

# FARMGATE **MILK PRICE STATEMENT**



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# INTRODUCTION

The primary purpose of this Statement is to help Fonterra farmer shareholders, unit holders in the Fonterra Shareholders' Fund, and other interested parties better understand the Farmgate Milk Price.

This Farmgate Milk Price Statement sets out information about the Farmgate Milk Price and outlines the way that Fonterra Co-operative Group Limited (Fonterra) has calculated the Farmgate Milk Price for the milk season that ended on 31 May 2015 (2015 season).

The appendices provide an overview of the Farmgate Milk Price and a report by Fonterra's external auditors that confirms that the Farmgate Milk Price for the 2015 season has been derived in accordance with the Principles, Methodologies and Detailed Rules in Fonterra's Farmgate Milk Price Manual, dated 1 August 2014. Five attachments provide further detail for the past three seasons on the most significant factors that affect the Farmgate Milk Price. A glossary of the terms used completes the report.

Fonterra has also released as an adjunct to this Statement a Microsoft Excel-based financial model that shows how the information set out in the Statement has been used to calculate the Farmgate Milk Price for the 2015 season.

Numbers in this Statement have been rounded and, as a result, some tables may not exactly total or sum to 100 per cent! The information on the Farmgate Milk Price presented in this Statement is based on data used within the Milk Price Model, not Fonterra's actual data.

A Farmgate Milk Price Statement is made available each year with Fonterra's annual results on [www.fonterra.com](http://www.fonterra.com).

<sup>1</sup> Percentage changes shown in tables in this statement have been calculated by reference to the underlying data, and may differ from percentage movements between the rounded data presented in the tables.

# FARMGATE MILK PRICE FOR THE 2015 SEASON

This section sets out the Farmgate Milk Price for the 2015 season. It also describes the way the Farmgate Milk Price relates to Fonterra's financial year ended 31 July 2015.

The Manual sets out the methodology for determining the base amount to be paid by Fonterra for milk supplied to Fonterra in New Zealand in a season. Fonterra's Milk Price Panel advises the Fonterra Board on matters concerning the Manual, including the calculation of the Farmgate Milk Price.

The Farmgate Milk Price is the total amount calculated under the Manual, and is NZD\$7.096 billion for the 2015 season. For convenience, the Manual also defines the 'Farmgate Milk Price per kgMS' as this total amount divided by Fonterra's total New Zealand milk supply (1.614 billion kilograms of milk solids (kgMS)), or **NZD\$4.40** per kgMS.

The Farmgate Milk Price of NZD\$7.096 billion is used for payments for New Zealand milk supplied in the 2015 season.

It includes payments for milk supplied by farmer shareholders, milk supplied on contract, and a portion of the premiums paid for winter milk.

The cost of New Zealand-sourced milk, as disclosed in Fonterra's most recent financial statements, is NZD\$7.121 billion. The NZD\$25 million difference between this amount and the Farmgate Milk Price of NZD\$7.096 billion primarily reflects the following three factors: first, the financial statements report the cost of milk acquired during the financial year comprising the 12-month period ending 31 July 2015. In contrast, the Farmgate Milk Price for the season is the cost of milk supplied in respect of the 12-month period ending 31 May 2015. Secondly, some payments for winter milk, and premiums for specialty milk, are not funded from the Farmgate Milk Price.<sup>1</sup> Thirdly, the difference between payments under the Guaranteed Milk Price scheme and the amount that would have been paid had the scheme not been put in place are also not funded from the Farmgate Milk Price.

## FARMGATE MILK PRICE

\$4.40/kgMS

<sup>1</sup> A commodity manufacturer of milk powders is unlikely to pay premiums for specialty milk or to pay the level of premiums for winter milk that an integrated processor such as Fonterra would pay. Premiums for specialty milks and a portion of the premiums paid for winter milk are therefore not funded from the total amount calculated under the Manual and are paid in addition to this total amount. For the 2015 season, these Approved Adjustments amounted to NZD\$18 million.

# FARMGATE MILK PRICE REVENUE AND COSTS

The most significant factor that affects the Farmgate Milk Price from season to season is revenue.

Table 1 below summarises the Farmgate Milk Price for the milk supplied in the 2013, 2014 and 2015 seasons. Both Table 1 and Figure 1 below show that changes in the Farmgate Milk Price over the past three seasons have been driven mainly by changes in commodity prices converted into NZD.

The first three subsections below describe the key factors that influence revenue.

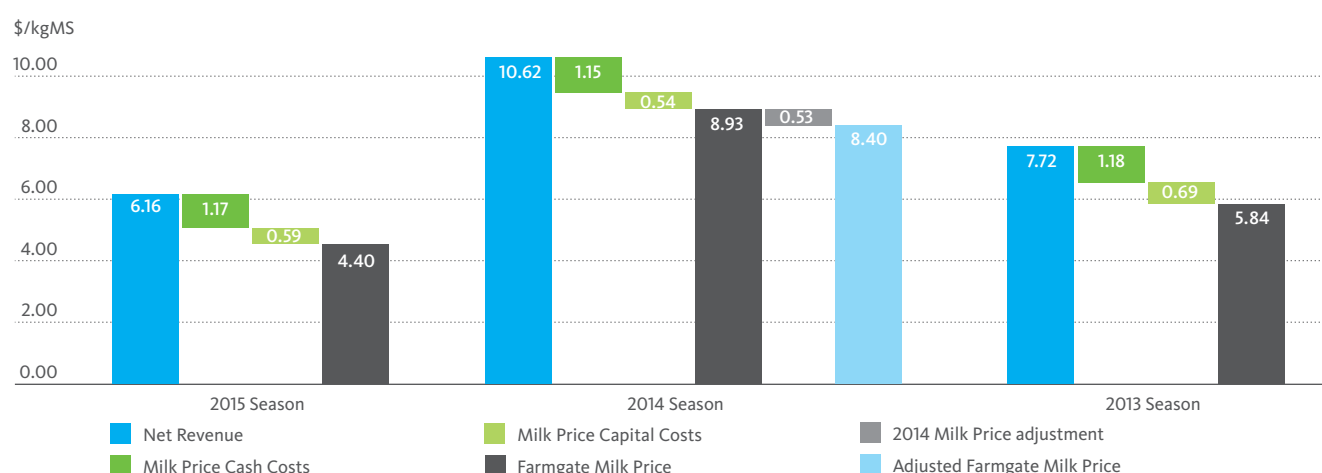
Key determinants of the movements in average costs between the 2014 and the 2015 seasons are explained in later subsections.

**TABLE 1: FARMGATE MILK PRICE SUMMARY**

| SEASON                             | 2015<br>\$b   | 2015<br>\$/kgMS | 2014<br>\$b   | 2014<br>\$/kgMS | 2013<br>\$b   | 2013<br>\$/kgMS | 2015/2014<br>% CHANGE<br>(\$/kgMS) | 2014/2013<br>%CHANGE<br>(\$/kgMS) |
|------------------------------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|------------------------------------|-----------------------------------|
| Farmgate Milk Price Revenue        | 10.54         | 6.53            | 17.50         | 11.04           | 12.06         | 8.24            | -40.9%                             | 34.0%                             |
| Lactose                            | (0.60)        | (0.37)          | (0.66)        | (0.42)          | (0.76)        | (0.52)          | -10.6%                             | -20.0%                            |
| <b>Net Revenue</b>                 | <b>9.94</b>   | <b>6.16</b>     | <b>16.83</b>  | <b>10.62</b>    | <b>11.30</b>  | <b>7.72</b>     | <b>-42.1%</b>                      | <b>37.6%</b>                      |
| Farmgate Milk Price Cash Costs     | (1.89)        | (1.17)          | (1.82)        | (1.15)          | (1.73)        | (1.18)          | 1.9%                               | -2.9%                             |
| Farmgate Milk Price Capital Costs* | (0.95)        | (0.59)          | (0.86)        | (0.54)          | (1.02)        | (0.69)          | 8.3%                               | -21.7%                            |
| <b>Total Costs</b>                 | <b>(2.84)</b> | <b>(1.76)</b>   | <b>(2.68)</b> | <b>(1.69)</b>   | <b>(2.75)</b> | <b>(1.88)</b>   | <b>4.0%</b>                        | <b>-9.8%</b>                      |
| Farmgate Milk Price                | 7.10          | 4.40            | 14.15         | 8.93            | 8.55          | 5.84            | -50.8%                             | 52.9%                             |
| Million kgMS                       |               | 1,614           |               | 1,584           |               | 1,463           | 1.9%                               | 8.3%                              |

\* Includes depreciation, tax and capital charge

**FIGURE 1: CHANGES IN THE FARMGATE MILK PRICE:  
SEASONS 2013 – 2015**



The Milk Price Adjustment of 53 cents per kgMS in the 2014 season to the Farmgate Milk Price calculated under the Manual was made in response to an unprecedented divergence in returns to the milk powder-based products included in the Farmgate Milk Price and other commodity products manufactured by Fonterra. With no adjustment, Fonterra would have incurred a loss, which could have put the Co-operative at risk of a loss of confidence of its stakeholders. Further explanation of the Milk Price Adjustment is provided in the Farmgate Milk Price Statement for 2014.

# FARMGATE MILK PRICE REVENUE AND COSTS

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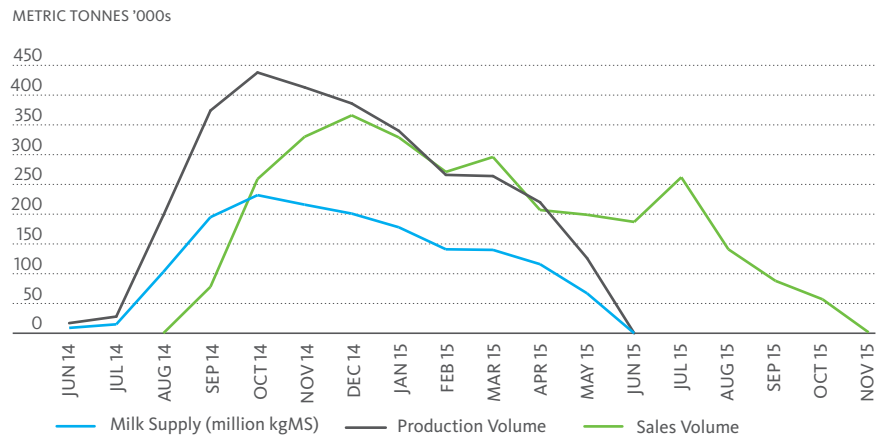
## MILK SUPPLY, PRODUCTION AND SALES VOLUMES

Farmgate Milk Price Revenue varies according to the milk supplied during the season, product mix, sales volumes and prices in NZD. Farmgate Milk Price Revenue is the most significant driver of the Farmgate Milk Price.

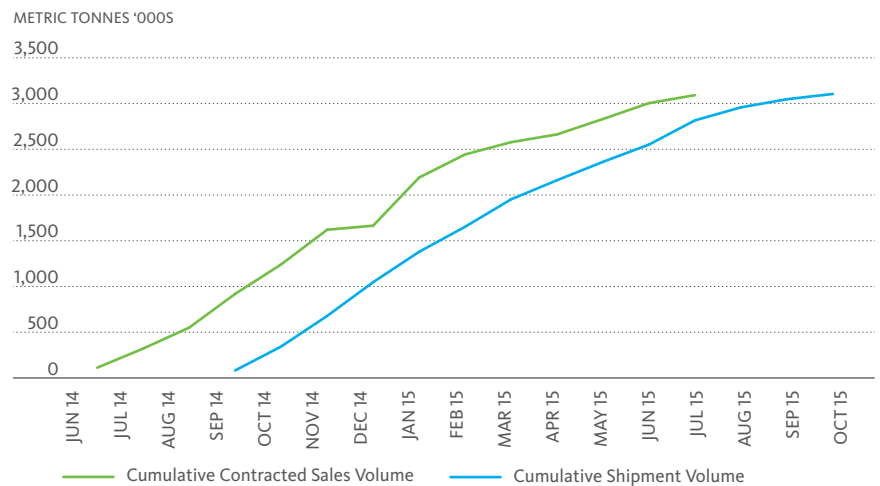
Figure 2 shows the relationship between when milk is collected during a season (the light blue line), the volume of products manufactured from that milk (the grey line) and when that product is shipped (the light green line). The key points to note are as follows:

- Milk supplied during the 2015 season comprised 1.614 billion kgMS. Attachment 1 provides information on milk supplied every quarter for each of the past three seasons.
- This amount of milk is assumed to be converted into Reference Commodity Products. The mix between the various products that goes into the Farmgate Milk Price is aligned to Fonterra's actual mix between Whole Milk Powder (WMP) and Skim Milk Powder (SMP), and between butter and Anhydrous Milk Fat (AMF) (production of Buttermilk Powder (BMP) is a residual amount). Attachment 1 provides Farmgate Milk Price production by quarter for each Reference Commodity Product for the past three seasons.
- Between September and November 2014, milk collected by Fonterra in the North Island exceeded the processing capacity assumed in the Milk Price model. To accommodate this, it was assumed that the notional Milk Price business would have refrained from adding lactose to a quantity of milk powder to adjust the protein content to a standard level aligned to internationally recognised specifications. This resulted in a net reduction in assumed production of

**FIGURE 2: TIMING OF SUPPLY, PRODUCTION AND SALES VOLUMES**



**FIGURE 3: LAG BETWEEN WHEN PRICES WERE STRUCK AND SHIPMENT**



Reference Commodity Products of 10,000 MT, and a reduction in revenue, net of the avoided lactose costs, of NZD\$11 million, or 0.7 cents per kgMS.

- Sales volumes reflect the pattern of Fonterra's actual shipments of Reference Commodity Products manufactured from milk supplied during the season. Figure 2 shows the lag between production and shipment, as well as the fact that minimal milk is

supplied in June and July. These factors mean that shipments of products manufactured from milk collected in a season (beginning 1 June) do not normally commence until August at the earliest. Shipments are normally complete by the end of October in the following year, again as illustrated in Figure 2. Attachment 2 sets out sales volumes by quarter for each of the past three seasons.

**TABLE 2: WEIGHTED AVERAGE USD PRICE 2013 – 2015 SEASONS**

| WEIGHTED AVERAGE PRICE (USD) PER MT | 2015  | 2014  | 2013  | 2015/2014<br>% CHANGE | 2014/2013<br>%CHANGE |
|-------------------------------------|-------|-------|-------|-----------------------|----------------------|
| WMP                                 | 2,639 | 4,824 | 3,394 | -45.3%                | 42.1%                |
| SMP                                 | 2,552 | 4,504 | 3,625 | -43.4%                | 24.3%                |
| Butter                              | 3,027 | 3,920 | 3,550 | -22.8%                | 10.4%                |
| AMF                                 | 3,577 | 4,853 | 3,450 | -26.3%                | 40.7%                |
| BMP                                 | 2,657 | 4,752 | 3,457 | -44.1%                | 37.5%                |
|                                     |       |       |       | -42.4%                | 35.5%                |

**2015 SEASON AVERAGE PRICES WERE LOWER THAN 2014 SEASON BY**

↓ 42.4%

Revenues are recognised when sales are invoiced, at the time of shipment. Sales prices included in the Farmgate Milk Price are always set prior to the month of shipment, primarily via GDT events. Figure 3 on page 4 shows the average lag between when prices are struck and when product is shipped. This matches Fonterra's actual average lag for product that is sold on terms that are typical for the sale of commodity products from New Zealand. To ensure that this is the case, contracts with more than five months between when a price is set and shipment occurs are not taken into account in determining shipment prices.<sup>2</sup>

Attachment 3 sets out the average number of months prior to shipment that prices were established for each quarter over the past three seasons. Attachment 3 also sets out the average percentage of sales contracted in each month prior to shipment in the past three seasons.

## PRICES

Since the 2012 season, GDT has been the sole source of prices for WMP, SMP and AMF, and is a primary reference point for BMP and butter. Non-GDT contracts Fonterra enters into are also used to establish prices for butter and BMP.

Detailed rules in the Manual dictate which contracts can be taken into account. Contracts that are excluded, for example, include sales to Fonterra subsidiaries.

Attachment 1 highlights that WMP, SMP and AMF (2,754,000 MT) accounted for 90 per cent of the Farmgate Milk Price production of Reference Commodity Products (3,071,000 MT) in the 2015 season.

The average shipment prices incorporate provisions for the lower prices received for 'downgrade product'. These are products that do not meet manufacturing specifications, some of which may only be suitable for use as stock feed.

Table 2 above shows the weighted average United States Dollars (USD) contract prices of Reference Commodity Products for the past three seasons. It shows that prices for the Reference Commodity Products decreased on average by 42.4 per cent between the 2014 season and the 2015 season, compared to an increase of 35.5 per cent between the 2013 season and the 2014

season. Average USD prices per MT for each Reference Commodity Product by quarter for the past three seasons are set out in Attachment 4.

The Manual provides for the conversion of notional USD Farmgate Milk Price receipts to NZD for each month at the average rate at which Fonterra actually converts its USD-equivalent foreign currency receipts for the month, taking into account the costs and benefits of Fonterra's hedging activities. Fonterra's policy is to hedge 100 per cent of net recognised foreign currency trade receivables and payables. It also requires hedging of forecast cash receipts from sales for a period of up to 18 months within limits approved by Fonterra's Board. Fonterra uses both forward foreign exchange contracts and currency options to hedge its foreign exchange risk.

Fonterra's hedging policy is designed to provide certainty and to reduce the impact on the Milk Price of volatility in the New Zealand dollar, and results in the spot exchange rate at a particular point in time being reflected in the hedged conversion rate over the subsequent 18 months. Consequently, a significant portion of the benefit from the sharp decline in the spot rate in the 2015 Season will be reflected in hedged conversion rates for the 2016 and 2017 Seasons.<sup>3</sup>

<sup>2</sup> For the 2015 season, approximately 7 per cent of sales of Reference Commodity Product were sold under contracts with more than 5 months between the price being set and shipment occurring.

<sup>3</sup> Fonterra's hedging policy also enables Fonterra to enter into future conversion rates that are typically lower than the spot rate, and the use of currency options has enabled Fonterra to further participate in some of the recent decline in the spot exchange rate.

# FARMGATE MILK PRICE REVENUE AND COSTS

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Table 3 shows that Fonterra's hedging policy resulted in an average foreign exchange conversion rate for the 2015 season of USD:NZD 0.7882 against an average spot rate of 0.7329 USD:NZD. In contrast to the 2015 season, Fonterra's hedging activities resulted in an average increase in the Farmgate Milk Price of 48 cents in each season from 2010 to 2014, relative to translation at the spot exchange rate. Attachment 5 on page 19 shows the average foreign exchange conversion rate (USD:NZD) for the Farmgate Milk Price Revenue for each quarter in the 2015 Season, based on Fonterra's actual hedging contracts in place, compared to the weighted average spot rate that prevailed in the quarter. Attachment 5 also provides equivalent information by quarter for the 2013 and 2014 seasons.

As at 31 July 2015, Fonterra had foreign exchange contracts in place in respect of approximately 67 per cent of the USD-equivalent operating cash flow exposure expected to impact on the Farmgate Milk Price for the 2016 Season. If the balance was hedged based on a spot exchange rate of 0.6603, the average USD:NZD conversion rate would be 69 cents.<sup>4</sup>

## LACTOSE

Lactose is used as an ingredient in the manufacture of WMP, SMP and BMP to achieve a standard protein composition aligned to internationally recognised specifications. Most of the lactose content of milk powders is obtained from the milk supplied to Fonterra. However, a portion is purchased at international prices. Because the cost of purchased lactose depends on global prices and the exchange rate, it is presented in Table 1 and Figure 1 as a deduction from Farmgate Milk Price Revenue.

Table 4 above provides the basis for the cost of purchased lactose in the 2015, 2014 and 2013 seasons.

**TABLE 3: EFFECT OF HEDGING POLICY ON THE FARMGATE MILK PRICE FOR THE 2013 – 2015 SEASONS**

| SEASON                            | 2015       |        | 2014       |        | 2013       |        |
|-----------------------------------|------------|--------|------------|--------|------------|--------|
|                                   | MILK PRICE | SPOT   | MILK PRICE | SPOT   | MILK PRICE | SPOT   |
| Average Conversion Rate (USD:NZD) | 0.7882     | 0.7329 | 0.8086     | 0.8396 | 0.7986     | 0.8214 |
| Milk Price (NZD/kgMS)             | 4.40       | 4.90   | 8.93       | 8.51   | 5.84       | 5.62   |
| Effect of Hedging (NZD/kgMS)      | -0.50      |        | 0.42       |        | 0.22       |        |

**TABLE 4: PURCHASED LACTOSE AND PRICE**

| SEASON                                | 2015  | 2014  | 2013  | 2015/2014<br>% CHANGE | 2014/2013<br>% CHANGE |
|---------------------------------------|-------|-------|-------|-----------------------|-----------------------|
| Purchased Lactose (000 Metric Tonnes) | 346   | 331   | 297   | 4.6%                  | 11.4%                 |
| Average Price (USD) per MT            | 1,406 | 1,605 | 2,036 | -12.4%                | -21.1%                |
| Total Lactose Purchases (USD \$m)     | 486   | 531   | 604   | -8.4%                 | -12.1%                |

## FARMGATE MILK PRICE CASH COSTS

Farmgate Milk Price Cash Costs reflect:

- Fonterra's actual supply chain and collection costs.
- Costs associated with modern plants with sufficient capacity to process all milk collected by Fonterra, located on more than 20 reference manufacturing sites (some of which contain multiple plants) with associated overhead costs. The costs of operating these plants are based on daily processing capacities that match Fonterra's averages, and on operating parameters that reflect manufacturers' specifications and Fonterra's per-unit costs.
- Overhead and selling costs that are typical of a commodity-only business that sells product from New Zealand. Overhead costs are calculated by reference to Fonterra's actual costs, but exclude costs that are attributable to the much broader scope of Fonterra's business. Selling costs primarily reflect the cost of selling products through GDT with an offshore supporting network.

Table 5 and Figure 4 on page 7 summarise the major categories of cash costs and the sources of movements in each category between the 2014 and 2015 seasons.

The movements in costs reflect the following:

- Milk supply increased by 1.9 per cent in the 2015 season compared to the 2014 season. By itself, this factor resulted in a decrease in cash costs of 0.6 cents per kgMS.
- Costs increased by an average of 2.4 per cent, or 2.8 cents per kgMS, due to inflationary factors.
- The NZD\$2 million reduction in costs due to structural changes is due to:
  - As explained in the 2014 Milk Price Statement, a revised approach has been used to calculate provisions for a number of relatively minor costs, relating to effluent, cleaning, consumables, laboratory testing and water costs. Where the previous approach effectively assumed the relevant costs increased in line with production, the revised approach recognises that some of these costs

<sup>4</sup> As noted above, Fonterra uses currency options as well as forward exchange contracts to hedge its foreign currency receipts. Use of options means the average hedged conversion rate may vary with the spot exchange rate.

**TABLE 5: SUMMARY OF MOVEMENTS IN CASH COSTS**

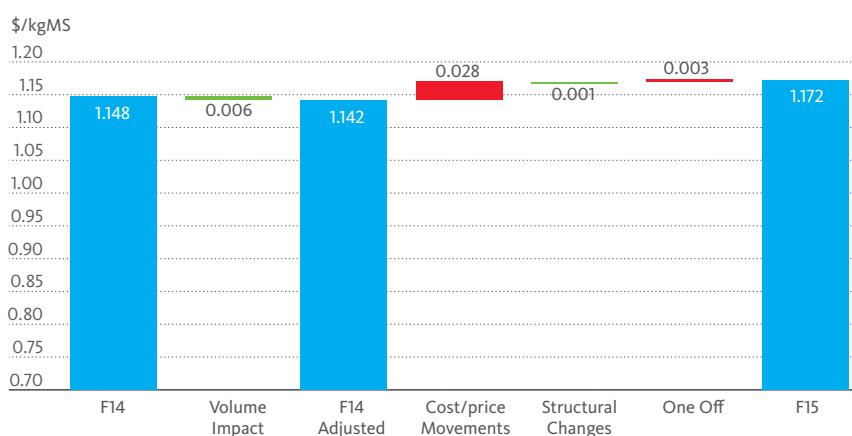
| NZD \$ MILLION                                                                                | F14          | VOLUME<br>IMPACT | COST / PRICE<br>MOVEMENTS | STRUCTURAL<br>CHANGES | ONE OFF  | F15          | % CHANGE<br>DUE TO COST | TOTAL %<br>CHANGE |
|-----------------------------------------------------------------------------------------------|--------------|------------------|---------------------------|-----------------------|----------|--------------|-------------------------|-------------------|
| Sales Costs                                                                                   | 121          | 1                | 4                         | –                     | –        | 126          | 3.3%                    | 3.7%              |
| Variable manufacturing and supply chain costs                                                 | 742          | 20               | 20                        | (47)                  | (3)      | 732          | 2.6%                    | –1.4%             |
| Fixed manufacturing (including repairs and maintenance)/site overheads and supply chain costs | 343          | –                | 16                        | 45                    | –        | 404          | 4.8%                    | 17.8%             |
| Collection costs                                                                              | 362          | 3                | 1                         | –                     | –        | 367          | 0.4%                    | 1.3%              |
| Other costs                                                                                   | 251          | –                | 3                         | –                     | 7        | 261          | 1.0%                    | 3.7%              |
| <b>Total Cash Costs</b>                                                                       | <b>1,819</b> | <b>23</b>        | <b>44</b>                 | <b>(2)</b>            | <b>4</b> | <b>1,889</b> | <b>2.4%</b>             | <b>3.8%</b>       |
| % movements                                                                                   |              | 1.3%             | 2.4%                      | –0.1%                 | 0.2%     |              |                         |                   |

do not vary with production (i.e. they are 'fixed'). This change in approach resulted in a decrease in costs of approximately 0.9 cents per kgMS.

- An update to assumed energy usages in the milk powder plants, based on data obtained from energy audits conducted at two Fonterra plants, resulting in an increase in costs of approximately 0.7 cents per kgMS.
- An allowance of NZD\$6.7 million was included for additional raw milk testing costs arising from the 1080 poisoning threat and for other minor specific quality issues faced by Fonterra. There was a partially offsetting reduction of NZD\$2.3 million in variable manufacturing costs as a consequence of the reduction in the assumed production of Reference Commodity Products due to the excess of peak period milk supply over processing capacity discussed above. The net impact of these adjustments was NZD\$4.4 million, or 0.3 cents per kgMS. There were no costs of a similar nature in 2014.

#### FARMGATE MILK PRICE CAPITAL COSTS

The Milk Price Model uses 'standard' plants to calculate both operating and plant-related capital costs. These

**FIGURE 4: SOURCES OF MOVEMENTS IN AVERAGE CASH COSTS**

plants have capacities that approximate Fonterra's average daily capacities for each type of plant and reflect current technology of the type typically employed across the industry.<sup>5</sup> The standard plants are smaller than Fonterra's newest large manufacturing plants, such as the ED4 drier installed at Fonterra's Edendale manufacturing site in Southland in 2009 and the DD2 drier installed at Fonterra's Darfield Site in Canterbury in 2013, but are larger and more efficient than Fonterra's older smaller plants.

The basis for deriving the benchmark depreciation, tax costs and capital

charge is set out in detail in the Manual. In broad terms:

- The capital charge on fixed assets is designed to recover the full cost (through a depreciation charge) of the manufacturing and other assets required to manufacture Reference Commodity Products over the assets' economic lives, and to generate a return at the benchmark Weighted Average Cost of Capital (WACC, see below) on the undepreciated balance each year.
- The capital charge is calculated in a manner that results in its aggregate amount growing each year approximately in line with milk supply

<sup>5</sup> The average daily processing capacity of the standard WMP and SMP plants installed prior to the 2013 season is approximately 1.9 million litres. Incremental and replacement WMP and SMP plants incorporated in the asset base from the 2013 season have an average daily processing capacity of approximately 2.5 million litres, equivalent to the plants installed by Fonterra at Darfield in 2011 and Pahiatua in 2015.

# FARMGATE MILK PRICE REVENUE AND COSTS

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and capital goods inflation, as long as the WACC does not change. This means that changes in the average age of the asset base do not result in material year-on-year movements in the capital charge, and therefore in the Farmgate Milk Price.

- The Farmgate Milk Price cost base also includes a provision for a capital charge on the monthly net working capital balances implied by the sale and manufacture of the Reference Commodity Products, and by the phasing of Fonterra's payments for milk to its suppliers. Each of these items varies somewhat between years, resulting in some annual variation in this element of the capital charge.
- The WACC used to determine the capital charge is specified on an after-tax basis, so the Farmgate Milk Price cost base includes a separate provision for corporate tax. This amount is a relatively constant proportion of the WACC charges on fixed assets and net working capital each year.

Table 6 shows the capital costs and the total book value of the Farmgate Milk Price fixed asset base and monthly average net working capital for the 2015, 2014 and 2013 seasons.

Two matters are relevant to a comparison of capital costs between the 2015 and 2014 seasons:

- In the 2015 season, the WACC rate was 6.1 per cent, down from the 6.8 per cent used in 2014. By itself, this change resulted in a reduction of NZD\$45 million in the capital charge on fixed assets, a reduction of NZD\$16 million in the charge on net working capital, and a reduction of NZD\$17 million in the tax charge, partially offset by an increase in depreciation expense of NZD\$13 million. The fixed asset-related reductions were partially offset by an increase in capital costs due to the

**TABLE 6: CAPITAL COSTS, BOOK VALUE OF FIXED ASSET BASE AND AVERAGE NET WORKING CAPITAL**

| NZD \$ MILLION                    | 2015  | 2014  | 2013  |
|-----------------------------------|-------|-------|-------|
| WACC rate % (post-tax)            | 6.1%  | 6.8%  | 7.4%  |
| Depreciation                      | 263   | 250   | 244   |
| WACC Charge – fixed assets        | 393   | 436   | 447   |
| WACC Charge – net working capital | 120   | 26    | 134   |
| Tax                               | 176   | 151   | 191   |
| Total capital costs               | 952   | 863   | 1017  |
| Total fixed assets (book value)   | 6,505 | 6,437 | 6,098 |
| Average Net Working Capital       | 2,335 | 887   | 1,601 |

effects of the underlying methodology, which is designed to result in an aggregate capital charge that increases approximately in line with inflation and milk supply, holding other things equal.

- The WACC charge on net working capital in 2014 was significantly lower than the charge in prior years. This was mainly due to the impact of the record high 2014 Farmgate Milk Price on the average balance owing to farmers for the supply of milk. The WACC charge for 2015 has returned to a more typical level.

## CALCULATION OF BENCHMARK WEIGHTED AVERAGE COST OF CAPITAL (WACC)

The WACC used to determine the Fixed Asset Capital Charges and the Net Working Capital Charge is calculated using the 'simplified Brennan Lally' methodology employed by the Commerce Commission.<sup>6</sup> The methodology applied through to the 2011 season provided for input parameters into the WACC to be updated every four years. Consequently, the WACC was held constant at 8.5 per cent between the 2009 and 2011 seasons, and reflected market interest rates as of mid-2008. From the 2012 season, the methodology was revised to be based on rolling five-year averages of market interest rates, including the five-year

New Zealand government stock rate, resulting in a reduction in the WACC to 7.7 per cent for the 2012 season, 7.4 per cent for the 2013 season and 6.8 per cent for the 2014 season.

For the 2015 season, the WACC methodology has been revised to reflect two matters:

- The asset beta has been revised from 0.45 to 0.38 based on a review by an independent expert, Associate Professor Alastair Marsden of the University of Auckland Business School.<sup>7</sup>
- As noted in the Farmgate Milk Price Statement for the 2014 season, the Manual was amended with effect from the 2015 season to include the inclusion of a 'specific risk premium' in the calculated WACC. A specific risk premium of 0.15, as recommended by Dr Marsden, was added to the assessed cost of equity capital.

The net impact of these two adjustments was to reduce the WACC for the 2015 season from 6.5 per cent to 6.1 per cent.

The 2016 season WACC will be 5.9 per cent, reflecting a further reduction in five-year average market interest rates.

<sup>6</sup> See, for example, [www.comcom.govt.nz/cost-of-capital/](http://www.comcom.govt.nz/cost-of-capital/)

<sup>7</sup> <http://www.comcom.govt.nz/regulated-industries/dairy-industry/review-of-fonterra-s-farm-gate-milk-price-and-manual/statutory-review-of-milk-price-calculation-2/review-of-milk-price-calculation-201415-season/>

# FARMGATE MILK PRICE MANUAL CHANGES

Since the Manual was introduced in the 2009 season, various minor refinements have been made as practical issues were identified and addressed. Such refinements are to be expected given the importance to Fonterra of ensuring the Farmgate Milk Price approach is robust. Any modification to the Manual is required to be consistent with the Milk Price Principles which are set out in both the Manual and Fonterra's constitution.

The Manual itself also allows for adjustments to various parameters. An example of this is the Detailed Rule that allows for the addition of new Reference Commodity Products if certain conditions established in the Manual are met. The Manual also provides for reviews of various aspects of the Manual to be carried out at least once every four years. These reviews can result in changes to the application of rules in the Manual or inputs into the Farmgate Milk Price. The first of these four-yearly reviews was completed in the 2012 season and the results were incorporated into the 2013 Milk Price.

As noted in Appendix 1, the Commerce Commission's final report on the 2014/15 Manual was released on 15 December 2014.

The Board approved a number of amendments to the Manual in July 2015, which will take effect from the 2016 season. The updated version of the Manual is available on [www.fonterra.com](http://www.fonterra.com). The following six of these amendments could be considered substantive, but are not expected to have a material effect on the Farmgate Milk Price for the 2016 season:

- Section 2.6, which was added to Part A in 2015, contained a commitment that 'in normal circumstances' the Milk Price and inputs into its calculation will evolve over time in a manner that could be achieved by a 'real world' dairy processor, and that Fonterra will disclose any change in approach to the application of the Manual where that change results in a materially different value of an input.<sup>8</sup> The phrase 'in normal circumstances' has been replaced with 'other than in exceptional circumstances', to make it more clear that it is not anticipated that this commitment would be overridden other than in highly unusual circumstances.
- The Part B rule relating to repairs and maintenance (R&M) has been further amended to explicitly exclude milk collection and dry stores fixed assets from the calculation (as the relevant R&M costs are provided for elsewhere in the calculation methodology), and consistent methods and assumptions are to be used in determining the replacement costs of the relevant Fonterra and Milk Price Model fixed assets. This amendment makes more explicit the approach actually applied to date.
- A new rule has been added to Part B that is intended to comprise a 'catch all' provision with respect to any non-recurring costs that could reasonably be expected to have been incurred by the Milk Price Business, and that are not otherwise provided for (whether on an ex ante or ex post basis) in the base milk price calculation methodology. Again, this approach makes more explicit the approach actually applied to date (for example, in calculating this season's provision for 1080-related costs).
- Rule 36 in Part B has been amended to make it explicit that on adding a manufacturing site to the model, appropriate provisions will be made for the cost of land and site-specific fixed assets, and that on removal of a site allowances will be made for the net financial implications.
- Rule 3 in Part B has been amended to include additional criteria for determining whether a product should be added or removed from the reference basket, to provide that a change should be made only where this is expected to result in a higher average milk price over time.
- Rule 26 in Part B, relating to assumed notional plant capacity, has been amended to provide that notional capacity will be aligned to the average capacity of Fonterra's relevant plants only for WMP and SMP plants (and not for butter, AMF or BMP plants). This change will provide additional flexibility to establish installation costs for new notional butter and AMF plants, in particular, by reference to costs actually incurred by Fonterra, but will not have any material impact on calculated capital costs.

<sup>8</sup> We have also amended this provision to provide that we will provide public explanations of changes in approach to the application of the Manual that result in materially different values of inputs in our 'reasons paper' to the Commerce Commission in support of the Milk Price for the relevant year, as well as in the Milk Price Statement.

# CHANGES IN APPROACH TO THE CALCULATION

As noted above, Fonterra included in the 2015 Manual an undertaking to disclose any changes to the application of the Manual that result in materially different values of any input into the Milk Price calculation.

Four changes in approach to the application of the Manual have resulted in materially different values of inputs into the Milk Price calculation for the 2015 season:

- As explained above, a revised approach was implemented for the 2015 season to calculate provisions for a number of relatively minor costs, relating to effluent, cleaning, consumables, laboratory testing and water costs. This revision resulted a decrease in costs for the 2015 season of approximately 0.9 cents per kgMS.
- The update to the asset beta and implementation of the new specific risk premium described above resulted in a net decrease in capital-related costs of 2.1 cents per kgMS.
- The assumption relating to the target level of moisture content in WMP, which affects the quantity of WMP which can be manufactured from a given volume of milk solids, was revised on advice from an independent expert. This amendment resulted in a net increase in the Milk Price of 0.5 cents per kgMS.
- For the 2014 season, assumed energy usages were based on equipment manufacturer specifications. For the 2015 season, our assumed energy usages have been updated to incorporate results obtained from energy audits conducted at two Fonterra sites to measure actual energy usages under operating conditions equivalent to those assumed in the Milk Price Model. The net impact of these updates was an increase in calculated energy costs of 0.7 cents per kgMS.

# APPENDIX 1

## FARMGATE MILK PRICE OVERVIEW

### RATIONALE FOR FARMGATE MILK PRICE

Fonterra currently collects around 85 per cent of New Zealand's milk production. Because Fonterra purchases such a large proportion of New Zealand's total milk, there is no 'market price' for milk that is independent of the price paid by Fonterra. As a result, since its formation in 2001, Fonterra has calculated a Milk Price that enables total returns to be allocated between payments for milk and returns on the capital invested by Fonterra farmer shareholders and more recently by unit holders in the Fonterra Shareholders' Fund.

### FARMGATE MILK PRICE METHODOLOGY

Since the 2009 season, the Farmgate Milk Price has been calculated in accordance with the Manual by:

- Determining the revenue that Fonterra would earn if the equivalent of all the milk Fonterra collects were converted into commodity specifications of WMP and SMP, and their by-products, which are butter, AMF and BMP. These products are referred to in the Manual as 'Reference Commodity Products'. Prices primarily reflect USD prices achieved on the twice-monthly GlobalDairyTrade (GDT) trading events, converted to NZD using Fonterra's actual average monthly foreign exchange conversion rate<sup>9</sup>.
- Deducting costs, including the cost of transporting raw milk to factories, and the cost of efficiently manufacturing Reference Commodity Products and then transporting them to the point of export from New Zealand, along with selling and administration expenses. These costs also include amounts for depreciation of fixed assets and an appropriate return on investment, including investment in working capital.

The balance comprises the Farmgate Milk Price. While this is an aggregate amount, it is usually referred to on the basis of a Farmgate Milk Price per kgMS.

### RATIONALE FOR REFERENCE COMMODITY PRODUCTS

Manufacture of the Reference Commodity Products comprised more than 75 per cent of Fonterra's total New Zealand ingredients production in the 2015 season.

Almost all additional milk collected over the past decade in New Zealand by Fonterra and its competitors has been used to make milk powders. Because returns from the sale of milk powders and their by-products represent the 'marginal' returns that would drive the price of milk in a competitive market in New Zealand, the Farmgate Milk Price is based on these products. Returns from non-powder commodities, such as cheese and casein, have largely been irrelevant in driving investment in the dairy industry over the past 10 years and are therefore not taken into account in determining the Farmgate Milk Price.

The Farmgate Milk Price approach does not include any returns earned by Fonterra from specialised ingredients and consumer branded products. These types of products earn premiums over the returns to standard commodity ingredients. It is therefore appropriate that these premiums are recognised in Fonterra's earnings rather than in the Farmgate Milk Price.

### FARMGATE MILK PRICE GOVERNANCE

The Fonterra Board sets the total amount to be paid by Fonterra for all milk supplied to it in New Zealand in each season. For the 2015 season, this amount is made up of the Farmgate Milk Price and Approved Adjustments (e.g. premium payments for some winter milk and specialty milk such as organic milk).

Both Fonterra's constitution and the Dairy Industry Restructuring Act (2001) (DIRA) require Fonterra to maintain the Manual, which sets out Fonterra's policies and methodology for determining the Farmgate Milk Price. The Manual must reflect the Milk Price Principles set out in Fonterra's constitution. The Farmgate Milk Price has been calculated in accordance with the Manual since the start of the 2009 season.

The Fonterra Board has established a robust governance structure to oversee the setting of the Farmgate Milk Price, which comprises the elements illustrated in the diagram on page 12.

#### 1 Milk Price Panel

The Milk Price Panel plays a key role in overseeing the integrity of the Farmgate Milk Price. It has five members. Two are Fonterra-appointed directors (one of whom is the Chair), one is a Fonterra farmer-elected director and two are appropriately qualified nominees of the Fonterra Shareholders' Council. The current members of the Panel are: John Waller (Chair) and David Jackson, who are appointed Fonterra directors; Michael Spaans, who is a farmer-elected Fonterra director; and Paddy Boyle and Bill Donaldson, who are nominees of the Council. Bill Donaldson replaced Richard Punter, who retired by rotation at the end of September 2014.

The Panel oversees the governance of the Farmgate Milk Price and the Manual, including changes to the Manual and verification by independent external experts of key parameters (such as resource usage rates, product yields and fixed manufacturing costs).

<sup>9</sup> For WMP, SMP and AMF, which comprised 89 per cent of revenue in the 2015 Farmgate Milk Price, all prices were sourced from GDT. For butter and BMP a mixture of GDT and non-GDT prices were used.

The Panel is responsible for:

- overseeing the calculation of the Farmgate Milk Price and making a recommendation on it to the Fonterra Board
- providing recommendations to the Fonterra Board on changes to the Manual
- providing assurance to the Fonterra Board that the Farmgate Milk Price has been calculated each year in accordance with the Manual.

## 2 Milk Price Group

The Milk Price Group is a working group established by Fonterra. The Head of the Milk Price Group is independent of Fonterra's management and reports directly to the Chair of the Milk Price Panel. The role of the Milk Price Group includes:

- ensuring that the Farmgate Milk Price is calculated in accordance with the Manual and making recommendations in respect of the Farmgate Milk Price to the Panel
- considering any proposed amendments to the Manual, including those the Milk Price Group itself considers are appropriate, and ensuring they are in accordance with the Milk Price Principles in Fonterra's Constitution
- providing assurance to the Fonterra Board over the calculation of the forecast of the Farmgate Milk Price
- managing engagement with External Reviewers
- engaging with the Commerce Commission, including to ensure full disclosure of all material aspects of the Farmgate Milk Price derivation each year.

The functions of the Milk Price Group are contracted out to Ernst & Young and other technical experts who are not employees of Fonterra.

## 3 External Reviewers

External reviewers provide expert advice on various inputs, as well as assurance over the accuracy of financial models. In addition they participate in reviews of key parameters of the Farmgate Milk Price at regular intervals (which can be up to four years).

## 4 External Auditor

The external auditor audits the Farmgate Milk Price each year and provides assurance that the Farmgate Milk Price has been determined in accordance with the Milk Price Principles, Methodologies and Detailed Rules of the Farmgate Milk Price Manual. Fonterra's external auditor is PricewaterhouseCoopers.

## 5 Commerce Commission Milk Price Oversight

Subpart 5A of DIRA, which was passed into law in July 2012, gives the Commerce Commission an oversight role with respect to Fonterra's milk price. The purpose of Subpart 5A is to promote the setting of a milk price that provides an incentive to Fonterra to operate efficiently, while providing for contestability in the market for the purchase of milk from farmers (section 150A). Each year, the Commission is required to review and report on the extent to which the Manual and Fonterra's actual milk price are consistent with this purpose:

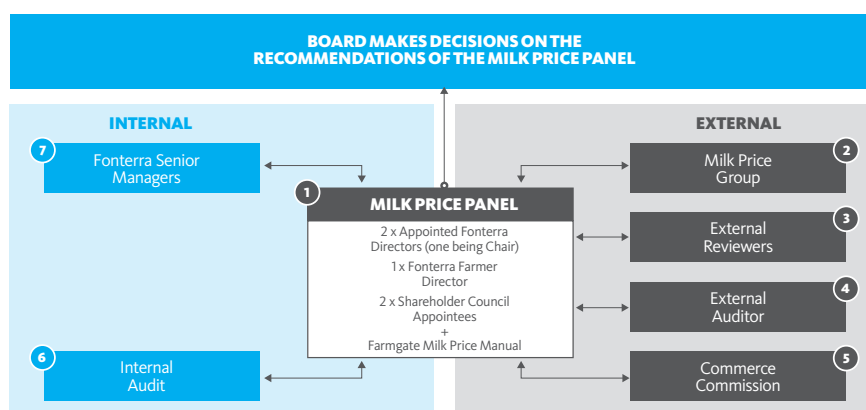
- The Commerce Commission's final report on the Manual for the 2014/15 season was released on 15 December 2014 and can be found at [www.comcom.govt.nz/regulated-industries/dairy-industry/review-of-fonterra-s-farm-gate-milk-price-and-manual/statutory-review-of-milk-price-manual/201415-season/](http://www.comcom.govt.nz/regulated-industries/dairy-industry/review-of-fonterra-s-farm-gate-milk-price-and-manual/statutory-review-of-milk-price-manual/201415-season/).
- The final report on the F15 Farmgate Milk Price calculation was released on 15 September 2015 and can be found at [www.comcom.govt.nz/regulated-industries/dairy-industry/review-of-fonterra-s-farm-gate-milk-price-and-manual/statutory-review-of-milk-price-calculation-2/review-of-milk-price-calculation-201415-season/](http://www.comcom.govt.nz/regulated-industries/dairy-industry/review-of-fonterra-s-farm-gate-milk-price-and-manual/statutory-review-of-milk-price-calculation-2/review-of-milk-price-calculation-201415-season/).

## 6 Internal Audit

Fonterra's internal audit team provides assurance over the processes and controls relating to Fonterra data used in the calculation of the Farmgate Milk Price.

## 7 Fonterra Senior Managers

Fonterra senior managers provide internal oversight of the calculation of the actual and forecast Farmgate Milk Price in accordance with the Manual and detailed models and procedures.



Source: Fonterra

# APPENDIX 2

## INDEPENDENT ASSURANCE REPORT

### TO THE DIRECTORS OF FONTERRA CO-OPERATIVE GROUP LIMITED



#### **Scope**

We have audited the application of the Principles, Methodologies and Detailed Rules as defined in the Farmgate Milk Price Manual of 1 August 2014 (the Manual) by the Milk Price Group (MPG) in deriving the F15 Season's Farmgate Milk Price of \$4.40 (the Fonterra Farmgate Milk Price). We have confirmed the balances contained in the Fonterra Farmgate Milk Price Statement are correctly extracted from the calculation of the Fonterra Farmgate Milk Price.

#### **Milk Price Group's Responsibilities**

The MPG are responsible for the calculation of the Fonterra Farmgate Milk Price based upon the Manual, ensuring the Fonterra Farmgate Milk Price has been derived in accordance with the Principles, Methodologies and Detailed Rules set out in the Manual. The MPG is also responsible for the preparation of the Fonterra Farmgate Milk Price Statement.

#### **Independent Auditors' Responsibilities**

We are responsible for expressing an independent opinion on whether the Fonterra Farmgate Milk Price has been derived in accordance with the Manual, in all material respects, and that the Fonterra Farmgate Milk Price Statement includes information that has been correctly extracted, in all material respects, from the calculation of the Fonterra Farmgate Milk Price and reporting our opinion to you.

We conducted our independent assurance engagement in accordance with ISAE (NZ) 3000 Assurance engagements other than audits or reviews of historical financial information and SAE 3100 Compliance Engagements issued in New Zealand. Those standards require that we comply with ethical requirements and plan and perform our procedures to obtain reasonable assurance about whether, in all material respects, the calculation of the Fonterra Farmgate Milk Price has complied with the Principles, Methodologies and Detailed Rules set out in the Manual, and that the balances contained in the Fonterra Farmgate Milk Price Statement are correctly extracted, in all material respects, from the calculation of the Fonterra Farmgate Milk Price.

#### **Inherent Limitations**

Our engagement includes examining, on a test basis, evidence relevant to the amounts used to derive the Fonterra Farmgate Milk Price and the balances in the Fonterra Farmgate Milk Price Statement. It also includes assessing the significant assumptions, estimates and judgements made by the MPG in the calculation of the Fonterra Farmgate Milk Price and ensuring the Principles, Methodologies and Detailed Rules applied are consistent with those set out in the Manual. Because of the inherent limitations, it is possible that fraud, error or non-compliance may occur and not be detected. As the procedures performed are undertaken on a test basis, our assurance engagement cannot be relied on to detect all instances where the Principles, Methodologies and Detailed Rules set out in the Manual have not been complied with. Our opinion expressed in this report has been formed on that basis.

Our firm carries out assignments for the Group in relation to other advisory, other assurance and attestation services. Partners and employees of our firm may deal with the Group on normal terms within the ordinary course of trading activities of the Group. These matters have not impaired our independence as auditors of the Fonterra Farmgate Milk Price.

#### **Opinion**

In our opinion the MPG has complied, in all material respects, with the Principles, Methodologies and Detailed Rules in the Manual in deriving the Fonterra Farmgate Milk Price of \$4.40 for the F15 Season. We have confirmed the balances contained in this Fonterra Farmgate Milk Price Statement are correctly extracted, in all material respects, from the Fonterra Farmgate Milk Price calculation.

#### **Restriction on Distribution or Use**

This report is made solely to the Directors. Our report has been prepared at the request of the Directors and for no other purpose. To the fullest extent permitted by law we do not accept or assume responsibility to anyone other than Fonterra Co-operative Group Limited for this report, or for the opinions we have formed.

**PricewaterhouseCoopers**

Auckland

23 September 2015

# ATTACHMENT 1

## MILK SUPPLIED AND PRODUCTION VOLUMES

| 2015 SEASON      | MILK SUPPLIED<br>(MILLION kgMS) | PRODUCTION (000 MT) FINISHED PRODUCT |            |            |            |           |              |
|------------------|---------------------------------|--------------------------------------|------------|------------|------------|-----------|--------------|
|                  |                                 | WMP                                  | SMP        | BUTTER     | AMF        | BMP       | TOTAL        |
| JUN 14 TO AUG 14 | 127                             | 168                                  | 43         | 10         | 17         | 5         | 244          |
| SEP 14 TO NOV 14 | 643                             | 728                                  | 287        | 113        | 70         | 27        | 1,225        |
| DEC 14 TO FEB 15 | 521                             | 665                                  | 175        | 88         | 45         | 19        | 992          |
| MAR 15 TO MAY 15 | 323                             | 440                                  | 83         | 42         | 32         | 13        | 611          |
| <b>TOTAL</b>     | <b>1,614</b>                    | <b>2,000</b>                         | <b>589</b> | <b>254</b> | <b>164</b> | <b>63</b> | <b>3,071</b> |

| 2014 SEASON      | MILK SUPPLIED<br>(MILLION kgMS) | PRODUCTION (000 MT) FINISHED PRODUCT |            |            |            |           |              |
|------------------|---------------------------------|--------------------------------------|------------|------------|------------|-----------|--------------|
|                  |                                 | WMP                                  | SMP        | BUTTER     | AMF        | BMP       | TOTAL        |
| JUN 13 TO AUG 13 | 121                             | 168                                  | 35         | 11         | 13         | 4         | 231          |
| SEP 13 TO NOV 13 | 621                             | 740                                  | 254        | 108        | 61         | 24        | 1,187        |
| DEC 13 TO FEB 14 | 530                             | 663                                  | 187        | 93         | 46         | 20        | 1,009        |
| MAR 14 TO MAY 14 | 313                             | 453                                  | 58         | 37         | 29         | 11        | 588          |
| <b>TOTAL</b>     | <b>1,584</b>                    | <b>2,025</b>                         | <b>534</b> | <b>248</b> | <b>149</b> | <b>59</b> | <b>3,015</b> |

| 2013 SEASON      | MILK SUPPLIED<br>(MILLION kgMS) | PRODUCTION (000 MT) FINISHED PRODUCT |            |            |            |           |              |
|------------------|---------------------------------|--------------------------------------|------------|------------|------------|-----------|--------------|
|                  |                                 | WMP                                  | SMP        | BUTTER     | AMF        | BMP       | TOTAL        |
| JUN 12 TO AUG 12 | 117                             | 171                                  | 24         | 9          | 13         | 3         | 221          |
| SEP 12 TO NOV 12 | 598                             | 642                                  | 294        | 119        | 63         | 25        | 1,143        |
| DEC 12 TO FEB 13 | 498                             | 541                                  | 232        | 86         | 64         | 22        | 945          |
| MAR 13 TO MAY 13 | 251                             | 340                                  | 63         | 31         | 27         | 10        | 472          |
| <b>TOTAL</b>     | <b>1,463</b>                    | <b>1,694</b>                         | <b>614</b> | <b>245</b> | <b>168</b> | <b>61</b> | <b>2,781</b> |

# ATTACHMENT 2

## SALES VOLUMES

| 2015 SEASON      | SHIPMENTS (000 MT) OF FINISHED PRODUCT |            |            |            |           |              |
|------------------|----------------------------------------|------------|------------|------------|-----------|--------------|
|                  | WMP                                    | SMP        | BUTTER     | AMF        | BMP       | TOTAL SALES  |
| AUG 14 TO OCT 14 | 253                                    | 35         | 24         | 20         | 5         | 337          |
| NOV 14 TO JAN 15 | 671                                    | 208        | 83         | 48         | 15        | 1,025        |
| FEB 15 TO APR 15 | 519                                    | 150        | 60         | 33         | 14        | 775          |
| MAY 15 TO JUL 15 | 431                                    | 117        | 46         | 38         | 16        | 648          |
| AUG 15 TO OCT 15 | 127                                    | 80         | 41         | 25         | 13        | 286          |
| <b>TOTAL</b>     | <b>2,000</b>                           | <b>589</b> | <b>254</b> | <b>164</b> | <b>63</b> | <b>3,071</b> |

| 2014 SEASON      | SHIPMENTS (000 MT) OF FINISHED PRODUCT |            |            |            |           |              |
|------------------|----------------------------------------|------------|------------|------------|-----------|--------------|
|                  | WMP                                    | SMP        | BUTTER     | AMF        | BMP       | TOTAL SALES  |
| AUG 13 TO OCT 13 | 309                                    | 66         | 5          | 14         | 8         | 402          |
| NOV 13 TO JAN 14 | 676                                    | 169        | 86         | 40         | 15        | 986          |
| FEB 14 TO APR 14 | 548                                    | 102        | 73         | 36         | 16        | 776          |
| MAY 14 TO JUL 14 | 402                                    | 118        | 57         | 41         | 14        | 633          |
| AUG 14 TO OCT 14 | 89                                     | 79         | 27         | 18         | 5         | 218          |
| <b>TOTAL</b>     | <b>2,025</b>                           | <b>534</b> | <b>248</b> | <b>149</b> | <b>59</b> | <b>3,015</b> |

| 2013 SEASON      | SHIPMENTS (000 MT) OF FINISHED PRODUCT |            |            |            |           |              |
|------------------|----------------------------------------|------------|------------|------------|-----------|--------------|
|                  | WMP                                    | SMP        | BUTTER     | AMF        | BMP       | TOTAL SALES  |
| AUG 12 TO OCT 12 | 197                                    | 57         | 16         | 17         | 10        | 297          |
| NOV 12 TO JAN 13 | 559                                    | 225        | 70         | 54         | 19        | 928          |
| FEB 13 TO APR 13 | 561                                    | 156        | 61         | 48         | 11        | 838          |
| MAY 13 TO JUL 13 | 312                                    | 111        | 50         | 39         | 14        | 527          |
| AUG 13 TO OCT 13 | 65                                     | 64         | 47         | 9          | 6         | 191          |
| <b>TOTAL</b>     | <b>1,694</b>                           | <b>614</b> | <b>245</b> | <b>168</b> | <b>61</b> | <b>2,781</b> |

# ATTACHMENT 3

## AVERAGE NUMBER OF MONTHS PRIOR TO SHIPMENT THAT PRICES WERE STRUCK

| 2015 SEASON      | AVERAGE NUMBER OF MONTHS PRIOR TO SHIPMENT |            |            |            |            |
|------------------|--------------------------------------------|------------|------------|------------|------------|
|                  | WMP                                        | SMP        | BUTTER     | AMF        | BMP        |
| AUG 14 TO OCT 14 | 2.6                                        | 2.9        | 3.0        | 3.0        | 3.1        |
| NOV 14 TO JAN 15 | 3.0                                        | 3.0        | 2.8        | 3.2        | 2.6        |
| FEB 15 TO APR 15 | 3.0                                        | 3.1        | 2.7        | 3.0        | 2.5        |
| MAY 15 TO JUL 15 | 2.8                                        | 2.6        | 2.5        | 2.6        | 2.4        |
| AUG 15 TO OCT 15 | 3.1                                        | 3.2        | 3.0        | 3.1        | 3.2        |
|                  | <b>2.9</b>                                 | <b>3.0</b> | <b>2.8</b> | <b>3.0</b> | <b>2.7</b> |

| 2014 SEASON      | AVERAGE NUMBER OF MONTHS PRIOR TO SHIPMENT |            |            |            |            |
|------------------|--------------------------------------------|------------|------------|------------|------------|
|                  | WMP                                        | SMP        | BUTTER     | AMF        | BMP        |
| AUG 13 TO OCT 13 | 2.6                                        | 2.4        | 2.7        | 2.7        | 2.6        |
| NOV 13 TO JAN 14 | 2.9                                        | 2.7        | 2.5        | 2.9        | 2.6        |
| FEB 14 TO APR 14 | 2.8                                        | 2.6        | 2.9        | 2.7        | 2.7        |
| MAY 14 TO JUL 14 | 2.7                                        | 2.5        | 2.5        | 2.6        | 2.4        |
| AUG 14 TO OCT 14 | 3.3                                        | 3.0        | 2.7        | 2.9        | 3.2        |
|                  | <b>2.8</b>                                 | <b>2.6</b> | <b>2.6</b> | <b>2.8</b> | <b>2.6</b> |

| 2013 SEASON      | AVERAGE NUMBER OF MONTHS PRIOR TO SHIPMENT |            |            |            |            |
|------------------|--------------------------------------------|------------|------------|------------|------------|
|                  | WMP                                        | SMP        | BUTTER     | AMF        | BMP        |
| AUG 12 TO OCT 12 | 2.7                                        | 2.9        | 2.5        | 3.0        | 2.7        |
| NOV 12 TO JAN 13 | 2.7                                        | 3.0        | 2.5        | 3.1        | 3.1        |
| FEB 13 TO APR 13 | 2.7                                        | 2.9        | 2.9        | 3.0        | 2.8        |
| MAY 13 TO JUL 13 | 3.2                                        | 2.9        | 2.5        | 2.9        | 2.5        |
| AUG 13 TO OCT 13 | 2.5                                        | 2.8        | 2.7        | 2.8        | 2.9        |
|                  | <b>2.8</b>                                 | <b>2.9</b> | <b>2.7</b> | <b>3.0</b> | <b>2.8</b> |

The tables on the next page supplement that above by providing information on the average percentages of sales contracted in each of months 1 to 5 prior to shipment in the 2013 to 2015 seasons.

# ATTACHMENT 3

## CONTINUED

### AVERAGE % OF SALES CONTRACTED IN EACH MONTH PRIOR TO SHIPMENT

| 2015 SEASON | AVERAGE PERCENTAGE OF SALES CONTRACTED IN EACH OF MONTHS 1- 5 PRIOR TO SHIPMENT |     |        |     |     |
|-------------|---------------------------------------------------------------------------------|-----|--------|-----|-----|
|             | WMP                                                                             | SMP | BUTTER | AMF | BMP |
| 1           | 8%                                                                              | 6%  | 9%     | 7%  | 10% |
| 2           | 33%                                                                             | 34% | 33%    | 32% | 41% |
| 3           | 27%                                                                             | 31% | 36%    | 31% | 26% |
| 4           | 20%                                                                             | 19% | 18%    | 19% | 20% |
| 5           | 12%                                                                             | 10% | 4%     | 11% | 3%  |

| 2014 SEASON | AVERAGE PERCENTAGE OF SALES CONTRACTED IN EACH OF MONTHS 1- 5 PRIOR TO SHIPMENT |     |        |     |     |
|-------------|---------------------------------------------------------------------------------|-----|--------|-----|-----|
|             | WMP                                                                             | SMP | BUTTER | AMF | BMP |
| 1           | 6%                                                                              | 11% | 6%     | 6%  | 10% |
| 2           | 39%                                                                             | 42% | 41%    | 39% | 36% |
| 3           | 31%                                                                             | 25% | 34%    | 29% | 34% |
| 4           | 16%                                                                             | 14% | 17%    | 18% | 16% |
| 5           | 9%                                                                              | 7%  | 2%     | 8%  | 4%  |

| 2013 SEASON | AVERAGE PERCENTAGE OF SALES CONTRACTED IN EACH OF MONTHS 1- 5 PRIOR TO SHIPMENT |     |        |     |     |
|-------------|---------------------------------------------------------------------------------|-----|--------|-----|-----|
|             | WMP                                                                             | SMP | BUTTER | AMF | BMP |
| 1           | 7%                                                                              | 5%  | 13%    | 5%  | 5%  |
| 2           | 40%                                                                             | 33% | 34%    | 32% | 38% |
| 3           | 33%                                                                             | 33% | 36%    | 30% | 32% |
| 4           | 14%                                                                             | 21% | 12%    | 21% | 22% |
| 5           | 8%                                                                              | 8%  | 5%     | 12% | 3%  |

# ATTACHMENT 4

## AVERAGE USD PRICES

| 2015 SEASON      | USD PER MT OF FINISHED PRODUCT |              |              |              |              |
|------------------|--------------------------------|--------------|--------------|--------------|--------------|
| SHIPMENT PERIOD  | WMP                            | SMP          | BUTTER       | AMF          | BMP          |
| AUG 14 TO OCT 14 | 3,130                          | 3,217        | 3,213        | 3,642        | 4,122        |
| NOV 14 TO JAN 15 | 2,694                          | 2,761        | 2,808        | 3,417        | 3,056        |
| FEB 15 TO APR 15 | 2,423                          | 2,487        | 3,217        | 3,922        | 2,713        |
| MAY 15 TO JUL 15 | 2,593                          | 2,482        | 3,338        | 3,781        | 2,351        |
| AUG 15 TO OCT 15 | 2,419                          | 1,938        | 2,733        | 3,072        | 1,919        |
|                  | <b>2,639</b>                   | <b>2,552</b> | <b>3,027</b> | <b>3,577</b> | <b>2,657</b> |

| 2014 SEASON      | USD PER MT OF FINISHED PRODUCT |              |              |              |              |
|------------------|--------------------------------|--------------|--------------|--------------|--------------|
| SHIPMENT PERIOD  | WMP                            | SMP          | BUTTER       | AMF          | BMP          |
| AUG 13 TO OCT 13 | 4,923                          | 4,624        | 3,639        | 4,817        | 4,687        |
| NOV 13 TO JAN 14 | 5,023                          | 4,625        | 3,759        | 4,959        | 4,794        |
| FEB 14 TO APR 14 | 4,950                          | 4,938        | 3,985        | 5,417        | 5,050        |
| MAY 14 TO JUL 14 | 4,434                          | 4,363        | 4,283        | 4,654        | 4,595        |
| AUG 14 TO OCT 14 | 3,949                          | 3,792        | 3,530        | 3,961        | 4,231        |
|                  | <b>4,824</b>                   | <b>4,504</b> | <b>3,920</b> | <b>4,853</b> | <b>4,752</b> |

| 2013 SEASON      | USD PER MT OF FINISHED PRODUCT |              |              |              |              |
|------------------|--------------------------------|--------------|--------------|--------------|--------------|
| SHIPMENT PERIOD  | WMP                            | SMP          | BUTTER       | AMF          | BMP          |
| AUG 12 TO OCT 12 | 2,740                          | 2,780        | 2,921        | 2,903        | 2,531        |
| NOV 12 TO JAN 13 | 3,086                          | 3,117        | 3,191        | 3,030        | 2,925        |
| FEB 13 TO APR 13 | 3,271                          | 3,511        | 3,431        | 3,214        | 3,552        |
| MAY 13 TO JUL 13 | 4,219                          | 4,608        | 4,189        | 4,219        | 4,317        |
| AUG 13 TO OCT 13 | 5,144                          | 4,726        | 3,767        | 4,871        | 4,562        |
|                  | <b>3,394</b>                   | <b>3,625</b> | <b>3,550</b> | <b>3,450</b> | <b>3,457</b> |

# ATTACHMENT 5

## AVERAGE USD:NZD CONVERSION AND SPOT RATES

Note that the spot data is based on the weighted average conversion rate that would have been achieved if the revenue collected during the shipping period was converted at the average spot rate in the month of collection. Data in Farmgate Milk Price Statements prior to 2014 was based on the average spot rate in the month of shipment.

| 2015 SEASON                            | FONTERRA'S AVERAGE<br>CONVERSION RATE | SPOT<br>EXCHANGE RATE |
|----------------------------------------|---------------------------------------|-----------------------|
| AUG 14 TO OCT 14                       | 0.8035                                | 0.7848                |
| NOV 14 TO JAN 15                       | 0.7957                                | 0.7628                |
| FEB 15 TO APR 15                       | 0.7943                                | 0.7488                |
| MAY 15 TO JUL 15                       | 0.7706                                | 0.6749                |
| AUG 15 TO OCT 15                       | 0.7625                                | 0.6603 <sup>1</sup>   |
| <b>REVENUE-WEIGHTED ANNUAL AVERAGE</b> | <b>0.7882</b>                         | <b>0.7329</b>         |

| 2014 SEASON                            | FONTERRA'S AVERAGE<br>CONVERSION RATE | SPOT<br>EXCHANGE RATE |
|----------------------------------------|---------------------------------------|-----------------------|
| AUG 13 TO OCT 13                       | 0.8083                                | 0.8283                |
| NOV 13 TO JAN 14                       | 0.7997                                | 0.8263                |
| FEB 14 TO APR 14                       | 0.8078                                | 0.8580                |
| MAY 14 TO JUL 14                       | 0.8194                                | 0.8595                |
| AUG 14 TO OCT 14                       | 0.8285                                | 0.7998                |
| <b>REVENUE-WEIGHTED ANNUAL AVERAGE</b> | <b>0.8086</b>                         | <b>0.8396</b>         |

| 2013 SEASON                            | FONTERRA'S AVERAGE<br>CONVERSION RATE | SPOT<br>EXCHANGE RATE |
|----------------------------------------|---------------------------------------|-----------------------|
| AUG 12 TO OCT 12                       | 0.7874                                | 0.8191                |
| NOV 12 TO JAN 13                       | 0.8015                                | 0.8357                |
| FEB 13 TO APR 13                       | 0.8026                                | 0.8334                |
| MAY 13 TO JUL 13                       | 0.7919                                | 0.7909                |
| AUG 13 TO OCT 13                       | 0.8043                                | 0.8221                |
| <b>REVENUE-WEIGHTED ANNUAL AVERAGE</b> | <b>0.7986</b>                         | <b>0.8214</b>         |

<sup>1</sup> The spot exchange rate for the period from August to October 2015 equals the spot rate at 9am on 31 July 2015.

# GLOSSARY

In this Statement, unless the context otherwise requires, the following terms have the meanings set out next to them:

**AMF** means anhydrous milk fat.

**Approved Adjustments** means an amount approved by the Fonterra Board to be paid for milk in addition to, or to be subtracted from, the amount calculated under the Farmgate Milk Price Manual, but excludes the Milk Price Adjustment.

**BMP** means buttermilk powder.

**Detailed Rules** means the detailed rules for calculating the Farmgate Milk Price as set out in the Manual.

**DIRA** means the Dairy Industry Restructuring Act 2001, which authorised Fonterra's formation and regulates its activities.

**Farmgate Milk Price** means Fonterra's Farmgate Milk Price as determined under the Manual.

**Farmgate Milk Price Capital Costs** are defined in the Manual.

**Farmgate Milk Price Cash Costs** are defined in the Manual.

**Farmgate Milk Price Manual** or **Manual** means Fonterra's Farmgate Milk Price Manual.

**Financial year** means Fonterra's financial year, which runs from 1 August to the following 31 July.

**Fonterra** means Fonterra Co-operative Group Limited.

**GlobalDairyTrade** or **GDT** means the electronic auction platform that is used to sell commodity dairy products.

**Independent Processors** means entities which are independent of Fonterra and process raw milk.

**kgMS** means kilograms of milksolids.

**Methodologies** means the methodologies for calculating the Farmgate Milk Price as set out in the Manual.

**Milk Price Model** means the model used to calculate the Farmgate Milk Price set out in the Manual.

**Milk Price Principles** or **Principles** means the Milk Price Principles set out in Fonterra's Constitution.

**MT** means metric tonnes.

**NZD** means New Zealand dollars.

**Season** means the 12-month period from 1 June to the following 31 May.

**SMP** means skim milk powder.

**Specialty Milk** means milk that has special properties such as organic milk.

**Raw Milk Regulations** means the Dairy Industry Restructuring (Raw Milk) Regulations 2001 or, where applicable, the Dairy Industry Restructuring (Raw Milk) Regulations 2012.

**Reference Commodity Products** means the commodity products used to calculate the Farmgate Milk Price, comprising WMP, SMP, BMP, AMF and butter.

**USD** means United States dollars.

**Winter Milk** means milk supplied by farmers in the months of May, June and July.

**WMP** means whole milk powder.





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