2	8
Loan to an associate	–	–	–	58	–	–	–
Trade and other receivables	23	1,698	26	1,026	941	8	173
Other financial assets	–	36	–	–	–	–	–
	48	1,991	33	1,094	941	10	181
Financial liabilities							
Trade and other payables	142	936	58	500	–	80	41
Interest-bearing borrowings	–	436	–	316	–	–	104
	142	1,372	58	816	–	80	145
Net financial assets / (liabilities)	(94)	619	(25)	278	941	(70)	36
Add: Firm commitments and highly probable forecast transactions in foreign currencies	(3)	(222)	(221)	(21)	–	55	(112)
Add: Contract assets	–	954	1	3	–	–	9
Less: Cross currency swap / foreign exchange forward contracts	40	(476)	–	(298)	(925)	–	43
Net currency exposure	(57)	875	(245)	(38)	16	(15)	(24)

The Company's gross exposure to foreign currencies is as follows:

(S$ million)	USD 2019	USD 2018
Company		
2019		
Financial assets		
Cash and cash equivalents	28	25
Trade and other receivables	18	33
	46	58
Financial liabilities		
Trade and other payables	39	27
Net financial assets	7	31
Net currency exposure	7	31

Sensitivity analysis

A 10% strengthening of the following currencies against the functional currencies of the Group at the balance sheet date would have increased / (decreased) equity and PBT by the amounts shown below. The analysis assumes that all other variables, in particular interest rates, remain constant and ignores any impact of firm commitments in foreign currencies and no further foreign exchange risk management action were taken.

	Group				Company	
	Equity		Profit before tax		Profit before tax	
(S$ million)	2019	2018	2019	2018	2019	2018
SGD	1	3	(7)	(9)	–	–
USD	(60)	(67)	202	96	1	3
EURO	(8)	–	6	(2)	–	–
GBP	5	5	(4)	(8)	–	–
INR	–	–	2	2	–	–
BRL	–	–	(4)	(7)	–	–
Others	–	–	5	8	–	–

A 10% weakening of the above currencies against the functional currencies of the Group at the balance sheet date would have had the equal but opposite effect on the above currencies to the amounts shown above.

F. Our Financial Instruments and Risks Management *(cont'd)*

F1. Market risk *(cont'd)*

Financial risk management objectives and policies (cont'd)

iii. Price risk

Unit trust and funds, and equity securities price risk

The Group is exposed to unit trust and funds, and equity securities price risk because of the investments held by the Group which are classified on the consolidated balance sheet either as FVTPL or FVOCI, respectively.

If prices for unit trusts and funds and equity securities increase by 10% with all other variables held constant, the increase in equity and PBT will be S$9 million and S$9 million, respectively: (2018: increase in equity and PBT are S$11 million and S$7 million, respectively). Conversely, if prices decrease by 10% the equity and PBT would have had the equal but opposite effect to the amounts.

Commodity risk

The Group hedges against fluctuations in commodity prices that affect revenue and cost. Exposures are managed via swaps and contracts for differences.

Contracts for differences are entered into with counterparty at a strike price, with or without fixing the quantity upfront, to hedge against adverse price movements on the sale of electricity. Exposure to price fluctuations arising on the purchase of fuel is managed via fuel oil swaps where the price of fuel is indexed to a benchmark fuel price index, for example Singapore High Sulphur Fuel Oil 180 CST fuel oil and Dated Brent.

The Group designates the fuel oil swaps and electricity futures in their entirety in cash flow hedges to hedge its commodity risk and applies a hedge ratio of 1:1.

The Group determines the existence of an economic relationship between the hedging instrument and hedged item based on the reference index of Singapore High Sulphur Fuel Oil 180 CST fuel oil and Dated Brent, tenors, repricing dates and maturities and the notional or par amounts. The Group assesses whether the derivative designated in each hedging relationship is expected to be and has been effective in offsetting changes in cash flows of the hedged item by looking at the critical terms.

The Group did not identify any significant sources of ineffectiveness in these hedge relationships.

Sensitivity analysis

If prices for commodities increase by 10% with all other variables held constant, the increase in equity as a result of fair value changes on cash flow hedges will be:

	Group	
(S$ million)	2019	2018
Equity	25	27

A 10% decrease in the prices for commodities would have had the equal but opposite effect to the amounts shown above. The analysis is performed on the same basis for 2018 and assumes that all other variables remain constant.

F. Our Financial Instruments and Risks Management *(cont'd)*

F2. Hedges and financial instruments

Key estimates and judgements

The Group determines the existence of an economic relationship between the hedging instrument and hedged item based on the reference interest rates, tenors, repricing dates and maturities and the notional or par amounts. The Group considers the critical terms in assessing if each designated derivative is expected to be and has been effective in offsetting changes in cash flows of the hedged item.

In these hedge relationships, the main sources of ineffectiveness are due to:

- the effect of the counterparties' and the Group's own credit risk on the fair value of the swaps, which is not reflected in the change in the fair value of the hedged cash flows attributable to the change in interest rates; and
- changes in the timing of hedged transactions.

The Group uses derivative instruments (derivatives) (as disclosed in Note H3) for managing its risks as described above. Derivatives are contracts whose value is derived from an underlying price index (or other variable) that require little or no initial net investment, and that are settled at a future date. Derivatives are carried on the balance sheet at fair value. Movements in the price of the underlying variables, which cause the value of the contract to fluctuate, are reflected in the fair value of the derivative. The method of recognising changes in fair value depends on whether the derivative is designated in an accounting hedge relationship. Derivatives not designated as accounting hedges are referred to as economic hedges.

The Group's exposure to the interest rate benchmark reform as at December 31, 2019 is attributable to the interest rate swaps and cross currency swaps to hedge SOR and LIBOR cash flows on the Group's bank loans maturing from 2020 to 2026. The Group's exposure to SOR and LIBOR designated in a hedging relationship that is directly affected by the interest rate benchmark reform approximates nominal amount of S$2,844 million at December 31, 2019.

Fair value gains and losses attributable to economic hedges are recognised in the income statement while recognition of fair value gains and losses of those attributable to accounting hedges depends on the nature of the item being hedged.

Derivatives designated as hedging instruments

The Group designates certain derivatives as either:

i. Hedges of fair value of recognised assets, liabilities or firm commitments (fair value hedge)

ii. Hedges of a particular cash flow risk associated with a recognised asset, liability or highly probable forecast transaction (cash flow hedge)

iii. Hedges of a net investment in a foreign operation (net investment hedge)

The effective portion of changes in fair value of derivatives designated as fair value hedge are recognised in profit or loss at the same time when all changes in the fair value of the underlying item relating to the hedged risks are recognised in profit or loss. The effective portion of changes in the fair value of derivatives designated as cash flow hedges are recognised in the hedge reserve (in equity).

Certain determinants of fair value included in derivatives or mismatches between the timing of the instrument and the underlying item in the hedge relationship, can cause hedge ineffectiveness. Any ineffectiveness is recognised immediately in profit or loss as change in fair value of derivatives.

When the underlying hedged item is sold or repaid, the unamortised fair value adjustments of a fair value hedge or the amounts accumulated in the hedge reserve for a cash flow hedge, is recognised immediately in profit or loss.

When the hedging instrument expires or is sold, terminated or no longer qualifies for hedge accounting, the unamortised fair value adjustments of a fair value hedge or the amounts accumulated in the hedge reserve for a cash flow hedge, is recognised in profit or loss when the hedged item is recognised in profit or loss, which may occur over time.

F. Our Financial Instruments and Risks Management *(cont'd)*

F2. Hedges and financial instruments *(cont'd)*

Cash flow hedges

Key estimates and judgements

For cash flow hedging relationships directly impacted by IRBR (i.e. hedges of SOR), the Group assumes that the cash flows of the hedged item and hedging instrument will not be altered as a result of IRBR. The Group further supports this qualitative assessment by using regression analysis to assess whether the hedging instrument is expected to be and has been highly effective in offsetting changes in the present value of the hedged item.

In Singapore, SIBOR and SOR continue to be used as reference rates in financial markets and are used in the valuation of instruments with maturities that exceed the expected end date for SIBOR and SOR. Therefore, the Group believes the current market structure supports the continuation of hedge accounting as at December 31, 2019.

The Group designates certain forward foreign exchange contracts, interest rate swaps, cross currency interest rate swaps and fuel oil swaps in cash flow hedge relationships.

At December 31, 2019, the Group held the following instruments to hedge exposures to changes in foreign currency, interest rates and commodity prices:

			Maturity		
(S$ million)	Rate ($)	Interest rate (%)	Within 1 year	Between 1 to 5 years	More than 5 years
2019					
Foreign currency risk					
Forward foreign exchange contracts (Buy / Sell)					
– SGD / USD	0.72–0.76	–	1,145	653	–
– USD / SGD	1.29–1.45	–	295	60	–
– SGD / INR	52.88–55.56	–	146	142	–
– EUR / SGD	1.51–1.63	–	72	35	–
– USD / INR	70.08–73.55	–	39	–	–
Interest rate risk					
Interest rate swap (IRS)					
– Float-to-fixed	–	0.87–5.53	1,017	961	100
Foreign currency and interest rate risk					
Cross currency swaps					
– SGD / INR	46.96	9.46–10.20	740	–	–
– USD / INR	66.75	8.36	–	298	–
– CLP / USD	0.0014–0.0015	1.50–2.88	–	50	–
Commodity risk					
Fuel oil swaps					
– Fuel oil swap ($ per MT)	242.00–439.75	–	292	58	–
– Fuel oil swap ($ per BBL)	55.47–68.12	–	45	8	–
– Electricity futures market contracts	74.36–101.55	–	32	1	–
– Coal commodity contracts	45.94–136.00	–	16	–	–

F. Our Financial Instruments and Risks Management *(cont'd)*

F2. Hedges and financial instruments *(cont'd)*

Cash flow hedges *(cont'd)*

			Maturity		
(S$ million)	Rate ($)	Interest rate (%)	Within 1 year	Between 1 to 5 years	More than 5 years
2018					
Foreign currency risk					
Forward foreign exchange contracts (Buy / Sell)					
– SGD / USD	0.70 – 0.77	–	1,013	223	–
– USD / SGD	1.29 – 1.45	–	275	118	–
– SGD / INR	52.03	–	104	–	–
Interest rate risk					
Interest rate swap (IRS)					
– Float-to-fixed	–	1.18 – 3.11	505	1,282	–
Foreign currency and interest rate risk					
Cross currency swaps					
– SGD / INR	46.96	9.46 – 10.20	166	740	–
– USD / INR	66.75	8.36	–	309	–
– CLP / USD	0.0015	3.39	30	–	–
Commodity risk					
Fuel oil swaps					
– Fuel oil swap ($ per MT)	244.25 – 496.00	–	273	103	–
– Fuel oil swap ($ per BBL)	61.20 – 77.60	–	10	–	–
– Electricity futures market contracts	85.99 – 125.00	–	4	5	–

The amounts at the reporting date relating to items designated as hedged items were as follows:

	Cash flow hedge reserve for continuing hedges	
(S$ million)	2019	2018
2019		
Foreign currency risk		
Receivables	3	8
Highly probable purchases	(3)	(1)
Highly probable sales	12	–
Interest rate risk		
Variable rate borrowings	(36)	(8)
Foreign currency and interest rate risk		
Receivables	7	1
Variable rate borrowings	(9)	(3)
Commodity risk		
Highly probable purchases	(17)	(52)

F. Our Financial Instruments and Risks Management *(cont'd)*

F2. Hedges and financial instruments *(cont'd)*

Cash flow hedges *(cont'd)*

The amounts related to items designated as hedging instruments and hedge ineffectiveness were as follows:

	Foreign currency risk	Interest rate risk	Foreign currency risk and interest rate risk	Commodity risk			
	Forward foreign exchange contracts	Interest rate swaps	Cross currency swaps	Fuel oil swaps	Electricity futures market contracts	Coal commodity contracts	Total
2019							
Nominal amount *(S$ million)*	2,587	2,078	1,008	403	33	16	6,125
Quantity	–	–	–	802,192 MT and 378,299 BBL	–	–	802,192 MT and 378,299 BBL
Carrying amount *(S$ million)*							
Other financial assets	24	–	97	14	*	–	135
Other financial liabilities	7	43	–	35	2	2	89
Fair value increase / (decrease) *(S$ million)*							
Hedging instruments	18	(32)	1	51	(1)	(1)	36
Hedged items	(13)	32	(1)	(51)	1	1	(31)
Hedge ineffectiveness	5	–	–	–	–	–	5
Reconciliation of hedging reserve *(S$ million)*							
Changes in fair value	18	(32)	1	51	(1)	(1)	36
Amounts reclassified to profit or loss:							
– Cost of goods sold	(12)	–	–	(9)	–	–	(21)
– Non-operating income / (expense)	(10)	–	–	–	–	–	(10)
– Finance cost	–	1	15	–	–	–	16
	(4)	(31)	16	42	(1)	(1)	21
Tax on above items							(6)
Change in hedging reserve							15
Share of other comprehensive income of associates and joint ventures							(12)
Movement during the year							3

F. Our Financial Instruments and Risks Management *(cont'd)*

F2. Hedges and financial instruments *(cont'd)*

Cash flow hedges *(cont'd)*

The amounts related to items designated as hedging instruments and hedge ineffectiveness were as follows:

	Foreign currency risk	Interest rate risk	Foreign currency risk and interest rate risk	Commodity risk		
	Forward foreign exchange contracts	Interest rate swaps	Cross currency swaps	Fuel oil swaps	Electricity futures market contracts	Total
2018						
Nominal amount *(S$ million)*	1,733	1,787	1,245	386	9	5,160
Quantity	–	–	–	750,276 MT and 91,400 BBL	–	750,276 MT and 91,400 BBL
Carrying amount *(S$ million)*						
Other financial assets	14	2	90	7	1	114
Other financial liabilities	17	13	–	68	1	99
Fair value increase / (decrease) *(S$ million)*						
Hedging instruments	(47)	3	126	(28)	(1)	53
Hedged items	49	(3)	(126)	28	1	(51)
Hedge ineffectiveness	2	–	–	–	–	2
Reconciliation of hedging reserve *(S$ million)*						
Changes in fair value	(47)	3	126	(28)	(1)	53
Amounts reclassified to profit or loss:						
– Cost of goods sold	6	–	–	(72)	–	(66)
– Non-operating income / (expense)	2	–	–	–	–	2
– Finance cost	–	2	(116)	–	–	(114)
	(39)	5	10	(100)	(1)	(125)
Tax on above items						23
Change in hedging reserve						(102)
Share of other comprehensive income of associates and joint ventures						27
Movement during the year						(75)

F. Our Financial Instruments and Risks Management *(cont'd)*

F2. Hedges and financial instruments *(cont'd)*

Cash flow hedges *(cont'd)*

The following table provides a reconciliation by risk category of components of equity and analysis of OCI items, net of tax, resulting from cash flow hedge accounting:

	Cash flow hedge reserve	
(S$ million)	2019	2018
Balance at January 1	(87)	(27)
Movement during the year		
Changes in fair value:		
Foreign currency risk	18	(47)
Interest rate risk	(32)	3
Foreign currency and interest rate risk	1	126
Commodity risk	49	(29)
Amount reclassified to profit or loss:		
Foreign currency risk	(22)	8
Interest rate risk	1	2
Foreign currency and interest rate risk	15	(116)
Commodity risk	(9)	(72)
Tax on movements on reserves during the year	(6)	23
Share of other comprehensive income of associates and joint ventures	(12)	27
	3	(75)
Share of non-controlling interests	(3)	15
Balance at December 31	(87)	(87)

Net investment hedges

The Group's investments in its United Kingdom (UK) subsidiaries are hedged by GBP / SGD forward foreign exchange contracts (hedging instrument), which mitigates the currency risks arising from the subsidiaries' net assets. The carrying amount of the hedging instrument of S$22 million (2018: S$26 million) is included in other financial assets.

The notional amount of the contracts are S$365 million (2018: S$353 million). During the financial year, hedging loss of S$4 million (2018: Hedging gain of S$26 million) was recognised in other comprehensive income. As at December 31, 2019, the balance of foreign currency translation reserve for continuing hedges is S$33 million (2018: S$37 million).

F. Our Financial Instruments and Risks Management *(cont'd)*

F3. Liquidity risk

The Group manages its liquidity risk with the view to maintaining a healthy level of cash and cash equivalents appropriate to the operating environment and expected cash flows of the Group. Liquidity requirements are maintained within the credit facilities established and are adequate and available to the Group to meet its obligations.

In particular, the Group's subsidiaries in the marine sector will continue to take steps to manage cost, cash flows and gearing to strengthen their financial position. While the majority of their contracts and new orders are secured on progressive payment terms, future new orders may result in increased working capital needs.

Maturity profile of the Group's and the Company's financial liabilities

The cash flows associated with the cash flow hedges of the Group are expected to occur within 1 year and between 1-5 years. Correspondingly, the cash flows related to the hedging instruments (foreign exchange contracts, fuel oil swaps, interest rate swaps, cross currency swaps and electricity futures market contracts) that are designated as cash flows hedges are expected to impact profit or loss within 1 year, between 1-5 years and upon disposal of its investment in subsidiaries.

A total of S$2.6 billion of interest-bearing borrowings are due within 12 months. This amount included S$1.4 billion from SCM Group. SCM Group is finalising with lenders to refinance and re-profile current loans with longer term maturities. The Group has at least S$1.0 billion in committed revolving credit facilities with final maturity dates beyond 2022 that can be drawn down.

The table below analyses the maturity profile of the Group's and the Company's financial liabilities (including derivatives financial liabilities) based on contractual undiscounted cash inflows / (outflows), including estimated interest payments and excluding the impact of netting agreements:

		Cash flows			
(S$ million)	Carrying amount	Contractual cash flow	Less than 1 year	Between 1 and 5 years	Over 5 years
Group					
2019					
Derivatives					
Derivative financial liabilities	94				
– inflow		1,017	637	380	–
– outflow		(1,119)	(712)	(402)	(5)
Derivative financial assets	(172)				
– inflow		2,444	1,969	467	8
– outflow		(2,295)	(1,839)	(456)	–
Non-derivative financial liabilities					
Trade and other payables*	2,807	(2,807)	(2,786)	(13)	(8)
Lease liabilities	504	(1,036)	(45)	(179)	(812)
Interest-bearing borrowings	10,800	(13,257)	(3,037)	(7,538)	(2,682)
	14,033	(17,053)	(5,813)	(7,741)	(3,499)

* Excludes advance payments, deferred grants, rental payables, Goods and Services Tax and employee benefits

F. Our Financial Instruments and Risks Management *(cont'd)*

F3. Liquidity risk *(cont'd)*

Maturity profile of the Group's and the Company's financial liabilities *(cont'd)*

(S$ million)	Carrying amount	Cash flows: Contractual cash flow	Less than 1 year	Between 1 and 5 years	Over 5 years
Group					
2018					
Derivatives					
Derivative financial liabilities	105				
– inflow		1,747	1,461	286	–
– outflow		(1,864)	(1,551)	(306)	(7)
Derivative financial assets	(153)				
– inflow		2,977	1,795	1,169	13
– outflow		(2,858)	(1,764)	(1,094)	–
Non-derivative financial liabilities					
Trade and other payables*	3,053	(3,053)	(2,917)	(52)	(84)
Interest-bearing borrowings	10,732	(13,032)	(1,977)	(6,913)	(4,142)
	13,737	(16,083)	(4,953)	(6,910)	(4,220)

* Excludes advance payments, deferred grants, rental payables, Goods and Services Tax and employee benefits

(S$ million)	Carrying amount	Cash flows: Contractual cash flow	Less than 1 year	Between 1 and 5 years	Over 5 years
Company					
2019					
Non-derivative financial liabilities					
Trade and other payables*	397	(424)	(235)	(189)	–
Lease liabilities	120	(194)	(8)	(32)	(154)
	517	(618)	(243)	(221)	(154)
2018					
Non-derivative financial liabilities					
Trade and other payables*	398	(432)	(139)	(146)	(147)

* Excludes advance payments, deferred grants, rental payables, Goods and Services Tax and employee benefits

F. Our Financial Instruments and Risks Management *(cont'd)*

F3. Liquidity risk *(cont'd)*

Maturity profile of the Group's and the Company's financial liabilities *(cont'd)*

The following table indicates the periods in which the cash flow associated with derivatives that are cash flow hedges are expected to impact the profit or loss and the fair value of the related hedging instruments.

(S$ million)	Carrying amount	Cash flows: Contractual cash flow	Less than 1 year	Between 1 and 5 years	Over 5 years
Group					
2019					
Derivative financial liabilities	89				
– inflow		821	543	278	–
– outflow		(910)	(614)	(292)	(4)
Derivative financial assets	(135)				
– inflow		1,811	1,344	467	–
– outflow		(1,694)	(1,238)	(456)	–
	(46)	28	35	(3)	(4)
2018					
Derivative financial liabilities	99				
– inflow		1,168	890	278	–
– outflow		(1,265)	(951)	(313)	(1)
Derivative financial assets	(114)				
– inflow		1,519	715	804	–
– outflow		(1,453)	(713)	(740)	–
	(15)	(31)	(59)	29	(1)

F. Our Financial Instruments and Risks Management *(cont'd)*

F4. Credit risk

The Group only deals with pre-approved customers and financial institutions with good credit rating. To minimise the Group's counterparty risk, the Group enters into derivative transactions only with creditworthy institutions. Cash and fixed deposits are placed in banks and financial institutions with good credit rating. For some customers, the Group may also obtain security in the form of deposits, guarantees, deeds of undertaking or letters of credit which can be called upon in the counterparty defaults.

For the Company's amounts due from subsidiaries, the Company considers the financial assets to have a low credit risk by taking into consideration the Group's financial ability to settle the amounts, in estimating the risk of default used in measuring expected credit loss.

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred. These events include probability of insolvency, significant financial difficulties of the customer and default or significant delay in payments.

When the Group determine whether the credit risk has increased significantly, the Group considered reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis based on the Group's historical experience and informed credit assessment and includes forward-looking information. Customer collectability is assessed on an ongoing basis and any resulting impairment losses are recognised in the profit or loss.

The maximum exposure to credit risk is the carrying amount of each financial asset, including derivatives, in the balance sheet, before taking into account any collateral held. The Group does not hold any collateral in respect of its financial assets, except for balances with customers where guarantees or security deposits are obtained.

The carrying amount of receivables from the Group's most significant customer of the Marine business was S$1,073 million as at December 31, 2019 (2018: S$955 million). This receivable is secured over a right to repossess and to re-sell the assets delivered in the event of default by the customer, and no allowance is recognised.

Expected credit loss (ECL) assessment for customers with credit ratings (or equivalent) as at December 31, 2019 and December 31, 2018

The Group allocates exposure to credit risk with reference to the key customers by segmenting the customers based on the geographic region and industry classification.

The Group applies the simplified approach to provide ECL on trade and unbilled receivables and contract assets without a significant financing component. The simplified approach requires the loss allowance to be measured at an amount equal to lifetime ECLs. To measure expected lifetime ECLs, these balances have been grouped based on common credit risk characteristics and ageing profiles. A receivable balance is written-off to the extent that there is no realistic prospect of recovery. The loss allowance for service concession receivables is measured at 12-month ECL.

For customers with credit ratings (or equivalent), an ECL rate is calculated for each segment based on probabilities of default and loss given default. 12-month and lifetime probabilities of default are based on historical data supplied by Standards and Poor's and Moody's for each credit rating. Loss given default parameters generally reflect an assumed recovery rate of 38.2% (2018: 37.8%.) The Group monitors changes in credit risk by tracking published external credit ratings.

The Group uses a provision matrix to measure the ECLs of certain customers. The ECL assets are grouped based on shared credit risk characteristics and days past due. In calculating the ECL rates, the Group considers historical loss rates for each category of customers and adjust to reflect current and forward looking macroeconomic factors affecting the ability of the customers to settle the receivables.

F. Our Financial Instruments and Risks Management *(cont'd)*

F4. Credit risk *(cont'd)*

(S$ million)	Equivalent to external credit rating	Credit impaired	Gross carrying amount	Loss allowance	Net carrying amount
Group					
2019					
Receivables measured at lifetime ECL					
Trade and other receivables and contract assets					
– Industrial	AAA–B+	No	2,893	(2)	2,891
– Government	AAA–BBB	No	50	–	50
– Retail	AAA–CCC	No	23	(1)	22
– Others	BBB–CCC	No	121	(1)	120
– Industrial	Not applicable	Yes	155	(155)	–
			3,242	(159)	3,083
Receivables measured at 12-month ECL					
Service concession receivables	AAA–B		1,055	(8)	1,047
Total			4,297	(167)	4,130
2018					
Receivables measured at lifetime ECL					
Trade and other receivables and contract assets					
– Industrial	AAA–B+	No	2,858	(5)	2,853
– Government	AAA–BBB	No	33	–	33
– Retail	AAA–CCC	No	35	(1)	34
– Others	BBB–CCC	No	89	(2)	87
– Industrial	Not applicable	Yes	159	(159)	–
			3,174	(167)	3,007
Receivables measured at 12-month ECL					
Service concession receivables	AAA–B		1,074	(9)	1,065
Total			4,248	(176)	4,072
Company					
2019					
Receivables measured at lifetime ECL					
Trade and other receivables and contract assets					
– Industrial	AA+–B+	No	42	*	42
2018					
Receivables measured at lifetime ECL					
Trade and other receivables and contract assets					
– Industrial	BBB	No	73	–	73

There were no trade and other receivables and contract assets for which credit risk has increased significantly since initial recognition but that are not credit-impaired financial assets.

F. Our Financial Instruments and Risks Management *(cont'd)*

F4. Credit risk *(cont'd)*

The following table provides information about the exposure to credit risk and ECLs for trade receivables and contract assets for customers with no credit rating or no representative credit rating or equivalent:

(S$ million)	Credit impaired	Weighted average loss rate	Gross carrying amount	Loss allowance	Net carrying amount
Group					
2019					
Not past due	No	0.2%	475	(1)	474
Past due 0 to 3 months	No	0.4%	71	*	71
Past due 3 to 6 months	No	0.5%	213	(1)	212
Past due 6 to 12 months	No	1.7%	167	(3)	164
More than 1 year	No	36.2%	66	(24)	42
Total			992	(29)	963
Company					
2019					
Not past due	No		72	–	72
Past due 0 to 3 months	No		7	–	7
Total			79	–	79

(S$ million)	Credit impaired	Weighted average loss rate	Gross carrying amount	Loss allowance	Net carrying amount
Group					
2018					
Not past due	No	0.1%	447	*	447
Past due 0 to 3 months	No	0.1%	253	*	253
Past due 3 to 6 months	No	0.4%	78	*	78
Past due 6 to 12 months	No	3.7%	82	(3)	79
More than 1 year	No	31.1%	74	(23)	51
Total			934	(26)	908
Company					
2018					
Not past due	No		94	–	94
Past due 0 to 3 months	No		9	–	9
Total			103	–	103

For remaining financial assets at amortised cost amounting to S$201 million (2018: S$280 million) which pertain mainly to long-term fixed deposits with financial institutions, dividend receivables from joint ventures and GST receivables, the Group considers the risk or probability that a credit loss occurs, and recognises a loss allowance of S$5 million (2018: S$5 million).

The Company held non-trade receivables from its subsidiaries of S$245 million (2018: S$245 million). These balances are amounts lent to subsidiaries to satisfy short-term funding requirements. The Company uses a similar approach for assessment of ECLs for these receivables to those used for debt investments. Impairment on these balances has been measured on the 12-month expected loss basis which reflects the low credit risk of the exposures. The amount of the allowance on these balances is insignificant.

F. Our Financial Instruments and Risks Management *(cont'd)*

F4. Credit risk *(cont'd)*

Movements in the loss allowance for trade and other receivables and contract assets are as follows:

		Group			Company		
(S$ million)	Note	12-month ECL 2019	Lifetime ECL 2019	Total 2019	12-month ECL 2019	Lifetime ECL 2019	Total 2019
Balance at January 1		9	198	207	–	–	–
Currency translation difference		*	(8)	(8)	–	–	–
Impairment loss recognised		*	16	16	–	*	*
Loss allowance utilised		*	(1)	(1)	–	–	–
Loss allowance written back		(1)	(8)	(9)	–	–	–
Transferred to assets held for sale		–	(4)	(4)	–	–	–
Disposal of subsidiary		–	*	–	–	–	–
Balance at December 31	E1	8	193	201	–	*	*

		Group			Company		
(S$ million)	Note	12-month ECL 2018	Lifetime ECL 2018	Total 2018	12-month ECL 2018	Lifetime ECL 2018	Total 2018
Balance at January 1		8	210	218	–	2	2
Currency translation difference		–	(9)	(9)	–	–	–
Impairment loss recognised		1	9	10	–	–	–
Loss allowance utilised		–	(4)	(4)	–	(2)	(2)
Loss allowance written back		–	(6)	(6)	–	–	–
Disposal of subsidiary		–	(2)	(2)	–	–	–
Balance at December 31	E1	9	198	207	–	–	–

F. Our Financial Instruments and Risks Management *(cont'd)*
F5. Financial instruments
Estimation of fair values

Accounting policies

SFRS(I) 13 establishes a fair value hierarchy that prioritises the inputs used to measure fair value. The three levels of the fair value input hierarchy defined by SFRS(I) 13 are as follows:

- Level 1 – Using quoted prices (unadjusted) from active markets for identical financial instruments.
- Level 2 – Using inputs, other than those used for Level 1, that are observable for the financial instruments either directly (prices) or indirectly (derived from prices).
- Level 3 – Using inputs not based on observable market data (unobservable input).

Securities

The fair value of financial assets is based on quoted market prices (bid price) in an active market at the balance sheet date without any deduction for transaction costs. If the market for a quoted financial asset is not active, and for unquoted financial assets, the Group establishes fair value by using other valuation techniques.

Derivatives

The derivatives used by the Group for hedging and enhancement of performance purposes. These derivatives are mainly foreign exchange contracts, foreign exchange swaps, interest rate swaps, cross currency swaps, fuel oil swaps, electricity futures market contracts. They are accounted on consistent basis as disclosed in the most recent annual financial report.

i. The fair value of foreign exchange contracts and foreign exchange swaps are accounted for based on the difference between the contractual price and the current forward market price.

ii. The fair values of interest rate swaps and cross currency swaps are the indicative amounts that the Group is expected to receive or pay to terminate the swap with the swap counterparties at the balance sheet date.

iii. The fair value of fuel oil swaps contracts is accounted for based on the difference between the contractual strike price with the counterparty and the current forward market price.

iv. Contracts for differences (CFDs) are accounted for based on the difference between the contracted price entered into with the counterparty and the reference price. The CFDs are measured at cost since the fair value cannot be measured reliably as there have been minimal trades made in the electricity future market. Upon settlement, the gains and losses for CFDs are taken to profit or loss.

Non-derivative non-current financial assets and liabilities

Carrying amount of non-derivative non-current financial assets and liabilities on floating interest rate terms are assumed to approximate their fair value because of the short period to repricing. Fair values for the remaining non-derivative non-current financial assets and liabilities are calculated using discounted expected future principal and interest cash flows at the market rate of interest at the reporting date.

Accounting policies *(cont'd)*

Other financial assets and liabilities

The carrying amounts of financial assets and liabilities with a maturity of less than one year (including trade and other receivables, cash and cash equivalents, and trade and other payables) are assumed to approximate their fair values because of the short period to maturity.

For financial instruments not actively traded in the market, fair value is determined by independent third party or by various valuation techniques, with assumptions based on existing market conditions at each balance sheet date.

The best evidence of the fair value of a financial instrument at initial recognition is normally the transaction price, that is, the fair value of the consideration given or received. When available, the Group measures the fair value of an instrument using the quoted price in an active market for that instrument.

If there is no quoted price in an active market, then the Group uses valuation techniques that maximise the use of relevant observable inputs and minimise the use of unobservable inputs. The chosen valuation technique incorporates all of the factors that market participants would take into account in pricing a transaction.

Fair value hierarchy

Financial assets and liabilities carried at fair value

	Fair value measurement using:			
(S$ million)	Level 1	Level 2	Level 3	Total
Group				
As at December 31, 2019				
Financial assets at FVOCI	–	–	87	87
Financial assets at FVTPL	81	–	25	106
Derivative financial assets	–	172	–	172
	81	172	112	365
Derivative financial liabilities	–	(94)	–	(94)
	81	78	112	271
As at December 31, 2018				
Financial assets at FVOCI	71	–	37	108
Financial assets at FVTPL	56	–	15	71
Derivative financial assets	–	153	–	153
	127	153	52	332
Derivative financial liabilities	–	(105)	–	(105)
	127	48	52	227

There have been no transfers between the different levels of the fair value hierarchy at December 31, 2019 and December 31, 2018.

F. Our Financial Instruments and Risks Management *(cont'd)*

F5. Financial instruments *(cont'd)*

Fair value hierarchy *(cont'd)*

Level 3 fair values

The following table shows a reconciliation from the beginning balances to the ending balances for fair value measurements of financial assets at FVOCI and FVTPL in Level 3 of the fair value hierarchy:

(S$ million)	Financial assets at FVOCI 2019	Financial assets at FVOCI 2018
Group		
As at January 1	37	42
Net change in fair value recognised in OCI	50	(5)
As at December 31	87	37

(S$ million)	Financial assets at FVTPL 2019	Financial assets at FVTPL 2018
Group		
As at January 1	15	11
Addition	1	*
Reclassification#	13	–
Net change in fair value recognised in profit or loss	(4)	4
As at December 31	25	15

Sembcorp Jingmen Water Co. Ltd (SJW) has a disagreement with the local authorities on the treatability of wastewater from a customer. On December 31, 2019, an administrative decision was issued by the City Construction Bureau, in Jingmen, China, which allows the local authorities to take over temporarily the operation of SJW for the period from June 28, 2019 to May 28, 2020. As a result, during this period, the Group is deemed to have lost control of SJW, and accordingly SJW was deconsolidated and recognised as 'other financial assets'.

Financial assets at FVOCI in Level 3 of the fair value hierarchy include unquoted equity shares (2018: unquoted equity shares). The fair value of the unquoted equity shares are determined by reference to the investment's net asset values as stated in the unaudited financial statements. The estimated fair value would increase / (decrease) if the net asset values for unquoted equity shares were higher / (lower).

F. Our Financial Instruments and Risks Management *(cont'd)*

F5. Financial instruments *(cont'd)*

Fair value hierarchy *(cont'd)*

Assets and liabilities not carried at fair value but for which fair values are disclosed#

(S$ million)	Fair value measurement using: Level 1	Level 2	Level 3	Total
Group				
At December 31, 2019				
Investment properties	–	152	23	175
Associate	181	–	–	181
Service concession receivables	–	1,253	–	1,253
Long-term interest-bearing borrowings	–	(8,226)	–	(8,226)
At December 31, 2018				
Investment properties	–	132	22	154
Associate	240	–	–	240
Service concession receivables	–	1,068	–	1,068
Long-term interest-bearing borrowings	–	(8,821)	–	(8,821)

(S$ million)	Fair value measurement using: Level 1	Level 2	Level 3	Total
Company				
At December 31, 2019				
Investment in a subsidiary	1,682	–	–	1,682
Amounts due from related parties	–	346	–	346
Amounts due to related parties	–	(149)	–	(149)
At December 31, 2018				
Investment in a subsidiary	1,962	–	–	1,962
Amounts due from related parties	–	267	–	267
Amounts due to related parties	–	(244)	–	(244)

Excludes financial assets and financial liabilities whose carrying amounts measured on the amortised cost basis approximate their fair values due to their short-term nature, frequent pricing and where the effect of discounting is immaterial.

F. Our Financial Instruments and Risks Management *(cont'd)*

F5. Financial instruments *(cont'd)*

Fair value versus carrying amount

The fair value of financial assets and financial liabilities measured on amortised cost basis for the Group and the Company approximate the carrying amounts, except for service concession receivables and non-current borrowings of the Group and the Company.

(S$ million)	Financial assets at amortised costs	Other financial liabilities	Total carrying amount	Fair value
Group				
As at December 31, 2019				
Service concession receivables	1,055	–	1,055	1,253
Interest-bearing borrowings:				
Non-current borrowings	–	8,157	8,157	8,226
As at December 31, 2018				
Service concession receivables	1,065	–	1,065	1,068
Interest-bearing borrowings:				
Non-current borrowings	–	8,868	8,868	8,821
Company				
As at December 31, 2019				
Amounts due from related parties	345	–	345	346
Amounts due to related parties	–	145	145	149
As at December 31, 2018				
Amounts due from related parties	268	–	268	267
Amounts due to related parties	–	245	245	244

G. Group Structure

This section provides key information on the Group's interests in joint arrangements, controlled entities and transactions with non-controlling interests. It also provides information on business acquisitions and disposals made during the year as well as information relating to Group's related parties and the extent of related parties transactions.

G1. Subsidiaries

Accounting policies

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

In the Company's separate financial statements, investments in subsidiaries are accounted for at cost less accumulated impairment losses.

Investment in subsidiaries

(S$ million)	Company December 31, 2019	Company December 31, 2018
At cost and carrying value:		
Quoted equity shares	739	739
Unquoted equity shares	1,616	1,616
Preference shares	288	288
Share-based payments reserve	3	4
	2,646	2,647

The fair value of the equity interest of the listed subsidiary, with a carrying amount of S$739 million (2018: S$739 million), amounts to S$1,682 million (2018: S$1,962 million) based on the last transacted market price on the last transaction day of the year.

G. Group Structure *(cont'd)*
G1. Subsidiaries *(cont'd)*
Subsidiaries

Details of key subsidiaries of the Group are as follows:

	Country of incorporation	Effective equity held by the Group 2019 %	2018 %
Energy			
Sembcorp Utilities Pte Ltd[1]	Singapore	100	100
Sembcorp Cogen Pte Ltd[1]	Singapore	100	100
Sembcorp Gas Pte Ltd[1]	Singapore	100	70.00
Sembcorp Utilities (UK) Limited[2]	United Kingdom	100	100
Sembcorp Energy UK Limited[2]	United Kingdom	100	100
Sembcorp Environment Pte. Ltd.[1]	Singapore	100	100
SembWaste Pte Ltd[1]	Singapore	100	100
Sembcorp Energy India Ltd, SEIL[2]	India	100	93.73
Sembcorp Green Infra Limited (SGI)[2]	India	100	93.73
Sembcorp Myingyan Power Company Limited[2]	Myanmar	100	100
Sembcorp North-West Power Company Ltd.[2]	Bangladesh	71.00	83.02
Marine			
Sembcorp Marine Ltd[1]	Singapore	61.01	61.01
Jurong Shipyard Pte Ltd[1]	Singapore	61.01	61.01
PPL Shipyard Pte Ltd[1]	Singapore	61.01	61.01
Sembcorp Marine Repairs & Upgrades Pte. Ltd.[1]	Singapore	61.01	61.01
Sembcorp Marine Offshore Platforms Pte Ltd[1]	Singapore	61.01	61.01
Urban			
Sembcorp Development Ltd[1]	Singapore	100	100
Vietnam Singapore Industrial Park Pte Ltd[1]	Singapore	96.59	96.59
Singapore Technologies Industrial Corp Ltd[1]	Singapore	100	100
Nanjing Riverside Quay Co., Ltd[2]	People's Republic of China	100	100
Others			
Sembcorp Design and Construction Pte Ltd[1, 3]	Singapore	–	100
Singapore Precision Industries Pte Ltd[1]	Singapore	100	100

1 Audited by KPMG LLP, Singapore

2 Audited by member firms of KPMG International

3 On December 12, 2019, divestment of commercial construction business of Sembcorp Design and Construction (SDC) has been completed. The defence construction business has been transferred to Sembcorp Specialised Construction Pte Ltd and SDC has ceased to be part of the Group.

G. Group Structure *(cont'd)*
G2. Acquisition and disposal of subsidiaries
Disposal of significant subsidiaries

For the year 2019, the Group divested its commercial design and construction business (100% stake in Sembcorp Design and Construction Pte Ltd) and a water business in China (80% stake in Sembcorp Lianyungang Water Co).

For the year 2018, disposal of subsidiaries primarily relates to the Group's divestment of its municipal water operations in South Africa Water business, including a 100% stake in Sembcorp Utilities South Africa Pty Ltd, 100% stake in Sembcorp Silulumanzi (RF) Pty Ltd and 73.4% stake in Sembcorp Siza Water (RF) Pty Ltd to South African Water Works Pty Ltd.

The financial effects arising from the de-consolidation and disposal of subsidiaries are as follows:

(S$ million)	Note	2019	2018
Property, plant and equipment		34	6
Intangible assets		1	38
Other receivables		53	17
Inventory		–	1
Cash and cash equivalents		73	15
Total assets		161	77
Trade and other payables		66	15
Other liabilities		28	3
Borrowing		9	–
Lease liability / finance lease		1	2
Current tax payable		7	–
Deferred tax liabilities	B3(b)	1	9
Total liabilities		112	29
Net assets derecognised		49	48
Less: Non-controlling interest		(2)	(4)
Realisation of currency translation		*	26
		47	70
Gain on disposal		16	8
Consideration received		63	78
Less: Cash and cash equivalents disposed of		(73)	(15)
Net cash (outflow) / inflow		(10)	63

G. Group Structure *(cont'd)*

G2. Acquisition and disposal of subsidiaries *(cont'd)*

Acquisition of significant subsidiaries

2018

i. On June 1, 2018, the Group acquired 100% equity stake in UK Power Reserve (UKPR), the UK's largest flexible distributed energy generator. The acquisition positions the Group for the global energy transition and build an integrated energy business in the UK.

Revenue and profit contribution

The acquired business contributed revenue of S$63 million and loss of S$32 million to the Group's result for the period from June 1, 2018 to December 31, 2018.

Had the acquired businesses been consolidated from January 1, 2018, the contribution to the Group's consolidated revenue and consolidated profit for the year ended December 31, 2018, would have been S$11,790 million and S$330 million respectively.

Consideration transferred

The following table summarises the acquisition date provisional fair value of each major class of consideration transferred:

(S$ million)	2018
a. Effect on cash flows of the Group	
Cash paid	401
Less: Cash and cash equivalents in subsidiaries acquired	(35)
Cash outflow on acquisition	366

(S$ million)	Note	At fair value
b. Identifiable assets acquired and liabilities assumed		
Property, plant and equipment		400
Intangible assets	D4	153
Other receivables		65
Inventories		3
Cash and cash equivalents		35
Total assets		656
Trade and other payables		53
Other financial liabilities		1
Borrowings		244
Finance lease		1
Deferred tax liabilities	B3(b)	45
Total liabilities		344
Total net identifiable assets		312
Add: Goodwill	D4	89
Consideration transferred for the businesses		401

G. Group Structure *(cont'd)*

G2. Acquisition and disposal of subsidiaries *(cont'd)*

Acquisition of significant subsidiaries *(cont'd)*

2018 *(cont'd)*

Measurement of fair values

The valuation techniques used for measuring the fair value of material assets acquired were as follows:

Assets acquired	Valuation technique	Key assumptions
Property, plant and equipment	Market Value Approach	• Freehold land – Prevailing market rates of similar agricultural lands from certified land valuer. • Plant and machinery – Current replacement costs derived from market quotes received from suppliers / manufacturers.
Intangible assets	Multi-period Excess Earnings Method (MEEM)	• Cash flows from Capacity Market contracts with the National Grid of UK. • Contract tenure of 1 – 14 years. • Discount rates range from 12% to 16%.

The Group has finalised the fair values of identifiable assets acquired and liabilities assumed during the measurement period with no significant change from the provisional amount.

Goodwill

The goodwill of S$89 million recognised on acquisition is primarily attributed to:

- the value of the acquired workforce; and
- the value associated with future earnings generated through either non-contractual services (e.g. Energy Optimisation and TRIAD) or from securing contractual services (e.g. capacity market, fast reserve and firm frequency reserve) in the future which were not secured at the date of acquisition and therefore cannot be recognised.

The goodwill recognised is not expected to be deductible for tax purpose.

Acquisition-related costs

The Group incurred acquisition related cost of S$3 million. These costs have been charged to profit or loss.

Acquired receivables

Included in trade and other receivables are trade receivables stated at fair value of S$2 million. The gross contractual amount for trade receivables due was S$2 million and, at the acquisition date, the entire contractual amount was expected to be collectible.

The above are inclusive of fair value adjustments, determined on a provisional basis.

G. Group Structure *(cont'd)*

G2. Acquisition and disposal of subsidiaries *(cont'd)*

Acquisition of significant subsidiaries *(cont'd)*

2018 *(cont'd)*

ii. In 2018, the Company's wholly-owned subsidiary, Sembcorp Marine Integrated Yard ("SMIY"), acquired the title to all of Sevan Marine ASA's ("Sevan Marine") intellectual property, and 95% of the shares of HiLoad LNG AS ("HiLoad"), a Sevan Marine subsidiary. The intellectual property acquired relates mainly to patents for the geostationary cylindrical hull design. In addition, SMIY acquired the balance 5% equity interest in HiLoad from a minority shareholder. Consequently, the intangible asset and financial statements of HiLoad were consolidated into the Group's financial statements.

Effect of acquisition

Revenue and profit contribution

The revenue and profit contribution from these new acquisitions were not material.

Had the acquired businesses been consolidated from January 1, 2018, the contribution to the Group's consolidated revenue and consolidated profit for the year ended December 31, 2018, would not have been significant.

Consideration transferred

The following table summarises the fair value of each major class of consideration transferred at acquisition date:

(S$ million)	2018
a. Effect on cash flows of the Group	
Cash paid	55
Less: Cash and cash equivalents in subsidiaries acquired	*
Cash outflow on acquisition	55

(S$ million)	As reported 2018	Fair value adjustment	Final purchase equation
b. Identifiable assets acquired and liabilities assumed			
Intangible assets	55	6	61
Trade and other receivables	*	–	*
Cash and cash equivalents	*	–	*
Total assets	55	6	61
Trade and other payables	*	*	*
Deferred tax liabilities	–	2	2
Total liabilities	*	2	2
Net identifiable assets	55	4	59
Add: Goodwill	–	1	1
Less: Negative goodwill	–	(5)	(5)
Consideration transferred for the business	55	–	55

Acquisition-related costs

Acquisition-related costs incurred in relation to the acquisition were immaterial and charged to profit or loss.

i. The Group made adjustments in 2019 to the provisional fair value originally recorded in 2018. Purchase price adjustments, which are non-cash in nature made during the measurement period have not been applied retrospectively as these adjustments, which relate mainly to balance sheet effects and certain consequential income statement effects are immaterial to the Group.

G. Group Structure *(cont'd)*

G3. Non-controlling interests

Non-controlling interests are that part of the net results of operations and of net assets of a subsidiary attributable to the interests which are not owned directly or indirectly by the equity holders of the Company.

Acquisition of significant non-controlling interests

2019

On December 30, 2019, the Group increased its shareholding in Sembcorp Energy India Limited (SEIL) from 94% to 100% for a consideration of S$77 million.

The following summarises the effect of changes in the Group's ownership interest:

	SEIL	
(S$ million)	2019	2018
Group's ownership interest at January 1	1,308	1,360#
Effect of increase in Group's ownership interest	99	29
Share of comprehensive income and capital injection during the year	163	(81)
Group's ownership interest at December 31	1,570	1,308

Amount consists of Group's ownership interest in SEIL, SGPL and SGI before reorganisation

G. Group Structure *(cont'd)*

G3. Non-controlling interests

Acquisition of significant non-controlling interests *(cont'd)*

2019 *(cont'd)*

The following summarises the financial information of the Group's subsidiaries with material non-controlling interests (NCI), based on its (consolidated) financial statements prepared in accordance with SFRS(I):

(S$ million)	2019 Sembcorp Marine Group	2018 Sembcorp Marine Group	2018 Sembcorp Energy India Group
NCI percentage	39%	39%	6%
Country of incorporation	Singapore	Singapore	India
Operating segment	Marine	Marine	Energy
Revenue	2,882	4,888	1,686
(Loss) / profit for the year	(140)	(78)	27
Other comprehensive income	(6)	(36)	(113)
Total comprehensive income	**(146)**	**(114)**	**(86)**
Attributable to non-controlling interests:			
(Loss) / profit for the year	(57)	(33)	4
Other comprehensive income	(2)	(17)	(9)
Total comprehensive income	**(59)**	**(50)**	**(5)**
Non-current assets	5,894	5,617	5,167
Current assets	2,565	2,960	1,216
Non-current liabilities	(3,377)	(3,466)	(3,406)
Current liabilities	(2,875)	(2,763)	(1,563)
Net assets	**2,207**	**2,348**	**1,414**
Net assets attributable to non-controlling interests	**875**	**931**	**106**
Cash flows (used in) / from operating activities	(296)	(170)	397
Cash flows used in investing activities	(312)	(382)	(707)
Cash flows from financing activities	164	89	344
Net (decrease) / increase in cash and cash equivalents	**(444)**	**(463)**	**34**
Dividends paid to non-controlling interests	**–**	**(8)**	**–**

G. Group Structure *(cont'd)*

G4. Associates and joint ventures

Accounting policies

Associates are those entities in which the Group has significant influence, but no control or joint control, over the financial and operating policies of these entities.

The existence and effect of potential voting rights that are presently exercisable or presently convertible are considered when assessing whether the Group has significant influence over another entity. Significant influence is presumed to exist when the Group holds 20% or more of the voting power of another entity.

A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement. The existence and effect of potential voting rights that are presently exercisable or presently convertible are considered when assessing whether the Group has joint control over the entity.

Key estimates and judgements

The recoverable amount of the interest in an associate was estimated based on its value-in-use. In estimating the recoverable amount, the Group applied the relief from royalty method to value the existing intellectual properties owned by the associate. As the associate is a new start-up with various intellectual properties at different stages of their business life cycles, the discount rates applied by the Group range from 20% to 22%, to reflect the higher risks inherent in the forecasted cash flows. Any significant changes to these forecasted cash flows, caused by changes in the risk of returns of the various intellectual properties may result in material adjustments on the associate's recoverable amounts in future periods.

(S$ million)	Note	Group December 31, 2019	Group December 31, 2018
Associates and joint ventures		1,630	1,683
Loan to an associate	(a)	66	58
		1,696	1,741

In 2019, the Group received dividends of S$201 million (2018: S$236 million) from its investments in associates and joint ventures.

a. On adoption of SFRS(I) 9, the loan is classified as financial assets at amortised cost. Allowance for impairment on this loan is insignificant.

   The loan to an associate is unsecured, bears interest at 8.5% per annum and has no fixed terms of repayment. The settlement of the amount is neither planned nor likely to occur in the foreseeable future and hence the loan is classified as non-current.

G. Group Structure *(cont'd)*

G4. Associates and joint ventures *(cont'd)*

The carrying value includes goodwill on acquisition as follows:

(S$ million)	Group 2019	Group 2018
Balance at January 1	3	2
Goodwill on acquisition	–	1
Balance at December 31	3	3

Associates

There are no individual associates that are considered to be material to the Group as at December 31, 2019 and December 31, 2018. Summarised financial information of the associates presented in aggregate, representing the Group's share, is as follows:

(S$ million)	Group December 31, 2019	Group December 31, 2018
Carrying amount	413	415
Profit for the year	34	26
Other comprehensive income	(15)	7
Total comprehensive income	19	33

The fair value of the equity interest of a listed associate amounts to S$181 million (2018: S$240 million) based on the last transacted market price on the last transaction day of the year.

G. Group Structure *(cont'd)*

G4. Associates and joint ventures *(cont'd)*

Joint ventures

The Group has two (2018: one) joint ventures that are material and a number of joint ventures that are individually immaterial to the Group. All are equity accounted. Summarised financial information of the material joint ventures is presented as follows:

(S$ million)	Guohua AES (Huanghua) Wind Power Co., Ltd.	Vietnam Singapore Industrial Park JV Co
December 31, 2019		
Revenue	129	521
Profit for the year[a]	60	130
Other comprehensive income	–	–
Total comprehensive income	60	130
Attributable to non-controlling interests	–	19
Attributable to investee's shareholders	60	111

[a] Includes depreciation and amortisation of S$52 million, finance income of S$7 million, finance cost of S$16 million and income tax expense of S$34 million

(S$ million)	Guohua AES (Huanghua) Wind Power Co., Ltd.	Vietnam Singapore Industrial Park JV Co
Non-current assets	739	166
Current assets[b]	134	745
Non-current liabilities[c]	(292)	(168)
Current liabilities[d]	(173)	(234)
Non-controlling interests	–	(78)
Net assets	408	431

[b] Includes cash and cash equivalents of S$203 million

[c] Includes non-current financial liabilities (excluding trade and other payables and provisions) of S$443 million

[d] Includes current financial liabilities (excluding trade and other payables and provisions) of S$127 million

(S$ million)	Guohua AES (Huanghua) Wind Power Co., Ltd.	Vietnam Singapore Industrial Park JV Co	Individually immaterial joint ventures	Total
December 31, 2019				
Group's interest in net assets of investees at beginning of the year	186	193	889	1,268
Group's share of:				
Profit from continuing operations	29	56	64	149
Other comprehensive income	–	–	(22)	(22)
Total comprehensive income	29	56	42	127
Dividends received during the year	(14)	(28)	(141)	(183)
Translation during the year	(5)	*	*	(5)
Impairment during the year	–	–	(1)	(1)
Addition during the year, net of disposal	–	–	11	11
Carrying amount of interest in investees at end of the year	196	221	800	1,217

G. Group Structure *(cont'd)*

G4. Associates and joint ventures *(cont'd)*

Joint ventures *(cont'd)*

(S$ million)	Guohua AES (Huanghua) Wind Power Co., Ltd.	Vietnam Singapore Industrial Park JV Co
December 31, 2018		
Revenue	74	418
Profit for the year[a]	30	114
Other comprehensive income	–	–
Total comprehensive income	30	114
Attributable to non-controlling interests	–	12
Attributable to investee's shareholders	30	102

[a] Includes depreciation and amortisation of S$31 million, finance income of S$7 million, finance cost of S$9 million and income tax expense of S$31 million

Non-current assets	827	153
Current assets[b]	93	737
Non-current liabilities[c]	(257)	(170)
Current liabilities[d]	(276)	(268)
Non-controlling interests	–	(73)
Net assets	387	379

[b] Includes cash and cash equivalents of S$191 million

[c] Includes non-current financial liabilities (excluding trade and other payables and provisions) of S$412 million

[d] Includes current financial liabilities (excluding trade and other payables and provisions) of S$89 million

(S$ million)	Guohua AES (Huanghua) Wind Power Co., Ltd.	Vietnam Singapore Industrial Park JV Co	Individually immaterial joint ventures	Total
December 31, 2018				
Group's interest in net assets of investees at beginning of the year	111	240	911	1,262
Group's share of:				
Profit from continuing operations	15	52	81	148
Other comprehensive income	–	–	24	24
Total comprehensive income	15	52	105	172
Dividends received during the year	(17)	(96)	(103)	(216)
Translation during the year	(5)	(3)	(24)	(32)
Addition during the year, net of disposal	82	–	–	82
Carrying amount of interest in investees at end of the year	186	193	889	1,268

The Group's share of the capital commitments of the joint ventures at the balance sheet date amounted to S$364 million (2018: S$405 million).

The Group's interest in joint ventures with total carrying amount of S$80 million (2018: S$83 million) as at balance sheet date has been pledged to banks to secure credit facilities granted to the joint venture entities.

G. Group Structure *(cont'd)*

G4. Associates and joint ventures *(cont'd)*

Associates, joint ventures and joint operations

Details of key associates, joint ventures and joint operations are as follows:

			Effective equity held by the Group	
	Name of key associates	**Country of incorporation**	**2019 %**	**2018 %**
	Energy			
^^^	Sembcorp Salalah Power and Water Company SAOG	Oman	40.00	40.00
	Urban			
^^	Wuxi-Singapore Industrial Park Development Co., Ltd	People's Republic of China	45.36	45.36
**	Sino-Singapore Nanjing Eco Hi-tech Island Development Co., Ltd	People's Republic of China	21.50	21.50
	Name of key joint ventures			
	Energy			
^	Phu My 3 BOT Power Company Ltd.	Vietnam	66.67	66.67
#	Shanghai Cao Jing Co-generation Co. Ltd	People's Republic of China	30.00	30.00
*	Emirates Sembcorp Water & Power Company P.J.S.C	United Arab Emirates	40.00	40.00
#	Chongqing Songzao Sembcorp Electric Power Co., Ltd	People's Republic of China	49.00	49.00
##	Guohua AES (Huanghua) Wind Power Co., Ltd	People's Republic of China	49.00	49.00
	Urban			
^^	Vietnam Singapore Industrial Park J.V. Co., Ltd.	Vietnam	49.26	49.26
^^	Sino-Singapore (Chengdu) Innovation Park Development Co., Ltd	People's Republic of China	25.00	25.00
***	PT Kawansan Industri Kendal	Indonesia	49.00	49.00
	Name of key joint operations			
	Others			
###	Sinohydro-Sembcorp Joint Venture	Singapore	–	50.00

The auditors of key associates, joint ventures and joint operations are as follows:

^ Audited by Ernst & Young Vietnam Limited
^^ Audited by member firms of KPMG International
# Audited by PricewaterhouseCoopers Zhong Tian CPAs Limited Company
** Audited by Jiangsu Gongzheng Tianye Certified Public Accountants Co., Ltd, China
Audited by KPMG LLP, Singapore
*** Audited by BDO Indonesia
^^^ Audited by PricewaterhouseCoopers LLC
Audited by Baker Tilly Certified Public Accountants Co., Ltd, China
* Audited by Ernst & Young, Abu Dhabi

G. Group Structure *(cont'd)*

G5. Related party information

a. Amounts due from related parties

(S$ million)	Note	Associates December 31, 2019	Associates December 31, 2018	Joint ventures December 31, 2019	Joint ventures December 31, 2018	Related companies December 31, 2019	Related companies December 31, 2018	Total December 31, 2019	Total December 31, 2018
Group									
Amounts due from:									
Trade		6	5	15	11	20	23	41	39
Non-trade		1	1	14	88	–	*	15	89
Loans		*	–	30	40	–	–	30	40
	E1	7	6	59	139	20	23	86	168
Loss allowance		(1)	(1)	(7)	(6)	*	(1)	(8)	(8)
		6	5	52	133	20	22	78	160
Amounts due within 1 year		(6)	(5)	(24)	(94)	(20)	(22)	(50)	(121)
		–	–	28	39	–	–	28	39

The non-trade amounts due from related parties are unsecured, repayable on demand and interest-free.

The loans to joint ventures of S$28 million (2018: S$39 million) are unsecured, not expected to be repaid in the next 12 months and bear interest rates ranging from 1.66% to 1.91% (2018: 1.03% to 4.43%) per annum. The remaining balance is repayable in the next 12 months.

(S$ million)	Note	Subsidiaries December 31, 2019	Subsidiaries December 31, 2018	Total December 31, 2019	Total December 31, 2018
Company					
Amounts due from related parties	E1	358	279	358	279
Amounts due within 1 year	E1	(13)	(11)	(13)	(11)
	E1	345	268	345	268

The amounts due from related parties are unsecured, repayable on demand and interest-free.

The loans to related parties of S$345 million (2018: S$268 million) are unsecured, not expected to be repaid in the next 12 months and bear interest rates ranging from 3.24% to 4.75% (2018: 3.24% to 4.75%) per annum.

b. Amounts due to related parties

(S$ million)	Note	Associates December 31, 2019	Associates December 31, 2018	Joint ventures December 31, 2019	Joint ventures December 31, 2018	Related companies December 31, 2019	Related companies December 31, 2018	Total December 31, 2019	Total December 31, 2018
Group									
Amounts due to:									
Trade		*	2	2	7	15	1	17	10
Non-trade		1	1	–	*	1	–	2	1
Advance payment – trade		–	–	3	3	–	–	3	3
	E3	1	3	5	10	16	1	22	14

The non-trade amounts due to related parties are unsecured, repayable on demand and interest-free.

G. Group Structure *(cont'd)*
G5. Related Party Information *(cont'd)*
b. Amounts due to related parties *(cont'd)*

(S$ million)	Note	Subsidiaries December 31, 2019	Subsidiaries December 31, 2018	Total December 31, 2019	Total December 31, 2018
Company					
Amounts due to:					
Trade	(i)	1	1	1	1
Non-trade		1	1	1	1
Loans from a related party	(ii)	245	245	245	245
		247	247	247	247
Amounts due after 1 year		(145)	(245)	(145)	(245)
	E3	102	2	102	2

i. The amounts due to related parties are unsecured, repayable on demand and interest-free.

ii. The loans from a related party of S$245 million (2018: S$245 million) bear interest rates ranging from 3.72% to 3.82% (2018: 3.72% to 3.82%) per annum and are unsecured.

c. Related party transactions
In addition to the above, the Group had the following significant outstanding balances and transactions with related parties during the year:

(S$ million)	Outstanding balances 2019	Outstanding balances 2018	Transactions 2019	Transactions 2018
Related corporations				
Sales	20	23	197	187
Purchases including rental	15	1	316	237
Finance income	–	–	1	1
Finance expense	1	–	36	46
Associates and joint ventures				
Sales	21	10	72	67
Purchases including rental	5	12	9	11
Payment on behalf	–	–	5	5
Loans due from	30	40	–	–

On July 8, 2019, the Group issued S$1.5 billion of five-year 3.55% per annum bond to DBS Bank, a related party, as sole lead manager and initial purchaser through a private placement. The investors of the bond include Temasek Holdings (Private) Limited, the Company's immediate and ultimate holding company and an interested person. An amount of S$2.3 million management and agent fees was paid to DBS Bank in relation to the issuance of the above bonds. The above transactions were reviewed and approved by the Audit Committee and Board of Directors to ensure that the effective cost of the bond was not higher than the cost issued to third parties.

d. Compensation of key management personnel
The Group considers the directors of the Company (including the Group President & CEO of the Company); the Group Chief Financial Officer; the President & CEO of Sembcorp Marine Ltd; the Head of Singapore, South East Asia & China (Energy); the Head of India (Energy) and the CEO of Sembcorp Development Ltd to be key management personnel in accordance with SFRS(I) 1-24 *Related Party Disclosures*. These persons have the authority and responsibility for planning, directing and controlling the activities of the Group.

The key management personnel compensation is as follows:

(S$ million)	Group 2019	Group 2018
Directors' fees paid / payable to:		
– Directors of the Company	2	2
– Other directors of the Company	1	1
Director's remuneration of the Company	2	2
Other key management personnel remuneration	6	6
	11	11
Fair value of share-based compensation	3	3

Remuneration includes salary (which includes allowances, fees and other emoluments) and bonus (which includes Annual Wage Supplement (AWS), discretionary bonus and performance targets bonus). In addition to the above, the Company provides medical benefits to all employees including key management personnel.

The Group adopts an incentive compensation plan, which is tied to the creation of Economic Value Added (EVA), as well as to attainment of individual and Group performance goals for its key executives. A "bonus bank" is used to hold incentive compensation credited in any year. Typically, one-third of the available balance is paid out in cash each year, with the balance being carried forward to the following year. The balances of the bonus bank will increase or decrease by the yearly EVA performance achieved and the pay-outs made from the bonus bank. The fair value of share-based compensation relates to performance shares and restricted shares granted that were charged to the profit or loss.

H. Other Disclosures

H1. Share-based incentive plans

This section sets out details of the Group's share-based remuneration arrangements, including details of the Company's Performance Share Plan (PSP) and Restricted Share Plan (RSP) (known as SCI PSP 2010, SCI RSP 2010 and collectively known as 2010 Share Plans). Details of its listed subsidiary's share plans is disclosed in the listed subsidiary's publicly available financial statements.

Accounting policies

Equity settled share-based incentive plan

The fair value of the compensation cost is measured at grant date and amortised over the service period to which the performance criteria relates and the period during which the employees become unconditionally entitled to the shares.

For awards granted with market-based performance conditions, in estimating the fair value of the compensation cost, market-based performance conditions are taken into account.

For awards granted with non-market based performance conditions, the compensation cost is charged to profit or loss with a corresponding increase in equity on a basis that fairly reflects the manner in which the benefits will accrue to the employee under the plan over the service period to which the performance period relates.

At the balance sheet date, the Company revises its estimates of the number of performance-based shares that the employees are expected to receive based on the achievement of non-market performance conditions and the number of shares ultimately given. It recognises the impact of the revision of the original estimates in employee expense and in a corresponding adjustment to equity over the remaining vesting period.

The share-based payments reserve relating to the performance shares released is transferred to share capital when new shares are issued. When treasury shares are issued, the cost of treasury shares is transferred to share-based payments reserve.

In the Company's separate financial statements, the fair value of performance shares and restricted shares granted to employees of its subsidiaries is recognised as an increase in the cost of the Company's investment in subsidiaries, with a corresponding increase in equity over the vesting period.

Cash settled share-based incentive plan

The compensation cost of Sembcorp Challenge Bonus is measured at the fair value of the liability at each balance sheet date and spread over the service period to which the performance criteria relates and the period during which the employees become unconditionally entitled to the bonus.

The Group recognises a liability and an expense for bonuses and profit-sharing, based on a formula that takes into consideration the share price of the Company. The Group recognises a provision when contractually obliged to pay or where there is a past practice that has created a constructive obligation to pay. The liability takes into account the probability of achieving the performance conditions in the future. With effect from 2018, the liability takes into account the performance achieved for the year.

Until the liability is settled, the Group will re-measure the fair value of the liability at each balance sheet date and at the date of settlement with any changes in fair value recognised in profit or loss for the period.

Key estimates and judgements

The fair value of equity-related compensation is measured using the Monte Carlo simulation method as at the date of the grant. The method involves projecting future outcomes using statistical distributions of key random variables including the share prices and volatility of returns. This model takes into account the probability of achieving the performance conditions in the future.

H. Other Disclosures *(cont'd)*

H1. Share-based incentive plans *(cont'd)*

The table below shows share-based expense that was recognised during the year.

(S$ million)	Note	2019	2018
Equity-settled share-based	(a)	9	11
Cash-settled share-based	(b)	(1)	2

a. Equity-settled share-based incentive

The 2010 Share Plans were incentive scheme approved and adopted by the shareholders at an Extraordinary General Meeting of the Company held on April 22, 2010. The SCI RSP 2010 is for directors and employees of the Group whereas the SCI PSP 2010 is primarily for key executives of the Group.

A participant's award under the 2010 Share Plans is determined by the Executive Resource & Compensation Committee (ERCC) taking into account, *inter alia*, the participant's performance during the relevant period, and his / her capability, entrepreneurship, scope of responsibility and skill set.

Award granted from 2019

After comprehensive review of the Group's total remuneration structure, with effect from FY2019, shares will be granted to eligible employees under the SCI RSP 2010 based on financial performance and corporate objectives achieved in the preceding year. The performance criteria for FY2019 restricted shares awards granted are calibrated based on Earnings Before Interest Tax Depreciation and Amortisation (EBITDA), Return On Equity (ROE) (excluding Sembcorp Marine Ltd), and non-financial performance targets, comprising transformation milestones and adherence to environment, health and safety standards achieved by the Group for FY2018.

For managerial participants, depending on achievement on criteria outlined above, a quarter of the SCI RSP 2010 awards granted will vest immediately with the remaining three-quarters vest over the following three years in equal tranches, subject to individual performance and fulfilment of service conditions at vesting.

b. Cash-settled share-based

Based on achievement, the non-managerial participants of the Group will receive a cash-settled notional restricted shares award known as the Sembcorp Challenge Bonus.

Movement in the number of shares under the Company's PSP and RSP are as follows:

	2019		2018	
	PSP	RSP	PSP	RSP
At January 1	3,601,553	5,082,597	2,403,303	9,727,916
Shares awarded	2,487,800	3,509,203	1,982,000	178,600
Shares released	–	(3,252,945)	–	(2,675,126)
Shares lapsed	–	(140,955)	(40,000)	(707,698)
Performance shares lapsed arising from targets not met	(770,000)	(1,187,000)	(743,750)	(1,441,095)
At December 31	5,319,353	4,010,900	3,601,553	5,082,597

H. Other Disclosures *(cont'd)*

H1. Share-based incentive plans *(cont'd)*

Sembcorp Industries Performance Share Plan

PSP awards granted have both market-based and non-market-based performance conditions. With the ERCC's approval on the achievement factor for the achievement of the performance targets for the performance period 2016 to 2018 (2018: performance period 2015 to 2017), no performance shares were released via the issuance of treasury shares (2018: nil).

The total number of performance shares in awards granted conditionally and representing 100% of targets to be achieved, but not released as at end December 31, 2019, was 5,319,353 (2018: 3,601,553). Based on the multiplying factor, the actual release of the awards could range from zero to a maximum of 7,979,029 (2018: 5,402,329) performance shares.

Sembcorp Industries Restricted Share Plan

Of the restricted shares released, 88,983 (2018: 55,437) restricted shares were cash-settled. The remaining restricted shares were released via the issuance of treasury shares.

The total number of restricted shares outstanding, including award(s) achieved but not released, as at end 2019, was 4,010,900 (2018: 5,082,597). With the change in the remuneration structure, with effect from 2019 award, the RSP balances represent 100% of targets achieved, but not released subject to individual performance and fulfilment of service conditions at vesting. The actual release of the awards is a maximum of 4,010,900 (2018: 4,489,401) restricted shares.

Awards for the performance and corporate objectives achieved in 2019 (2018: 2018) will be granted in 2020 (2018: 2019).

The fair values of the performance and restricted shares are estimated using a Monte Carlo simulation methodology at the grant dates.

	PSP Year of Grant		RSP Year of Grant	
	2019	2018	2019	2018
Fair value at measurement date	S$1.24	S$1.29	S$2.44	NA
Assumptions under the Monte Carlo model				
Share price	S$2.53	S$2.73	S$2.54	NA
Expected volatility	22.5%	21.6%	19.8%	NA
Risk-free interest rate	1.9%	2.0%	1.9%	NA
Expected dividend	3.2%	3.2%	2.7%	NA

With the ERCC's approval on the achievement factor for performance targets for the performance period 2017 to 2018 (2018: performance period 2016 to 2017), a total of S$1.2 million, equivalent to 462,048 (2018: S$0.9 million, equivalent to 258,928) notional restricted shares, were awarded and paid.

H. Other Disclosures *(cont'd)*

H2. Retirement benefit obligations

The Group's post-employment retirement benefits is predominantly through participation in defined contribution plans. The Group also operates a few defined benefit scheme of which the largest is in the UK.

Accounting policies

Employee benefits

Defined contribution plans

Under a defined contribution plan, an entity pays fixed contributions into an independent funds or separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution plans are recognised as an expense in profit or loss as incurred.

Under a defined benefit plan, the Group's net obligation in respect of defined benefit pension plans is calculated separately for each defined benefit plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value. The fair value of any plan assets is deducted. The Group determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the net defined benefit liability (asset).

Re-measurements calculation is performed annually by a qualified actuary using the projected unit credit method. Changes from defined benefit plans comprise of actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest). The Group recognises these changes immediately in other comprehensive income and all expenses related to defined benefit plans in employee benefits expense in profit or loss. The difference between the present value of the defined benefit obligation and the settlement price, is recognised as gains and losses on settlement in profit or loss.

Where the calculation results in a benefit to the Group, the recognised asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan.

Long-term employee benefits

Long-term employee benefits other than retirement plans is the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value. Long-term employee benefits are reported in other long-term payables.

Short-term employee benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related employment service is provided. The amount expected to be paid is accrued when the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

Staff retirement benefits

Retirement benefits payable to certain categories of employees upon their retirement are provided for in the financial statements based on their entitlement under the staff retirement benefit plan or, in respect of unionised employees of a subsidiary who joined on or before December 31, 1988, based on an agreement with the union.

The Group's net obligation in respect of retirement benefits is the amount of future benefit that employees have earned in return for their service in the current and prior periods. The obligation is calculated using the projected future salary increase and is discounted to its present value and the fair value of any related assets is deducted.

H. Other Disclosures *(cont'd)*

H2. Retirement benefit obligations *(cont'd)*

(S$ million)	Note	Group December 31, 2019	Group December 31, 2018
Provision for retirement gratuities	(a)	4	4
Retirement benefit obligations / (assets)	(b)	(9)	1
		(5)	5
Retirement benefit obligations			
– Non-current	E3	5	5
Retirement benefit assets			
– Non-current	E1	(10)	*

a. Provision for retirement gratuities

(S$ million)	Group 2019	Group 2018
Balance at January 1	4	4
Translation adjustments	*	*
Provision made during the year	1	1
Less: Amount paid	(1)	(1)
Balance at December 31	4	4

Certain subsidiaries provide end of service benefits to its expatriate employees. The entitlement to these benefits is usually based upon the employee's length of service and the completion of a minimum service period.

H. Other Disclosures *(cont'd)*

H2. Retirement benefit obligations *(cont'd)*

b. Retirement benefit obligations

Certain subsidiaries provide pension arrangements to its full time employees through defined benefit plans. One of the pension schemes has been closed to further accruals from June 1, 2013. The pensions for all active members at the closure date, which are based on service prior to closure, remain linked to final pensionable salary.

The numbers shown below have been based on calculations carried out by qualified independent actuaries to take into account the requirements of SFRS(I) 1-19 in order to assess the liabilities of the schemes at December 31, 2019 and December 31, 2018.

The present values of the funded defined benefit obligations, the related current service cost and, where applicable, past service cost was measured using the projected unit credit method. Details of the schemes are as follows:

(S$ million)	Group December 31, 2019	Group December 31, 2018
Present value of funded defined benefit obligations	230	214
Fair value of plan assets	(239)	(213)
(Surplus) / Deficit in scheme	(9)	1

The amounts included in the balance sheet are as follows:

(S$ million)	Group December 31, 2019	Group December 31, 2018
Retirement benefit obligations	*	1
Retirement benefit assets	(9)	*
	(9)	1

The proportion of fair value of plan assets at the balance sheet is analysed as follows:

(S$ million)	Group December 31, 2019	Group December 31, 2018
Equity instruments	44	34
Debt instruments	169	154
Other assets	26	25
	239	213

The plan assets do not include any of the Group's own financial instruments, nor any property occupied by, or other assets used by the Group.

H. Other Disclosures *(cont'd)*

H2. Retirement benefit obligations *(cont'd)*

b. Retirement benefit obligations *(cont'd)*

Movement in net defined benefit liability / (asset)

The following table shows reconciliation from the opening balances to the closing balances for net defined benefit liability / (asset) and its components.

	Defined benefit obligation		Fair value of plan assets		Net defined benefit liability / (asset)	
(S$ million)	2019	2018	2019	2018	2019	2018
Group						
Balance at January 1	214	242	(213)	(245)	1	(3)
Included in income statement						
Service cost	*	1	*	*	*	1
Interest cost / (income)	6	6	(6)	(6)	*	*
Included in other comprehensive income						
Re-measurements loss / (gain):						
Actuarial loss / (gain) arising from:						
– demographic assumptions	15	(10)	–	–	15	(10)
– financial assumptions	(4)	2	–	–	(4)	2
– experience adjustment	*	*	–	–	*	*
Return on plan assets excluding interest income	–	–	(17)	12	(17)	12
Effect of movements in exchange rates	6	(8)	(8)	9	(2)	1
	17	(16)	(25)	21	(8)	5
Other						
Contributions paid by employer	–	–	(2)	(2)	(2)	(2)
Benefits paid	(7)	(19)	7	19	*	*
	(7)	(19)	5	17	(2)	(2)
Balance at December 31	230	214	(239)	(213)	(9)	1

The weighted average duration of the defined benefit obligation at the end of the reporting period is 18 (2018: 17) years.

Principal actuarial assumptions

The main financial assumptions used by the independent qualified actuaries to calculate the liabilities under SFRS(I) 1-19 are as follows:

	Group	
(%)	December 31, 2019	December 31, 2018
Discount rate at December 31	2.0	2.8
Future rate of pension increases	1.9 – 2.6	1.9 – 3.1

Assumptions regarding future mortality are based on published statistics and mortality tables. The expected remaining life expectancy of an individual retiring at age 65 is 21 (2018: 21) for male and 23 (2018: 24) for female.

A 1% increase / decrease in discount rate would have decreased / increased the defined benefit obligations by 15.4% / 19.7% (2018: 15.7% / 20.0%). A 1% increase / decrease in future rate of pension increases would have increased / decreased the defined benefit obligations by 14.2% / 12.0% (2018: 12.6% / 12.4%).

H. Other Disclosures *(cont'd)*

H3. Other financial assets and liabilities

Accounting policies

Classification and subsequent measurement

Financial assets

On initial recognition, a financial asset is classified as measured at: amortised cost; fair value through other comprehensive income (FVOCI) or fair value through profit or loss (FVTPL).

Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

Financial liabilities

The Group initially recognises financial liabilities on the trade date, which is the date that the Group becomes a party to the contractual provisions of the instrument.

The Group classifies financial liabilities as measured at amortised cost or FVTPL.

Equity investments at FVOCI

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect on initial recognition to present subsequent changes in the investment's fair value in other comprehensive income. This election is made on an investment-by-investment basis. The Group's equity investments are classified as FVOCI. These assets are subsequently measured at fair value. Dividends are recognised as income in profit or loss unless dividend clearly represents a recovery of part of the cost of investment. Other net gains and losses are recognised in OCI and are never reclassified to profit or loss.

Financial assets and liabilities at FVTPL

All other financial assets not classified as measured at amortised costs or FVOCI as described above are measured at FVTPL. This includes derivative financial assets. On initial recognition, the Group may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortised cost or at FVOCI, as at FVTPL, if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise. A financial liabilities is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Financial assets and financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognised in profit or loss. Directly attributable transaction costs are recognised in profit or loss as incurred.

Derecognition

The Group derecognises a financial asset when the contractual rights to the cash flows from the financial asset expire, or when it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Group enters into transactions whereby it transfers assets recognised in its balance sheet, but retains either all or substantially all of its risks and rewards of the transferred assets. In these cases, the transferred assets are not recognised.

The Group derecognises a financial liability when its contractual obligations are discharged, cancelled or expired. The Group also derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantively different, in which case a new financial liability based on the modified terms is recognised at fair value.

On derecognition of a financial liability, the difference between the carrying amount extinguished and the consideration paid (including non-cash transferred or liabilities assumed) is recognised in profit or loss.

H. Other Disclosures *(cont'd)*
H3. Other financial assets and liabilities *(cont'd)*

	Note	Assets Current	Assets Non-current	Liabilities Current	Liabilities Non-current
2019					
At fair value through other comprehensive income:					
– Equity shares	(a)	–	87	–	–
At fair value through profit or loss:					
– Cross currency swaps		–	8	–	2
– Interest rate swaps		*	*	1	*
– Foreign exchange option contracts		–	*	–	*
– Forward foreign exchange contracts		3	*	1	–
– Foreign exchange swap contracts		3	–	1	–
– Equity shares	(b)	13	–	–	–
– Unit trusts and funds	(c)	81	12	–	–
		100	20	3	2
Hedge of net investment in foreign operations:					
– Forward foreign exchange contracts		22	–	–	–
		22	–	–	–
Cash flow hedges:					
– Forward foreign exchange contracts		14	10	5	2
– Fuel oil swaps		12	2	33	2
– Interest rate swaps		–	–	5	38
– Cross currency swaps		79	18	–	–
– Commodity contracts		–	–	2	–
– Electricity futures market contracts		*	–	2	*
		105	30	47	42
Fair value hedges:					
– Forward foreign exchange contracts		1	–	–	–
		1	–	–	–
At amortised cost:					
– Long-term fixed deposits		–	129	–	–
Total		**228**	**266**	**50**	**44**

H. Other Disclosures *(cont'd)*
H3. Other financial assets and liabilities *(cont'd)*

	Note	Assets Current	Assets Non-current	Liabilities Current	Liabilities Non-current
2018					
At fair value through other comprehensive income:					
– Equity shares		–	108	–	–
At fair value through profit or loss:					
– Cross currency swaps		–	8	–	2
– Interest rate swaps		–	*	–	*
– Foreign exchange option contracts		–	*	–	*
– Forward foreign exchange contracts		–	–	2	–
– Foreign exchange swap contracts		5	–	*	–
– Commodity swaps		*	–	–	–
– Commodity contracts		–	–	2	–
– Unit trusts and funds	(c)	56	15	–	–
		61	23	4	2
Hedge of net investment in foreign operations:					
– Forward foreign exchange contracts		–	26	–	–
		–	26	–	–
Cash flow hedges:					
– Forward foreign exchange contracts		13	1	12	5
– Fuel oil swaps		7	*	46	22
– Interest rate swaps		*	2	*	13
– Cross currency swaps		13	77	–	–
– Electricity futures market contracts		1	–	*	1
		34	80	58	41
At amortised cost:					
– Long-term fixed deposits		–	25	–	–
Total		**95**	**262**	**62**	**43**

a. In 2019, as part of the Group's strategy on portfolio rebalancing, entire investment in Gallant Venture was sold. The shares were sold at a fair value of S$63 million at the time of sale. The cumulative loss of S$4 million is included in fair value reserve.

b. Sembcorp Jingmen Water Co. Ltd (SJW) has a disagreement with the local authorities on the treatability of the wastewater from a customer. On December 31, 2019, an administrative decision was issued by the City Construction Bureau in Jingmen, China which allows the local authorities to temporarily take over the operation of SJW for the period from June 28, 2019 to May 28, 2020. As a result, during this period, the Group is deemed to have lost control of SJW, and SJW's net assets of S$13 million is deconsolidated and recognised as 'other financial assets' accordingly.

c. Included in unit trust and funds are amounts of S$78 million (2018: S$55 million) pledged to secure loan facilities.

H. Other Disclosures *(cont'd)*

H4. Provisions

Accounting policies

A provision is an amount set aside based on reliable estimate to settle a probable legal or constructive obligation from a past event.

Key estimates and judgements

Estimates of the Group's obligations arising from contracts or regulations that exist as at balance sheet date may be affected by future events, which cannot be predicted with any certainty. The assumptions and estimates are made based on the management's knowledge and experience and may vary from actual experience so that the actual liability may vary considerably from the best estimates.

Certain of the Group's subsidiaries are involved in claims, litigations, land disputes and other regulatory matters in certain countries at year end. Due to the nature of these disputes and matters and also in view of the uncertainty of the outcome, the Group believes that the amount of exposure cannot currently be determinable. Therefore, no impairment, revision of useful or provision for restoration cost, where applicable has been recorded.

Provision for restoration cost

The provision recognised represents management's best estimate of the present value of the future costs required. Significant estimates and assumptions are made in determining the amount of restoration provisions. Those estimates and assumptions deal with uncertainties such as: changes to the relevant legal and regulatory framework; the timing, extent and costs required. These uncertainties may result in future actual expenditure differing from the amounts currently provided. The provisions recognised are periodically reviewed and updated based on the facts and circumstances available at the time. Changes to the estimated future costs are recognised in the balance sheet by adjusting both the asset and provision. Such changes give rise to a change in future depreciation and interest charges.

Warranty

The provision for warranty is based on estimates from known and expected warranty work and contractual obligations for further work to be performed after completion. The warranty expense incurred could be higher or lower than the provision made.

H. Other Disclosures *(cont'd)*

H4. Provisions *(cont'd)*

Movements in provisions are as follows:

(S$ million)	Note	Claims (i)	Restoration costs (ii)	Warranty (iii)	Fines (iv)	Others (v)	Total
Group							
2019							
Balance at January 1		24	108	58	40	19	249
Translation adjustments		*	(3)	*	(1)	*	(4)
Provisions made during the year		9	5	9	–	9	32
Provisions reversed during the year		(8)	(6)	(24)	–	(2)	(40)
Provisions utilised during the year		(13)	(2)	(1)	(10)	(2)	(28)
Transfer to other payables	(a)	–	–	–	(29)	(7)	(36)
Disposal of subsidiaries		–	–	–	–	*	*
Unwind of discount on restoration costs	C7	–	3	–	–	–	3
Balance at December 31		12	105	42	–	17	176
Provisions due:							
– within 1 year		12	2	15	–	5	34
– after 1 year but within 5 years		–	49	27	–	11	87
– after 5 years		–	54	–	–	1	55
		12	105	42	–	17	176
2018							
Balance at January 1		25	108	21	25	18	197
Translation adjustments		–	(4)	–	–	–	(4)
Provisions made during the year		10	4	64	25	2	105
Provisions reversed during the year		(10)	(3)	(27)	–	–	(40)
Provisions utilised during the year		(1)	*	–	(10)	(1)	(12)
Disposal of subsidiaries		–	*	–	–	–	*
Unwind of discount on restoration costs	C7	–	3	–	–	–	3
Balance at December 31		24	108	58	40	19	249
Provisions due:							
– within 1 year		24	–	17	40	5	86
– after 1 year but within 5 years		–	36	41	–	12	89
– after 5 years		–	72	–	–	2	74
		24	108	58	40	19	249

a. Following the conclusion of the legal proceedings in China related to the discharge of off-specification wastewater by Sembcorp Nanjing Suiwu Company Limited announced on February 7, 2020 (Note H5), the balance provisions amount of S$36 million was transferred to current and non-current other payables of S$21 million and S$15 million, respectively.

H. Other Disclosures *(cont'd)*
H4. Provisions *(cont'd)*

(S$ million)	Claims (i)	Restoration costs (ii)	Total
Company			
2019			
Balance at January 1	19	16	35
Provisions made during the year	2	*	2
Provisions reversed during the year	(8)	(6)	(14)
Provisions utilised during the year	(2)	–	(2)
Balance at December 31	11	10	21
Provisions due:			
– within 1 year	11	–	11
– after 5 years	–	10	10
	11	10	21
2018			
Balance at January 1	16	16	32
Provisions made during the year	4	–	4
Provisions utilised during the year	(1)	–	(1)
Balance at December 31	19	16	35
Provisions due:			
– within 1 year	19	–	19
– after 5 years	–	16	16
	19	16	35

H. Other Disclosures *(cont'd)*
H4. Provisions *(cont'd)*

i. Claims

This provision relates to the obligations arising from contractual and commercial arrangements in the Group's and the Company's operations, based on the best estimate of the possible outflow considering both contractual and commercial factors.

ii. Restoration costs

Restoration costs relate to cost of dismantling and removing assets and restoring the premises to its original condition as stipulated in the agreements. The liability is expected to be incurred upon fulfilment of restoration obligation or termination of the lease.

iii. Warranty

Provision for warranty relate to contracts with contractual warranty terms. The provision for warranty is based on estimates from weighing all possible outcomes by their associated probabilities and estimates made from historical warranty data associated with similar projects.

The non-current portion of the provision for warranty is for contracts with contractual warranty periods that will lapse within 2 to 3 years from the reporting date.

iv. Fines

The provision for fines was made relating to an alleged discharge of off-specification wastewater by Sembcorp Nanjing Suiwu Company Limited in China. The legal proceedings were concluded on February 7, 2020 (see Note H5 on Subsequent events). With the proceedings concluded, the provision amount is reclassified to other payables.

v. Others

Others include provision for maintenance obligation recognised for the contractual obligations to maintain the infrastructure and equipment to specified levels of serviceability under the service concession agreements. The amount also includes provision for legal and professional fee, amongst others. These provisions are measured at the best estimate of the expenditure required and timing of outflows, to settle the present obligation at the end of each reporting period.

H5. Subsequent events

On January 3, 2020 the Group announced that it has entered into a sale and purchase agreement with Veolia Environmental Services Asia Pte. Ltd. to acquire 100% equity interest in Veolia ES Singapore Pte. Ltd. and the public cleaning business of Veolia ES Singapore Industrial Pte. Ltd. (VESSI) for approximately S$28 million. The completion of the acquisition is subject to conditions precedent including regulatory approvals.

On February 6, 2020, the Group announced that it has agreed to sell 100% of its interest in the water business in Chile for a total consideration of CLP27.8 billion (approximately S$49 million) to the Spanish construction and engineering service SACYR S.A. group of companies. Arising from the divestment, an impairment of S$64 million was recognised in the profit or loss, and a foreign currency translation loss (S$30 million, as at December 31, 2019) will be taken to profit or loss upon completion of the sale, expected by mid-2020.

On February 7, 2020, the Group announced that the legal proceedings in China related to the discharge of off-specification wastewater by its 95%-owned joint venture wastewater treatment company, Sembcorp Nanjing Suiwu Company Limited was concluded following the issue of the final mediation agreement. The Group's share of fines and cash settlement for both the criminal and civil claims was a total of S$54 million, fully provided, and the Group is committed to new investments of S$45 million over the next four years to develop projects and initiatives to support environmental protection in China.

H. Other Disclosures *(cont'd)*

H6. New or revised accounting standards and interpretations not yet effective

The following new SFRS(I)s, amendments and interpretations of SFRS(I)s are effective for annual periods beginning after January 1, 2019:

Applicable to 2020 financial statements

- Amendments to SFRS(I) 3 *Definition of a business*
- Amendments to SFRS(I) 1–1 and SFRS(I) 1–8 *Definition of Material*
- Amendments to References to Conceptual Framework in SFRS(I) Standards

Applicable to 2021 financial statements

- SFRS(I) 17 *Insurance contracts*

Mandatory effective date deferred

- Amendments to SFRS(I) 10 and SFRS(I) 1–28
  Sales or contribution of assets between an investor and its associate or joint venture

The Group is still in the process of assessing the impact of the new SFRS(I)s, amendments to and interpretations of SFRS(I)s on the financial statements. The Group does not expect significant impact on the financial statements upon the adoption of these new SFRS(I)s.

H7. Update in relation to investigations of "Operacao Lava Jato" (Operation Car Wash)

The Group's subsidiary, Sembcorp Marine Ltd (SCM), refers to its earlier announcements on July 3, 2019, July 8, 2019, February 3, 2020 and February 21, 2020 in relation to ongoing investigations related to Operation Car Wash in Brazil. It has come to the SCM's attention that the Ministerio Publico Federal in Brazil (MPF) have filed charges against Mr Guilherme Esteves de Jesus (GDJ) for money laundering and ex-employee Mr Martin Cheah Kok Choon (MCKC) for money laundering and corruption in connection with certain drilling rig construction contracts entered into in 2012 by subsidiaries of SCM with subsidiaries of Sete Brasil (Contracts). GDJ has been convicted by the Federal Courts of Curitiba of the crimes of the corruption, money laundering and participation in a criminal organisation. GDJ is connected to the consultant engaged by SCM's subsidiaries in connection with the Contracts.

MCKC is the former President of Estaleiro Jurong Aracruz Ltda (EJA), SCM's Brazilian subsidiary. MCKC's employment with the SCM Group was terminated in June 2015. SCM has lodged suspicious transaction reports in respect of MCKC with the Commercial Affairs Department of the Singapore Police Force.

The above charges filed against MCKC and GDJ by the MPF are in their personal capacities and not against EJA. Other than MCKC, SCM is not aware of any other employee past or present of SCM that is a subject of the ongoing investigations by the Brazilian authorities related to Operation Car Wash.

SCM Group continues to cooperate fully with the Brazilian authorities investigating the above matter.

As at the date of these financial statements, proceedings are ongoing and it is premature to predict and the SCM Group cannot reliably determine the eventual outcome to this matter. The timeline for resolution of this matter also cannot be determined presently.

As SCM is separately listed on the Singapore Exchange Securities Trading Limited (SGX-ST) and managed independently by SCM's board of directors, the above disclosure on Operation Car Wash is extracted from SCM's announcements issued on the website of the SGX-ST and / or from SCM audited financial statements.

I. Supplementary Information

I1. Directors and key executives remuneration

(Under SGX-ST Listing Manual requirements)

Directors' and key executives' remuneration earned for the year

Summary compensation table for the year ended December 31, 2019

			Fair value of share-based compensation granted for the year[3]	Directors' fees		Brought forward bonus bank[2]
Name of Director	Salary[1] S$'000	Bonus earned S$'000	S$'000	Cash-based[4] S$'000	Share-based[5] S$'000	S$'000
Payable by Company						
Ang Kong Hua	–	–	–	525	225	–
Neil McGregor	1,522	(198)	1,691	–	–	221
Margaret Lui[4]	–	–	–	127	54	–
Tan Sri Mohd Hassan Marican	–	–	–	117	50	–
Tham Kui Seng	–	–	–	115	50	–
Dr Teh Kok Peng	–	–	–	127	54	–
Ajaib Haridass	–	–	–	128	55	–
Nicky Tan[4]	–	–	–	126	54	–
Yap Chee Keong	–	–	–	127	54	–
Jonathan Asherson OBE	–	–	–	127	54	–
Dr Josephine Kwa Lay Keng	–	–	–	82	35	–
Payable by Subsidiaries						
Neil McGregor[4]	–	–	–	210	–	–
Tan Sri Mohd Hassan Marican	–	–	–	378	162	–
Tham Kui Seng	–	–	–	59	–	–
Name of Key Executive						
Graham Cockroft[4]	557	45	609	30	–	37
Wong Weng Sun	788	(173)	–	–	–	1,825
Koh Chiap Khiong[4]	629	121	913	205	–	910
Kelvin Teo[5]	435	120	445	10	–	197
Vipul Tuli	691	199	760	–	–	187

I. Supplementary Information *(cont'd)*

I1. Directors and key executives remuneration *(cont'd)*

(Under SGX-ST Listing Manual requirements) *(cont'd)*

Directors' and key executives' remuneration earned for the year *(cont'd)*

Notes:

1 The amounts shown are inclusive of basic salary, fixed allowances, AWS and other emoluments.

2 The Brought forward bonus bank is the outstanding balance of bonus as at December 31, 2019 (incorporating any adjustment made to the bank balance but excluding the bonus earned during the financial year). Typically, one-third of the accumulated bonus, comprising bonus earned in the financial year and the brought forward bonus, is paid out in cash each year, with the balance carried forward to the following year. Future balances of the bonus bank will be adjusted according to the yearly EVA performance of the Group and its subsidiaries, and payouts will be made accordingly from the bonus bank.

3 The fair value of the share plans granted for the year is disclosed. The shares granted to key executives are contingent upon meeting performance measures. If these performance measures are not met, the key executives will not be vested with any shares.

4 Directors' fees in cash for Margaret Lui are payable to Azalea Investment Management Pte Ltd. Directors' fees in cash for Nicky Tan are payable to Tan Kok Wah and Tee Min Foundation Ltd. Directors' fees in cash from subsidiaries for Neil McGregor, Graham Cockroft and Koh Chiap Khiong are payable to SCI. Directors' fees in cash from subsidiaries for Kelvin Teo are payable to Sembcorp Parks Management Pte Ltd and Batamindo Shipping & Warehousing Pte Ltd.

5 To align the interests of non-executive directors with the interests of shareholders, up to 30% of the aggregate directors' fees approved by shareholders for a particular financial year may be paid out in the form of restricted share awards under the Sembcorp Industries Restricted Share Plan 2010.

From 2011, the awards granted under the Sembcorp Industries Restricted Share Plan 2010 to all directors as part of their directors' fees (except for Neil McGregor, who was the Group President & CEO, and who did not receive any directors' fees) will consist of the grant of fully paid shares outright with no performance and vesting conditions attached, but with a selling moratorium. Non-executive directors are required to hold shares (including shares obtained by other means) worth the value of their annual base retainer fee (currently S$75,000); any excess may be sold as desired. A non-executive director can dispose of all of his shares one year after leaving the Board.

The actual number of shares awarded to each non-executive director will be determined with reference to the volume-weighted average price of a share on the SGX-ST over the 14 trading days from (and including) the day on which the shares are first quoted ex-dividend after the AGM (or, if the resolution to approve the final dividend is not approved, over the 14 trading days immediately following the date of the AGM). The number of shares to be awarded will be rounded down to the nearest hundred and any residual balance will be settled in cash. A non-executive director who steps down before the payment of the share component will receive all of his / her director's fees for the year (calculated on a pro-rated basis, where applicable) in cash.

Details of the performance shares and restricted shares granted to the directors are set out in the section on Share-based Incentive Plans in the Directors' Statement.

I. Supplementary Information *(cont'd)*

I2. Interested person transactions

(Under SGX-ST Listing Manual requirements)

For the purposes of Chapter 9 of the SGX-ST Listing Manual, shareholders' approval is required for any interested person transaction of a value equal to, or more than 5% of the Group's latest audited consolidated net tangible assets (NTA) or when aggregated with other transactions entered into with the same interested person during the same financial year, is of a value equal to, or more than 5% of the Group's latest NTA. For FY2019, the 5% Group's consolidated NTA as at December 31, 2018 was S$300 million.

Chapter 9 however permits the Company to obtain a shareholders' mandate for recurrent transaction of a revenue or trading nature or those necessary for its day-to-day operations. At the Annual General Meeting held on April 2019, the Company obtained approval for such shareholders' mandate.

Transactions under shareholders' mandate

(S$ million)	Aggregate value of all interested person transactions conducted under shareholders' mandate pursuant to Rule 920 of the SGX-ST Listing Manual (excluding transactions less than S$100,000) FY2019
Sale of goods and services	
Temasek Holdings (Private) Limited and its Associates	
– Mapletree Investments Pte Ltd and its Associates	1.3
– PSA International Pte Ltd and its Associates	5.2
– Singapore Power Limited and its Associates	2.8
– Singapore Technologies Telemedia Pte Ltd and its Associates	1.2
– Temasek Capital (Private) Limited and its Associates	8.8
	19.3
Olam International Ltd and its Associates	4.3
Singapore Telecommunications Ltd and its Associates	146.0
CapitaLand Ltd and its Associates	23.8
Singapore Technologies Engineering Ltd and its Associates	0.2
	193.6
Purchase of goods and services	
Temasek Holdings (Private) Limited and its Associates	
– Singapore Power Limited and its Associates	5.0
– Surbana-Jurong Private Limited and its Associates	9.2
– Temasek Capital (Private) Limited and its Associates[1]	466.3
– Certis CISCO Security Pte Ltd and its Associates	0.1
	480.6
Singapore Technologies Engineering Ltd and its Associates	0.2
Starhub Ltd and its Associates	1.9
	482.7
Provision of management and support services	
Temasek Holdings (Private) Limited and its Associates	
– Temasek Capital (Private) Limited and its Associates	3.0
	679.3

Note:

1 This relates mainly to the purchase of gas by Sembcorp Cogen Pte Ltd from Sembcorp Gas Pte Ltd for the generation of electricity up to November 10, 2019. Up until November 10, 2019, Sembcorp Gas Pte Ltd is 30% owned by Seletar Investments Pte Ltd, a wholly-owned subsidiary of Temasek Holdings (Private) Limited.

I. Supplementary Information *(cont'd)*

I2. Interested person transactions *(cont'd)*

(Under SGX-ST Listing Manual requirements) *(cont'd)*

Treasury transactions

On June 21, 2019, the Company announced that it issued S$1.5 billion of five-year 3.55% per annum bonds to DBS Bank, a related party as sole lead manager and initial purchaser through a private placement. The investors of the bond include Temasek, the Company's immediate and ultimate holding company, and an Interested Person.

The issue of the bonds to DBS Bank is not an Interested Person Transaction. However, assuming that it is treated as an Interested Person Transaction, the maximum amount at risk is the total interest payable on the S$1.5 billion principal amount of bonds calculated at the fixed rate of 3.55% per annum for 5 years, which is S$266.25 million.

Transactions not under shareholders' mandate

(S$ million)	Aggregate value of all interested person transactions conducted during the financial year under review (excluding transactions less than S$100,000 and transactions conducted under shareholders' mandate pursuant to Rule 920) FY2019
Investment of Funds	
Temasek Holdings (Private) Limited and its Associates	
– ABC World Asia Pte Ltd and its Associates	20.0
Acquisition of Shares[2]	
Temasek Holdings (Private) Limited and its Associates	
– Temasek Capital (Private) Limited and its Associates	12.1
	32.1

[2] On November 11, 2019, the Group completed its acquisition of the remaining 30% shareholding in Sembcorp Gas Pte Ltd from Seletar Investments Pte Ltd, a wholly-owned subsidiary of Temasek Holdings (Private) Limited.

I. Supplementary Information *(cont'd)*

I3. EVA statements

(S$ million)	Note	2019	2018
Net operating profit before tax expenses		111	246
Adjusted for:			
Share of associates' and joint ventures' profits		226	225
Interest expense	1	552	502
Others	2,3	126	(18)
Adjusted profit before interest and tax		1,015	955
Cash operating taxes	4	(304)	(227)
Net operating profit after tax (NOPAT)		711	728
Average capital employed	5	20,246	19,291
Weighted average cost of capital	6	6.2%	6.2%
Capital charge		1,255	1,196
Add: Capital Charge Deferral (net)	7	46	67
Economic Value Added (EVA)		(498)	(401)
Non-controlling share of EVA		147	153
EVA attributable to shareholders		(351)	(248)
Less: Unusual items (UI) gains	8	(19)	(9)
EVA attributable to shareholders (exclude UI)		(370)	(257)

Notes:

[1] Interest expense includes imputed interest on the present value of operating leases and capitalised interest charged to profit or loss upon disposal of the assets

[2] Other adjustments include recovery of investment costs, timing difference of allowances made for / (write-back) of doubtful debts, warranty, inventory obsolescence and goodwill written off / impaired and construction-in-progress

[3] In 2018, this included adjustments that exclude the profits of certain contracts which, with the adoption of SFRS(I) 15 had been reversed, and subsequently recognised when the projects were delivered to the customers in 2018

[4] The reported current tax is adjusted for the statutory tax impact of interest expense

[5] Average capital employed is computed by taking monthly average total assets less non-interest-bearing liabilities plus timing provision, goodwill written off / impaired and present value of operating leases

(S$ million)	2019	2018
Major capital components:		
Property, plant and equipment	12,374	11,711
Investments	2,188	2,207
Other long-term assets	2,948	3,173
Net working capital and long-term liabilities	2,736	2,200
Average capital employed	20,246	19,291

[6] The Weighted Average Cost of Capital is calculated in accordance with the Sembcorp Group EVA Policy as follows:

i. Cost of Equity using Capital Asset Pricing Model with market risk premium at 5.0% (2018: 5.0%);

ii. Risk-free rate 2.32% (2018: 2.26%) based on yield-to-maturity of Singapore Government 10-year Bonds;

iii. Ungeared beta ranging from 0.5 to 1.0 (2018: 0.5 to 1.0) based on Sembcorp Industries' risk categorisation; and

iv. Cost of Debt rate at 3.48% (2018: 3.12%)

[7] Capital charge deferral (net) refers to deferral of capital charge on investments made for projects where returns are not immediate at the time of investment (e.g. Greenfield projects), less the cost of deferral of weighted average cost of capital

[8] Unusual items (UI) refer to gain / loss on divestment of subsidiaries, associates, joint ventures, long-term investments and disposal of major property, plant and equipment

I. Supplementary Information *(cont'd)*

I4. List of properties

Marine

Location	Description & approximate land area	Tenure	Usage
Singapore Yards[1]			
Tanjong Kling Road[#]	Land area: 491,056 m^2 Buildings, workshops, drydocks and quays	10 years leasehold 10 years renewal (JTC Land)	Ship repairs, ship conversion, offshore engineering, shipbuilding and rig building including drydock, berthage and workshops
Admiralty Road East / Admiralty Road West	Land area: 860,716 m^2 Buildings, workshops, drydocks and quays	22 years leasehold	Ship repairs, ship conversion, offshore engineering and rig building including docks, berthage and workshops
Pandan Road	Land area: 141,791 m^2	15 years leasehold (JTC Land)	Rig building, repairs, upgrading and fabrication including berthage and workshops
Pandan Road	Land area: 9,182 m^2	30 years leasehold (JTC Land)	Steel fabrication and precision machining of components for offshore jack-up oil rigs
Tuas Crescent	Land area: 58,226 m^2	9.5 years leasehold (JTC Land)	Fabrication of jack-up oil rigs and associated sub- structure modules
Shipyard Road[#]	Land area: 63,300 m^2 Buildings, workshops and drydocks	22 months tenancy (JTC Land)	Ship repairs and shipbuilding including drydocks, berthage and workshops
Tuas Road[#]	Land area: 59,942 m^2 Buildings, workshops, docks and quays	14 years leasehold (JTC Land)	Shipbuilding and fabrication including berthage and workshops
Tuas South Boulevard Phase I	Land area: 733,104 m^2 Docks, quays, workshops, buildings and berthage	30 plus 30 years leasehold (JTC land)	Ship repairs, ship conversion, offshore engineering, shipbuilding and rig building including drydocks, berthage and workshops
Tuas South Boulevard Phase II	Land area: 345,600 m^2	30 plus 30 years leasehold (JTC land)	Ship repairs, ship conversion, offshore engineering, shipbuilding and rig building including drydocks, berthage and workshops
Tuas South Boulevard Phase IIIa	Land area: 411,131 m^2 (Pending final survey of land by JTC)	30 plus 30 years leasehold (JTC land)	Marine engineering activities including repair, conversion, upgrading and building of rigs, ships and offshore structures

[#] The properties are being prepared to be handed back to JTC following expiry of tenure.

Group's effective interest as at December 31, 2019:

[1] 61.01%

[2] 54.91%

[3] 52.35%

I. Supplementary Information *(cont'd)*

I4. List of properties *(cont'd)*

Marine *(cont'd)*

Location	Description & approximate land area	Tenure	Usage
Overseas Yards			
P.T. Karimun Sembawang Shipyard[1]			
Karimun Island, Indonesia	Land area: 307,650 m^2 Buildings, workshops and wharves	30 years leasehold with option for 20 years plus another option for 30 years	Ship repair and fabrication including berthage and workshop
Estaleiro Jurong Aracruz[1]			
Municipality of Aracruz, State of Espirito Santo, Brazil	Land area: 825,000 m^2 Slipways, berthing quays, drydock, ancillary steel and piping facilities	Freehold	Drillships construction, building of semi-submersible rigs, FPSO integration, fabrication of topside modules, PSVs construction, drilling rig repairs and modification works
P.T. SMOE Indonesia[2]			
Batam Island, Indonesia	Land area: 815,036 m^2 Workshops, office buildings and 547 metres of jetty for modules load-out	30 years leasehold	Workshops and fabrication facilities
Miscellaneous			
JPL Industries[3]			
Jurong Pier Road	Land area: 27,783 m^2	20 years leasehold (JTC Land)	Copper slag recycling
SES Engineering Sdn Bhd[1]			
Perindustrian Taman Johor, Johor Bahru	Land area: 5,235 m^2 Workshop and a 3-storey office building	Freehold	Metal Fabrication workshop
Sembmarine SLP Ltd[1]			
Lowestoft, Suffolk, UK	Land area: 55,000 m^2 Workshops and office building	Freehold and leasehold land ranging from 22 to 99 years	Workshops and fabrication facilities
Mendon Spring[1]			
Pasir Panjang	9 units of 3-room apartment with built-in area of 99 m^2 per unit	Freehold	Residential properties

I. Supplementary Information *(cont'd)*
I4. List of properties *(cont'd)*
Urban

Description	Type	Land tenure	Net lettable / saleable area (sq m)	Group's effective interest	Status
China					
Industrial & Business Properties					
1. International Water Hub, Nanjing	Office & Exhibition Centre	Leasehold 50 years from 2015	52,516	100.0%	Completed Development
2. Jiangdao Intelligent Cube, Nanjing	Incubator	Leasehold 50 years from 2012	106,218	21.5%	Completed Development
3. Jiangdao Technology Innovation Centre, Nanjing	Office & Exhibition Centre	Leasehold 50 years from 2012	49,340	21.5%	Completed Development
4. Wuxi-Singapore Industrial Park	Ready-built Factories	Leasehold 50 years from 1995	371,459	45.4%	Completed Development
5. Wuxi-Singapore Industrial Park	Built-to-specs Factories	Leasehold 50 years from 2006	292,737	45.4%	Completed Development
Commercial & Residential Properties					
1. Jiangdao Xin Tiandi, Nanjing	Retail Mall	Leasehold 40 years from 2012	66,274	21.5%	Under Development
2. Jiangdao Hua Ting, Nanjing	Residential	Leasehold 70 years from 2012	7,761	21.5%	Completed Development
3. Modena by Fraser, Wuxi New District	Service Apartment	Leasehold 40 years from 2008	11,056	45.4%	Completed Development
4. Riverside Grandeur, Nanjing	Residential	Leasehold 70 years from 2015	25,523	100.0%	Completed Development
Indonesia					
Industrial & Business Properties					
1. Kendal Industrial Park, Central Java	Ready-built Factories	Leasehold 28 years from 2017	2,746	49.0%	Completed Development

I. Supplementary Information *(cont'd)*
I4. List of properties *(cont'd)*
Urban *(cont'd)*

Description	Type	Land tenure	Net lettable / saleable area (sq m)	Group's effective interest	Status
Vietnam					
Industrial & Business Properties					
1. VSIP Bac Ninh Phase I - V	Ready-built Factories	Leasehold 50 years from 2007	37,035	46.5%	Completed Development
2. VSIP Binh Duong II-A	Ready-built Factories & Shop Kiosks	Leasehold 50 years from 2008	67,734	49.3%	Completed Development
3. VSIP Hai Phong	Ready-built Factories	Leasehold 50 years from 2008	30,051	49.3%	Completed Development
4. VSIP Nghe An	Ready-built Factories	Leasehold 50 years from 2015	8,810	49.3%	Completed Development
5. VSIP Binh Duong I	Ready-built Factories	Leasehold 50 years from 1996	57,813	49.3%	Completed Development
6. VSIP Binh Duong II	Ready-built Factories	Leasehold 50 years from 2005	25,016	49.3%	Completed Development
7. SIS Hai Phong Phase I	Warehousing	Leasehold 44 years from 2014	15,000	70.0%	Completed Development
8. SIS Hai Phong Phase II	Warehousing	Leasehold 43 years from 2016	14,279	70.0%	Completed Development
9. SIS Hai Phong Phase III	Warehousing	Leasehold 40 years from 2018	13,195	70.0%	Under Development
Commercial & Residential Properties					
1. VSIP Hai Phong	Retail Mall	Leasehold 50 years from 2008	421	46.5%	Completed Development
2. VSIP Plaza, Quang Ngai	Retail Mall	Leasehold 50 years from 2012	3,062	49.3%	Completed Development
3. VSIP, Bac Ninh	Shophouses	Leasehold 50 years from 2007	680	46.5%	Completed Development
4. Suncasa, Binh Duong	Residential & Shophouses	Leasehold 50 years from 2008	58,941	49.3%	Completed Development
5. Bel Homes, Bac Ninh	Residential & Shophouses	Leasehold 50 years from 2007	58,863	46.5%	Completed Development
6. The Habitat Binh Duong II	Residential & Retail	Leasehold 45 years from 2018	31,559	51.6%	Under Development
7. VSIP Binh Duong II-A	Retail	Leasehold 50 years from 2008	436	49.3%	Completed Development

Corporate and Others

Description	Type	Land tenure	Net lettable / saleable area (sq m)	Group's effective interest
Singapore				
30 Hill Street	Office	Freehold land and building	11,410	100%

Additional Information on Directors Seeking Re-election

Name of Director	Ang Kong Hua	Yap Chee Keong	Nagi Hamiyeh
Date of appointment	February 26, 2010	October 1, 2016	March 3, 2020
Date of last re-appointment	April 20, 2018	April 19, 2017	N.A.
Age	75	59	51
Country of principal residence	Singapore	Singapore	Singapore
The Board's comments on this appointment (including rationale, selection criteria, and the search and nomination process)	N.A.	N.A.	N.A.
Whether appointment is executive, and if so, the area of responsibility	No	No	No
Job title (e.g. Lead ID, AC Chairman, AC Member etc.)	Non-executive & Independent Director **Chairman** • Executive Committee • Executive Resource & Compensation Committee • Nominating Committee • Technology Advisory Panel	Non-executive & Independent Director **Chairman** • Audit Committee **Member** • Risk Committee	Non-executive & Non-independent Director
Professional qualifications	BSc (Honours) in Economics from the University of Hull, UK	BAcc from the National University of Singapore and a fellow of the Institute of Singapore Chartered Accountants and CPA Australia	Master of Science degree in Civil and Environmental Engineering from the Massachusetts Institute of Technology Bachelor of Science degree in Civil Engineering from the University of Texas

Name of Director	Ang Kong Hua	Yap Chee Keong	Nagi Hamiyeh
Working experience and occupation(s) during the past 10 years	**NSL** • Executive Director	**The Straits Trading Company** • Executive Director **Singapore Power** • Chief Financial Officer **Various Companies** • Advisor & Consultant	**Temasek International** • Senior Managing Director
Shareholding interest in the listed issuer and its subsidiaries	Sembcorp Industries: 421,900* * Of the 421,900 Sembcorp Industries Shares, 336,100 shares are held in the name of DBS Nominees	Sembcorp Industries: 41,700	No
Any relationship (including immediate family relationships) with any existing director, existing executive officer, the issuer and / or substantial shareholder of the listed issuer or of any of its principal subsidiaries	No	No	No
Conflict of interest (including any competing business)	No	No	No
Undertaking (in the format set out in Appendix 7.7) under Rule 720(1) has been submitted to the listed issuer	Yes	Yes	Yes

Additional Information on Directors Seeking Re-election

Other Principal Commitments Including Directorships

Name of Director	Ang Kong Hua	Yap Chee Keong	Nagi Hamiyeh
Past (for the last 5 years)	• Global Logistic Properties	• ACRA • ARA Asset Management • CityNet Infrastructure Management • InterOil Corporation • Malaysian Smelting Corporation • Public Accountants Oversight Committee, ACRA • The Straits Trading Company • Tiger Airways Holdings	• Tana Africa Capital • Tana Africa Investment Managers
Present	**Listed companies** • Sembcorp Industries • Southern Steel **Others** • Action Precision Holdings • Agrimax • Barghest Building Performance • Bioimmunate Technologies • Foamtec International Co • GIC • GLP Holdings	**Listed companies** • Sembcorp Industries • Olam International • Shangri-La Asia **Others** • Certis CISCO Security • Citibank Singapore • Ensign Infosecurity • Mediacorp • The Assembly of Christians of Singapore	**Listed companies** • Sembcorp Industries • Olam International **Others** • Dream International • Lebanese International Finance Executives • Sheares Healthcare Group

Information required pursuant to Listing Rule 704(7)

Name of Director	Ang Kong Hua	Yap Chee Keong	Nagi Hamiyeh
a. Whether at any time during the last 10 years, an application or a petition under any bankruptcy law of any jurisdiction was filed against him or against a partnership of which he was a partner at the time when he was a partner or at any time within 2 years from the date he ceased to be a partner?	No	No	No
b. Whether at any time during the last 10 years, an application or a petition under any law of any jurisdiction was filed against an entity (not being a partnership) of which he was a director or an equivalent person or a key executive, at the time when he was a director or an equivalent person or a key executive of that entity or at any time within 2 years from the date he ceased to be a director or an equivalent person or a key executive of that entity, for the winding up or dissolution of that entity or, where that entity is the trustee of a business trust, that business trust, on the ground of insolvency?	No	No	No
c. Whether there is any unsatisfied judgment against him?	No	No	No
d. Whether he has ever been convicted of any offence, in Singapore or elsewhere, involving fraud or dishonesty which is punishable with imprisonment, or has been the subject of any criminal proceedings (including any pending criminal proceedings of which he is aware) for such purpose?	No	No	No
e. Whether he has ever been convicted of any offence, in Singapore or elsewhere, involving a breach of any law or regulatory requirement that relates to the securities or futures industry in Singapore or elsewhere, or has been the subject of any criminal proceedings (including any pending criminal proceedings of which he is aware) for such breach?	No	No	No
f. Whether at any time during the last 10 years, judgment has been entered against him in any civil proceedings in Singapore or elsewhere involving a breach of any law or regulatory requirement that relates to the securities or futures industry in Singapore or elsewhere, or a finding of fraud, misrepresentation or dishonesty on his part, or he has been the subject of any civil proceedings (including any pending civil proceedings of which he is aware) involving an allegation of fraud, misrepresentation or dishonesty on his part?	No	No	No
g. Whether he has ever been convicted in Singapore or elsewhere of any offence in connection with the formation or management of any entity or business trust?	No	No	No
h. Whether he has ever been disqualified from acting as a director or an equivalent person of any entity (including the trustee of a business trust), or from taking part directly or indirectly in the management of any entity or business trust?	No	No	No

Additional Information on Directors Seeking Re-election

Information required pursuant to Listing Rule 704(7) *(cont'd)*

Name of Director	Ang Kong Hua	Yap Chee Keong	Nagi Hamiyeh
i. Whether he has ever been the subject of any order, judgment or ruling of any court, tribunal or governmental body, permanently or temporarily enjoining him from engaging in any type of business practice or activity?	No	No	No
j. Whether he has ever, to his knowledge, been concerned with the management or conduct, in Singapore or elsewhere, of the affairs of:			
i. any corporation which has been investigated for a breach of any law or regulatory requirement governing corporations in Singapore or elsewhere; or	No	No	No
ii. any entity (not being a corporation) which has been investigated for a breach of any law or regulatory requirement governing such entities in Singapore or elsewhere; or	No	No	No
iii. any business trust which has been investigated for a breach of any law or regulatory requirement governing business trusts in Singapore or elsewhere; or	No	No	No
iv. any entity or business trust which has been investigated for a breach of any law or regulatory requirement that relates to the securities or futures industry in Singapore or elsewhere, in connection with any matter occurring or arising during that period when he was so concerned with the entity or business trust?	No	No	No
k. Whether he has been the subject of any current or past investigation or disciplinary proceedings, or has been reprimanded or issued any warning, by the Monetary Authority of Singapore or any other regulatory authority, exchange, professional body or government agency, whether in Singapore or elsewhere?	No	No	No

Disclosure applicable to appointment of Director only

Name of Director	Ang Kong Hua	Yap Chee Keong	Nagi Hamiyeh
Any prior experience as a director of an issuer listed on the Exchange? If yes, please provide details of prior experience. If no, please state if the director has attended or will be attending training on the roles and responsibilities of a director of a listed issuer as prescribed by the Exchange. Please provide details of relevant experience and the nominating committee's reasons for not requiring the director to undergo training as prescribed by the Exchange (if applicable).	N.A.	N.A.	N.A.

Shareholding Statistics

As at March 4, 2020

Statistics of Shareholders

Issued and fully paid-up capital:	S$565,571,683.28
Number of issued shares:	1,787,547,732
Number / percentage of treasury shares:	4,834,276 (0.27%)
Number of shareholders:	39,548
Class of shares:	Ordinary shares with equal voting rights[1]

Shareholdings Held by the Public

Based on information available to the company as of March 4, 2020, 50.34%[2] of the issued ordinary shares of the company is held by the public and therefore, the company has complied with Rule 723 of the SGX-ST Listing Manual.

Substantial Shareholder

Substantial Shareholder	Direct Interest	Indirect Interest	Total	%[2]
Temasek Holdings (Private) Limited	871,200,328	12,718,760[3]	883,919,088	49.58

Top 20 Shareholders

No.	Name	No. of Ordinary Shares Held	%[2]
1	Temasek Holdings (Private) Limited	871,200,328	48.87
2	Citibank Nominees Singapore Pte Ltd	180,054,053	10.10
3	DBS Nominees Pte Ltd	162,998,536	9.14
4	DBSN Services Pte Ltd	64,127,429	3.60
5	Raffles Nominees (Pte) Ltd	41,398,430	2.32
6	HSBC (Singapore) Nominees Pte Ltd	34,943,861	1.96
7	United Overseas Bank Nominees Private Limited	23,804,498	1.33
8	OCBC Nominees Singapore Private Limited	11,680,376	0.65
9	Startree Investments Pte Ltd	9,400,000	0.53
10	OCBC Securities Private Ltd	8,647,706	0.48
11	UOB Kay Hian Private Limited	6,408,263	0.36
12	Phillip Securities Pte Ltd	5,521,498	0.31
13	Maybank Kim Eng Securities Pte Ltd	5,453,801	0.31
14	Tang Kin Fei	4,746,612	0.27
15	CGS-CIMB Securities (Singapore) Pte Ltd	4,464,959	0.25
16	Heng Siew Eng	3,717,000	0.21
17	BPSS Nominees Singapore (Pte.) Ltd.	3,126,209	0.18
18	DBS Vickers Securities (Singapore) Pte Ltd	2,708,643	0.15
19	DB Nominees (Singapore) Pte Ltd	2,340,155	0.13
20	Low Sin Leng	1,604,437	0.09
		1,448,346,794	81.24

[1] Ordinary shares purchased and held as treasury shares by the company will have no voting rights

[2] The percentage of issued ordinary shares is calculated based on the number of issued ordinary shares of the company as of March 4, 2020 excluding 4,834,276 ordinary shares held as treasury shares as at that date

[3] Temasek is deemed to be interested in the 12,718,760 shares in which its subsidiaries and / or associated companies have or are deemed to have an interest pursuant to Section 7 of the Companies Act

Shareholding Statistics

As at March 4, 2020

Analysis of Shareholdings

Range of Shareholdings	No. of Ordinary Shareholders	%	No. of Ordinary Shares Held (Excluding Treasury Shares)	%
1 – 99	614	1.55	24,096	0.00
100 – 1,000	6,542	16.54	5,322,434	0.30
1,001 – 10,000	26,221	66.30	107,462,275	6.03
10,001 – 1,000,000	6,144	15.54	213,014,850	11.95
1,000,001 and above	27	0.07	1,456,889,801	81.72
	39,548	100.00	1,782,713,456	100.00

Corporate Information

Registered Office
30 Hill Street #05-04
Singapore 179360
Tel: (65) 6723 3113
Fax: (65) 6822 3254
www.sembcorp.com

Board of Directors
Ang Kong Hua
Chairman

Neil McGregor
Group President & CEO

Margaret Lui
Tan Sri Mohd Hassan Marican
Tham Kui Seng
Dr Teh Kok Peng
Ajaib Haridass
Nicky Tan Ng Kuang
Yap Chee Keong
Jonathan Asherson OBE
Dr Josephine Kwa Lay Keng
Nagi Hamiyeh *(Appointed on March 3, 2020)*

Executive Committee
Ang Kong Hua
Chairman

Neil McGregor
Margaret Lui
Tham Kui Seng
Nicky Tan Ng Kuang

Audit Committee
Yap Chee Keong
Chairman

Dr Teh Kok Peng
Ajaib Haridass
Jonathan Asherson OBE

Risk Committee
Ajaib Haridass
Chairman

Dr Teh Kok Peng
Yap Chee Keong
Jonathan Asherson OBE

Executive Resource & Compensation Committee
Ang Kong Hua
Chairman

Margaret Lui
Tan Sri Mohd Hassan Marican
Tham Kui Seng
Nicky Tan Ng Kuang

Nominating Committee
Ang Kong Hua
Chairman

Margaret Lui
Tan Sri Mohd Hassan Marican
Nicky Tan Ng Kuang

Technology Advisory Panel
Ang Kong Hua
Chairman

Neil McGregor
Dr Teh Kok Peng
Jonathan Asherson OBE
Dr Josephine Kwa Lay Keng
Prof Ng How Yong
Prof Lui Pao Chuen

Company Secretary
Kwong Sook May

Registrar
M & C Services Private Limited
112 Robinson Road #05-01
Singapore 068902

Principal Bankers
Citibank N.A.

Crédit Agricole Corporate
& Investment Bank

DBS Bank

Mizuho Bank Ltd

MUFG Bank Ltd

Oversea-Chinese Banking
Corporation Limited

Standard Chartered Bank

Sumitomo Mitsui Banking Corporation

The Hongkong and Shanghai Banking
Corporation Limited

United Overseas Bank Limited

Auditors
KPMG LLP
Public Accountants and
Chartered Accountants
16 Raffles Quay #22-00
Hong Leong Building
Singapore 048581

Partner-in-Charge: Koh Wei Peng
(Appointed during the financial year ended December 31, 2019)

Glossary

ABC	anti-bribery and corruption
AC	Audit Committee
AGM	Annual General Meeting
AI	artificial intelligence
BBS	behaviour-based safety
C&R	commercial & residential
CCGT	combined cycle gas turbine
CER	certified emission reduction
COVID-19	coronavirus disease 2019
D/C	debt-to-capitalisation ratio
EBITDA	earnings before interest, tax, depreciation and amortisation EBITDA figures exclude major non-cash items such as the effects of fair value adjustments, re-measurements, impairments and write-offs
EI	exceptional item(s)
EPC	engineering, procurement and construction
ERCC	Executive Resource & Compensation Committee
ERM	enterprise risk management
ESG	environmental, social and governance
EVA	economic value added
ExCo	Executive Committee
FEED	front-end engineering design
FPSO	floating, production, storage and offloading
FPU	floating production unit
FSRU	floating storage and regasification unit
FSU	floating storage unit
GHG	greenhouse gas
GRI	Global Reporting Initiative
IFRS	International Financial Reporting Standards
IPCC	Intergovernmental Panel on Climate Change
IPO	initial public offering
IPT	interested person transactions
JV	joint venture
KPIs	key performance indicators
kWp	kilowatt peak
LNG	liquefied natural gas
m^3	cubic metres
m^3/day	cubic metres per day
MW	megawatt
MWh	megawatt hour
MWp	megawatt peak
NC	Nominating Committee
NM	not meaningful
NCI	non-controlling interest
PLF	plant load factor
PFO	profit from operations
R&D	research & development
RC	Risk Committee
REC	renewable energy certificate
SDG	Sustainable Development Goal
SFRS(I)	Singapore Financial Reporting Standards (International)
SGX	Singapore Exchange
SGXNet	Singapore Exchange's web-based platform that enables listed issuers to upload announcements
SGX-ST	Singapore Exchange Securities Trading
SLC	Senior Leadership Council
TAP	Technology Advisory Panel
tCO_2e	tonnes of carbon dioxide equivalent
TCFD	Task Force on Climate-related Financial Disclosures
VB	virtual brain
VPP	virtual power plant

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