



Sustainability Report FY2017



Table of Contents

| | |
|--|----|
| Board Statement | 3 |
| About This Report..... | 4 |
| Sustainability Governance | 4 |
| Assessing Materiality | 5 |
| Economic..... | 6 |
| Economic Performance | 6 |
| Environment..... | 7 |
| Energy and Emissions | 7 |
| Waste | 9 |
| Our People | 10 |
| Talent Attraction and Retention..... | 10 |
| Training and Education..... | 11 |
| Occupational Health and Safety | 11 |
| Our Suppliers and Customers..... | 12 |
| Supplier Assessment..... | 12 |
| Marketing and Labelling..... | 13 |
| Regulatory Compliance | 14 |
| Compliance with Laws and Regulations | 14 |
| Environmental Compliance | 14 |
| Anti-Corruption | 14 |



Board Statement

The Board of Directors is pleased to present the inaugural sustainability report of Advanced Systems Automation Limited (“ASA” or the “Group”).

The Board oversees the development and implementation of sustainability strategies and is committed to incorporating sustainability into ASA’s policies and practices. The Board has direct involvement in the identification of ASA’s material topics and ensures that issues relating to these topics are monitored and managed on a regular basis. A sustainability committee was established to provide support to the Board in implementing sustainability initiatives at ASA.

As with many industries, the semiconductor manufacturing industry is increasingly embracing the value that sustainability can bring. Many companies are incorporating sustainable issues such as eco-efficiency and occupational health and safety into their business practices.

At ASA, we recognise the need to adapt to the changing landscape in order to remain competitive. Honesty and quality customer service are our guiding virtues, which are at the foundation of our business activities. We are also committed to protecting the health, safety and welfare of our employees, being honest and transparent with all our stakeholders and making sure that we comply with all global and industrial standards and guidelines.

At the same time, we place a high value on ethical business practices and product quality. We believe our ability to manage all these issues are a critical factor in determining our growth, profitability and long-term success. Hence, our commitment and efforts towards sustainability will continue to grow as we move forward in the years ahead.



About This Report

This inaugural report presents ASA's sustainability performance for the period of 1 January to 31 December 2017 ("FY2017"). ASA manufactures automated front-end and back-end equipment for semiconductor companies. Based in Singapore, the Group has 4 research and development centres, 13 factories and 25 sales offices located in Southeast Asia, Greater China, South Korea, the United States of America and the United Kingdom. The scope of the report covers Microfits Pte Ltd (Singapore)'s business operations in Singapore, as it is the most material area of our business currently.

ASA will publish a sustainability report on an annual basis. This report is in compliance with the requirements of SGX-ST Listing Rules 711A and 711B and references the Global Reporting Initiative (GRI) Standards (2016). This report references the following topic-specific disclosures:

- Disclosure 205-3 from GRI 205: Anti-corruption 2016
- Disclosures 302-1 and 302-3 from GRI 302: Energy 2016
- Disclosures 305-1 and 305-4 from GRI 305: Emissions 2016
- Disclosures 306-2 and 306-4 from GRI 306: Effluents and Waste 2016
- Disclosure 307-1 from GRI 307: Environmental Compliance 2016
- Disclosures 401-1 and 401-2 from GRI 401: Employment 2016
- Disclosure 403-2 from GRI 403: Occupational Health and Safety 2016
- Disclosure 404-2 from GRI 404: Training and Education 2016
- Disclosure 414-1 from GRI 414: Supplier Social Assessment 2016
- Disclosure 417-2 from GRI 417: Marketing and Labelling 2016
- Disclosure 419-1 from GRI 419: Socioeconomic Compliance 2016

We welcome any enquires, comments or feedback on both our sustainability performance and inaugural sustainability report. Please send your comments and suggestions to enquiries@asa.com.sg.

Sustainability Governance

We believe that strong leadership and an effective governance framework are essential to the successful integration of sustainability into our business operations. At ASA, a robust governance structure and various procedures are in place to manage environmental, social and governance (ESG) issues that are important to us and our stakeholders.

Sustainability Steering Committee (SSC)

The Sustainability Steering Committee (SSC) consists of senior members of the Administration, Finance, Human Resources, Information Technology and Engineering and Operations divisions at ASA. The SSC offers advice and assistance to the Board in ensuring that sustainability policies and procedures are aligned with ASA's business strategy. A Sustainability Task Force (STF), represented by employees from Microfits Pte Ltd, has been established to support the SSC in implementing sustainability initiatives and programmes across ASA.

Monitoring and Benchmarking

Our sustainability performance is monitored and assessed against our peer companies in order to improve our own performance and to identify improvement areas. We carry out a review of our approach to sustainability once performance gaps have been identified, therefore allowing us to take targeted actions to address the gaps.

Assessing Materiality

Our stakeholders play a significant role in our success and we value their contributions to ASA. We meet and communicate with our stakeholders regularly to give them an update on our sustainability progress and to find out and respond to the material issues that concern them. The following table presents our approach to stakeholder engagement, which includes information on our key stakeholders and ways we engage with them:

| Investors and Shareholders | Employees | Customers | Suppliers |
|--|--|--|--|
| <ul style="list-style-type: none"> • Media releases • Quarterly SGX's announcements • Yearly annual general meeting (AGM) for shareholders • Annual report | <ul style="list-style-type: none"> • Company handbook • New employee orientation • Whistle blowing policy | <ul style="list-style-type: none"> • Customer visits • Participate in trade shows • Customers' material safety compliance requirements • Customer satisfaction survey • Factory visits by customers | <ul style="list-style-type: none"> • Supplier selection process • Supplier assessment • Meetings with suppliers |

When assessing materiality, we considered the issues of concern to our various stakeholders as well as determining their importance to the operations of the business. We engaged an independent consultant to assist us in carrying out a materiality assessment in FY2017. The assessment involved members of the senior management team from ASA and took into account research conducted on global and local trends in our industry, material topics identified by our peers and industry best practices.

We are committed to managing, measuring and reporting on issues that are material to us and our stakeholders. In FY2017, we focused on the following material issues:

| Economic | Environment | Our People | Our Suppliers and Customers | Regulatory Compliance |
|--|---|---|--|---|
| <ul style="list-style-type: none"> • Economic Performance | <ul style="list-style-type: none"> • Energy and Emissions • Waste | <ul style="list-style-type: none"> • Talent Attraction and Retention • Training and Education • Occupational Health and Safety | <ul style="list-style-type: none"> • Supplier Assessment • Marketing and Labelling | <ul style="list-style-type: none"> • Compliance with Laws and Regulations • Environmental Compliance • Anti-Corruption |



Economic

Economic Performance

Our economic performance affects our ability to deliver value to all stakeholders, including our shareholders. We strive to produce strong performance in order to create sustained value for our shareholders.

Our financial performance for FY2017 can be found in the Financial Highlights section (page 9) and Appendix 2 - Audited Financial Statements (pages 7 to 52) of the Annual Report.

Environment

Energy and Emissions

Performance in FY2017

- Electricity consumption: 242,011 kilowatt hours (kWh)
- Electricity intensity: 62 kWh/m²
- Greenhouse gas (GHG) emissions from electricity use: 101 tonnes carbon dioxide equivalent (tCO₂e)
- GHG emissions intensity from electricity use: 0.03 tCO₂e/m²

Target for FY2018

- Maintain energy (electricity) intensity within 3 - 5% of FY2017's levels

Energy consumption accounts for a substantial amount of operating costs and greenhouse gas (GHG) emissions in the equipment manufacturing industry. The ongoing challenge of managing the impacts of rising energy costs and climate risks poses a threat to the industry. Reducing energy consumption and GHG emissions is, therefore, key to improving efficiency and supporting the transition to a low carbon and sustainable future.

As an equipment manufacturer, ASA recognises its responsibility to reduce the environmental impacts of its business operations. We are committed to minimising our environmental footprint through sustainable practices and initiatives that aimed at reducing greenhouse gas (GHG) emissions, while improving our energy efficiency and lowering costs.

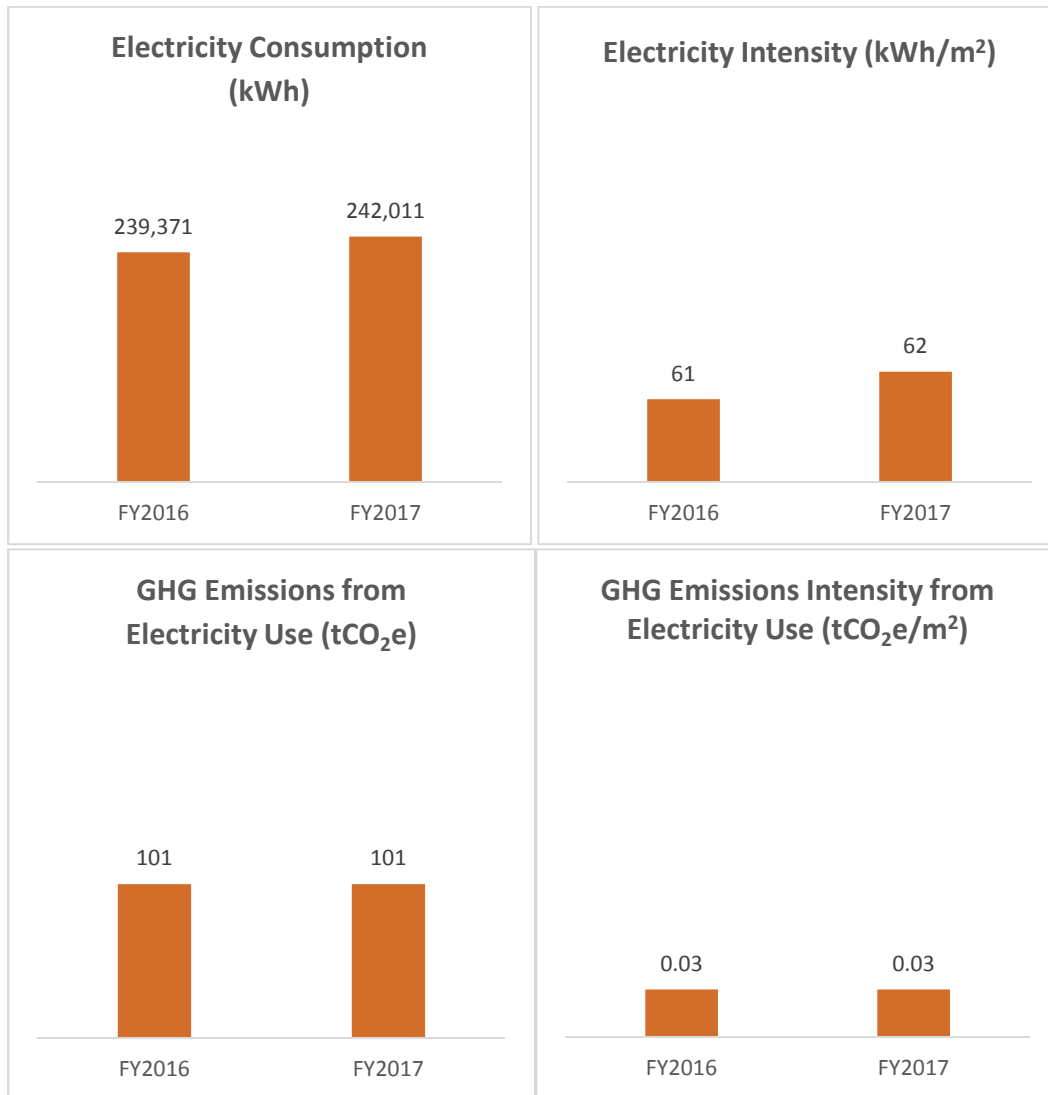
Cleanroom heating, ventilation, and air conditioning account for a significant amount of the total energy used at ASA. Therefore, we strive to reduce our energy consumption through more efficient use of our resources to achieve cost savings while implementing robust systems for monitoring and targeting. We track and monitor our utility consumption patterns on a monthly basis in order to ensure that our operations are as energy efficient as possible.

The following initiatives have been implemented to reduce energy consumption:

- Install an auto-timer in the air-compressor room at the manufacturing site
- Conduct regular maintenance checks on equipment, including air compressors to ensure optimal performance
- Maintain the air-conditioning within our office at a temperature of 24°C
- Encourage employees to turn off lights and air-conditioners when not in use

The total electricity consumption at ASA in FY2017 was 242,011 kilowatt hours (kWh), a rise of 1.1% compared to 239,371 kWh in FY2016. The electricity intensity increased slightly from 61 kWh/m² in FY2016 to 62 kWh/m² in FY2017. The rise is due to higher sales of manufacturing equipment. However, the GHG emissions from electricity use remained the same at 1,011 tonnes carbon dioxide equivalent (tCO₂e) between FY2016 and FY2017. Similarly, the GHG emissions intensity from electricity use in FY2017 was unchanged from the previous year at 0.03 tCO₂e/m².

¹ CO₂ emissions released were calculated using conversion factors of 0.4192 kg CO₂/kWh and 0.4237 kg CO₂/kWh – Singapore's Average Operating Margin (OM) Grid Emission Factors (GEFs) in 2017 and 2016, respectively.





Waste

Performance in FY2017

- Amount of non-hazardous waste incinerated: 168 tonnes
- Zero incidents of non-compliance with laws and regulations concerning waste management/disposal

Target for FY2018

- Achieve zero incidents of non-compliance with laws and regulations concerning waste management/disposal

Waste is an unavoidable aspect of any manufacturing process. We consider waste management a key issue mainly because our stakeholders and the communities have a great interest on how we manage waste generated from our business operations. Improper waste disposal can cause pollution, posing a threat to the environment and to human health.

We advocate environmental responsibility by setting in place an ISO14001-certified environmental management system to manage hazardous and non-hazardous waste. We have implemented measures to monitor the life cycle of raw materials and ensure any waste generated is properly managed through incineration, landfill or other disposal methods that adhere to local rules and regulations, such as the Environmental Public Health (Toxic Industrial Waste) Regulations 1988 in Singapore. In FY2017, there were zero incidents of non-compliance with laws and regulations concerning waste management/disposal reported.

A total of 168 tonnes of non-hazardous waste generated was incinerated at an off-site waste management facility during the same period.

All general waste and toxic industrial waste are segregated and disposed of accordingly. We strive to recycle and possibly reuse most of the general waste generated. Burning of waste is strictly prohibited within our premises. We collect and store all waste oils in secure, clearly labelled drums, which are placed in designated areas to prevent any leaks or spills. We also engage licensed third party contractors to collect solid waste and waste oils for treatment and disposal.

Our People

Talent Attraction and Retention

Performance in FY2017

- No new hires and no turnover of employees

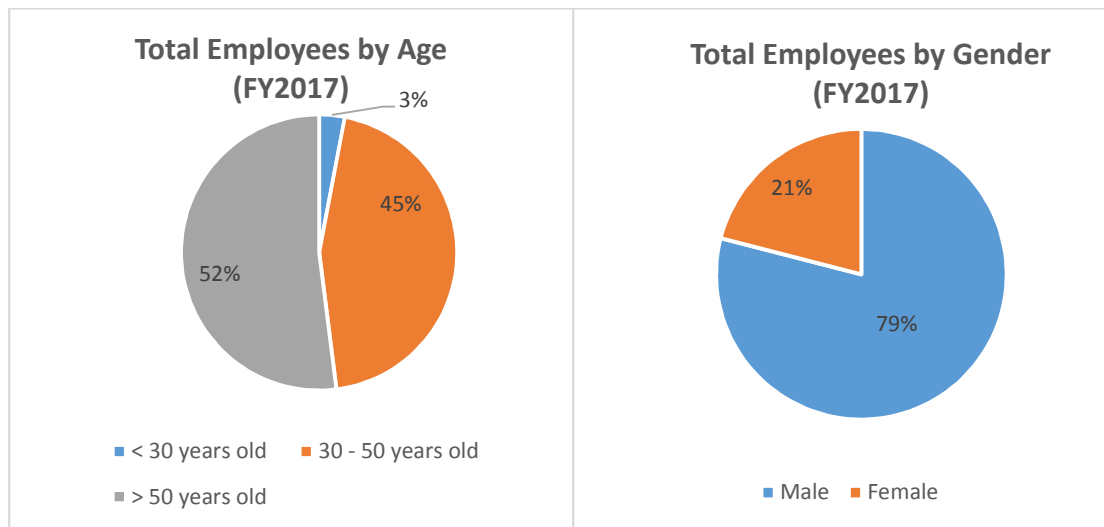
Targets for FY2018

- Achieve an employee turnover rate that is equal to or less than the industry average

At ASA, we recognise that our success depends on the quality, skills and expertise of our employees. The contributions of our employees play an important role in ensuring that we remain highly competitive in the equipment manufacturing industry. Thus, recruiting and retaining talent remains one of our top priorities.

As of 31 December 2017, there were 33 employees at Microfits and most of them were based in Singapore. 45% of ASA's employees were within the 30-to-50-year age group. There were no new hires and no turnover of employees at Microfits in FY2017.

We have a system in place to collect, track and monitor our human resources (HR) data, including overtime, vacation balances and the number of training days.



We offer competitive compensation and attractive employee benefits to attract and retain the best talent in order to grow the Group's business. We have established a remuneration framework to align our pay practices with the marketplace. All our employees receive an annual performance review in which their performance is evaluated and personal development opportunities are identified.

Our full-time employees enjoy benefits such as health care coverage, parental leave and retirement plans. Sufficient benefit coverage is also provided to our part-time employees. We conduct exit interviews to gain an understanding of the reasons why employees leave the Group. Feedback and comments are gathered from employees through the interviews.



Training and Education

At ASA, we strive to provide our employees with opportunities to develop their potential through various learning and development programmes. Employees are encouraged to participate in relevant workshops, seminars and courses to improve their skills and capabilities.

All new employees are given on-the-job training under the supervision of experienced employees. We monitor the training needs and progress of our employees on a regular basis so that they can plan their professional development accordingly.

Occupational Health and Safety

Performance in FY2017

- No workplace fatalities and major accidents among our employees

Target for FY2018

- Achieve zero workplace fatalities and/or injuries

At ASA, we consider health and safety as a priority and see this as integral to what we do. We believe it is our responsibility to provide a healthy and safe working environment to our employees and to ensure that health and safety risks are adequately addressed.

A workplace health and safety committee has been established to facilitate employee participation in health and safety activities and to address health and safety issues throughout the Group. The committee, made up of management and employee representatives, meets regularly and makes recommendations to improve health, safety and working conditions at ASA. Also, processes are in place to measure and monitor our occupational health and safety performance.

We adopt safe work practices, such as implementing standard operating procedures and carrying out emergency response training to ensure that the risk of accidents, injuries and exposure to health hazards for all of our employees and contractors is minimised. Our safety handbook outlines standard safety practices and requirements that our employees and contractors have to adhere to. Appropriate health and safety training is provided to our employees to ensure that they are able to identify and deal with common hazards in the workplace.

Site inspections are conducted regularly to ensure that machines, equipment and work areas within our premises do not pose any risks to employee health and safety. Also, the conditions of the work environment and other relevant work practices are reviewed from time to time so that we are able to identify foreseeable hazards and to monitor the effectiveness of local risk control implemented.

In addition, measures have been put in place to reduce noise and air pollution within and outside our manufacturing plants. For example, regular maintenance and inspections of the compressors are carried out and compressed air guns in our manufacturing plants are used in short intervals in order to cut noise and air pollution. We also place signs in areas where hearing protection is mandatory so that employees are not exposed to excessive noise.

We require our employees and occupants in each building to familiarise themselves with the emergency evacuation plans and procedures. The plans and procedures are reviewed and revised, as necessary, after any incident. In addition, fire drills are conducted twice a year in order to familiarise our employees with the evacuation procedures during a fire. No workplace fatalities and major accidents among our employees were recorded during the reporting period.

Our Suppliers and Customers

Supplier Assessment

Performance in FY2017

- No new suppliers were engaged, and therefore evaluated in terms of their ability to supply materials according to our requirements.
- All suppliers and vendors met our specification requirements and expectations for quality and delivery

Targets for FY2018

- Ensure all suppliers and vendors meet our specification requirements and expectations for quality and delivery

Our suppliers are an important part of our value chain. As a world-class equipment manufacturer, we source raw materials from a wide range of suppliers. We expect our suppliers to provide top-quality raw materials and products and operate in a sustainable manner that is consistent with our values and standards.

We have a stringent selection process for our all suppliers. Procurement standards are established to select, monitor, audit and manage our suppliers in order to ensure quality materials are purchased and used in the production process. We maintain a list of approved suppliers from which we procure materials for our production of equipment and monitor their performance over time. In addition, we encourage our suppliers to achieve a 100% on time delivery rate. Suppliers that fail to meet our standards will be removed from the list. In FY2017, all our suppliers and vendors met our specification requirements and expectations for quality and delivery. We conduct due diligence on all of suppliers based on their ability to meet our requirements before engaging them. However, no new suppliers were engaged during the reporting period.

Our suppliers are required to comply with the Restriction of Hazardous Substances (RoHS) Directive, which includes a CE2-marking directive. We also expect our suppliers to meet the requirements of relevant laws and regulations.

² "CE" is as an abbreviation of Conformité Européenne (European Conformity).

Marketing and Labelling

Performance in FY2017

- No incidents of non-compliance with regulations concerning product information and labelling

Target for FY2018

- Achieve zero incidents of non-compliance with regulations concerning product information and labelling

Clear and accurate labelling is essential to ensure safe and effective use of machines and equipment. It is our responsibility to ensure that machines and equipment manufactured by ASA are classified and labelled accurately, in compliance with all necessary labelling guidance. Failure to follow the labelling guidance can result in negative consequences such as product recalls and withdrawals.

We have a mechanism in place to ensure labels on our machines and equipment contain the right information and instructions for correct and safe operation. We monitor the latest industry trends and developments regularly and offer our employees training on relevant guidelines relating to product marketing and labelling. In FY2017, there were no incidents of non-compliance with regulations concerning product information and labelling reported.

Regulatory Compliance

Compliance with Laws and Regulations

Performance in FY2017

- Zero incidents of non-compliance with anti-corruption and environmental laws, socioeconomic regulations and regulatory requirements

Target for FY2018

- Achieve zero incidents of non-compliance with anti-corruption and environmental laws, socioeconomic regulations and regulatory requirements

At ASA, we are committed to good corporate governance practices in order to gain stakeholders' trust, provide accountability and maintain the necessary license to operate. We have procedures and risk management standards in place to ensure that we comply with relevant laws, including environmental laws and socioeconomic regulations. We also expect and require all our employees to observe the highest standards of integrity in the day-to-day conduct of our business.

Environmental Compliance

We are subject to various environmental laws and regulations in the places where we operate. In Singapore, we are required to comply with laws and regulations set by the National Environmental Agency (NEA), the Public Utilities Board (PUB) and the Singapore Civil Defence Force (SCDF). A breach of any law or regulation will significantly inhibit our ability to operate.

We have an environmental management system (EMS) in place to minimise our impacts and ensure that we comply with all relevant environmental legislation. In FY2017, there were no incidents of non-compliance with environmental laws and regulations.

Anti-Corruption

At ASA, we have zero tolerance for bribery and corruption. We require our employees to adhere to the Code of Conduct and policies on corruption within the Group. Information on the Code of Conduct, which includes ethical requirements and information on the whistle-blowing policy is provided to employees.

ASA has a whistle-blowing policy, which enables employees to express any concerns they have about suspected fraud, corruption, dishonest practices or other similar matters. Any suspicious practices or inappropriate activities involving our employees are brought to the attention of the Head of Human Resources ("HR") and/or any member of the Executive Committee. Employees who are found guilty of fraud, dishonesty or criminal conduct are will be held personally liable for their actions and disciplinary action will be taken towards these employees.

In FY2017, there were zero incidents of non-compliance with anti-corruption laws and socioeconomic regulations.

Information on ASA's corporate governance, compliance and risk management policies and practices can be found in Appendix 1 – Corporate Governance Report (pages 1 to 15) of the Annual Report.



*This sustainability report has been prepared by the Company and its contents have been reviewed by the Company's sponsor, SAC Capital Private Limited ("**Sponsor**"), for compliance with the relevant rules of the Singapore Exchange Securities Trading Limited ("**SGX-ST**"). The Sponsor has not independently verified the contents of this sustainability report.*

This sustainability report has not been examined or approved by the SGX-ST and the SGX-ST assumes no responsibility for the contents of this sustainability report, including the correctness of any of the statements or opinions made, or reports contained in this sustainability report.

The contact person for the Sponsor is Ms Tay Sim Yee (Tel: (65) 6232 3210) at 1 Robinson Road, #21-00 AIA Tower, Singapore 048542.