

# FARMGATE **MILK PRICE STATEMENT**

# INTRODUCTION

<b>INTRODUCTION</b>	<b>1</b>
<b>FARMGATE MILK PRICE FOR THE 2017 SEASON</b>	<b>2</b>
<b>FARMGATE MILK PRICE REVENUE AND COSTS</b>	<b>3</b>
MILK SUPPLY, PRODUCTION AND SALES VOLUMES	4
PRICES	5
LACTOSE	6
FARMGATE MILK PRICE CASH COSTS	6
FARMGATE MILK PRICE CAPITAL COSTS	7
CALCULATION OF BENCHMARK WEIGHTED AVERAGE COST OF CAPITAL (WACC)	8
<b>FARMGATE MILK PRICE MANUAL CHANGES</b>	<b>9</b>
<b>CHANGES IN APPROACH TO THE CALCULATION</b>	<b>10</b>
<b>APPENDIX 1</b>	<b>11</b>
FARMGATE MILK PRICE OVERVIEW	
<b>APPENDIX 2</b>	<b>13</b>
INDEPENDENT ASSURANCE REPORT	
<b>ATTACHMENT 1</b>	<b>15</b>
MILK SUPPLIED AND PRODUCTION VOLUMES	
<b>ATTACHMENT 2</b>	<b>16</b>
SALES VOLUMES	
<b>ATTACHMENT 3</b>	<b>17</b>
AVERAGE NUMBER OF MONTHS PRIOR TO SHIPMENT THAT PRICES WERE STRUCK	
<b>ATTACHMENT 4</b>	<b>19</b>
AVERAGE USD PRICES	
<b>ATTACHMENT 5</b>	<b>20</b>
AVERAGE USD:NZD CONVERSION AND SPOT RATES	
<b>GLOSSARY</b>	<b>21</b>

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 2017 (2017 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 2017 Season has been derived in accordance with the Principles, Methodologies and Detailed Rules in Fonterra's Farmgate Milk Price Manual, dated 1 August 2016. 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 an unaudited 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 2017 Season.

Numbers in this Statement have been rounded and, as a result, some tables may not exactly total or sum to 100 per cent.<sup>2</sup> 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> Capitalised terms in this Statement are defined in the glossary.

<sup>2</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 2017 SEASON

This section sets out the Farmgate Milk Price for the 2017 Season. It also describes the way the Farmgate Milk Price relates to Fonterra's financial year ended 31 July 2017.

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\$9.349 billion** for the 2017 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 (1.526 billion kilograms of milk solids (kgMS)), or NZD\$6.13 per kgMS. This is referred to below as the Average Farmgate Milk Price calculated under the Manual.

The cost of New Zealand-sourced milk, as disclosed in Fonterra's most recent financial statements, is NZD\$9.471 billion. The NZD\$122 million difference between this amount and the Farmgate Milk Price of NZD\$9.349 billion primarily reflects the following two factors:

- The financial statements report the cost of milk acquired during the financial year comprising the 12-month period ending 31 July 2017. 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 2017.

**TABLE 1: RECONCILIATION BETWEEN AVERAGE FARMGATE MILK PRICE CALCULATED UNDER THE MANUAL AND THE ANNOUNCED FARMGATE MILK PRICE**

	\$/kgMS
Average Farmgate Milk Price calculated under the Manual	6.13
Adjustment for portion of winter milk premiums paid, and other items	(0.01)
<b>Announced Farmgate Milk Price (average price for milk supplied on standard terms of supply)</b>	<b>6.12</b>

- A commodity manufacturer of milk powders is unlikely to pay premiums for Specialty Milk (such as organic milk) or to pay as high a premium for Winter Milk that an integrated processor such as Fonterra would pay. Such payments are therefore a cost of New Zealand-sourced milk for Fonterra but are not a component of the Farmgate Milk Price.

**AVERAGE PRICE FOR MILK SUPPLIED ON STANDARD TERMS OF SUPPLY**

The Average Farmgate Milk Price calculated under the Manual differs slightly from the average price paid by Fonterra for milk supplied on standard terms of supply by Fonterra's supplier-shareholders.

The largest driver of the difference is the portion of the premiums paid for Winter Milk, equal to the premium that a commodity manufacturer would be willing to pay for Winter Milk. That premium is funded from the aggregate amount calculated under the Manual, and slightly reduces the amount available to pay for milk supplied on standard terms.

The reduction due to Winter Milk premiums is partially offset by an increase due to instances where Fonterra has paid less for milk supplied on non-standard terms (for example, for non-share backed supply under deferred share purchase agreements) or where milk quality demerits have been applied.

Table 1 above shows the net impact of these adjustments is that the average price for milk supplied on standard terms of supply is NZD\$6.12 per kgMS. Because this is the price that is of most relevance to most suppliers, it is the price that is referenced in Fonterra's general public communications relating to the 2017 Season, including in Fonterra's most recent financial statements and associated public announcements. For convenience, it is referred to in those communications as the Farmgate Milk Price.

# FARMGATE MILK PRICE REVENUE AND COSTS

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

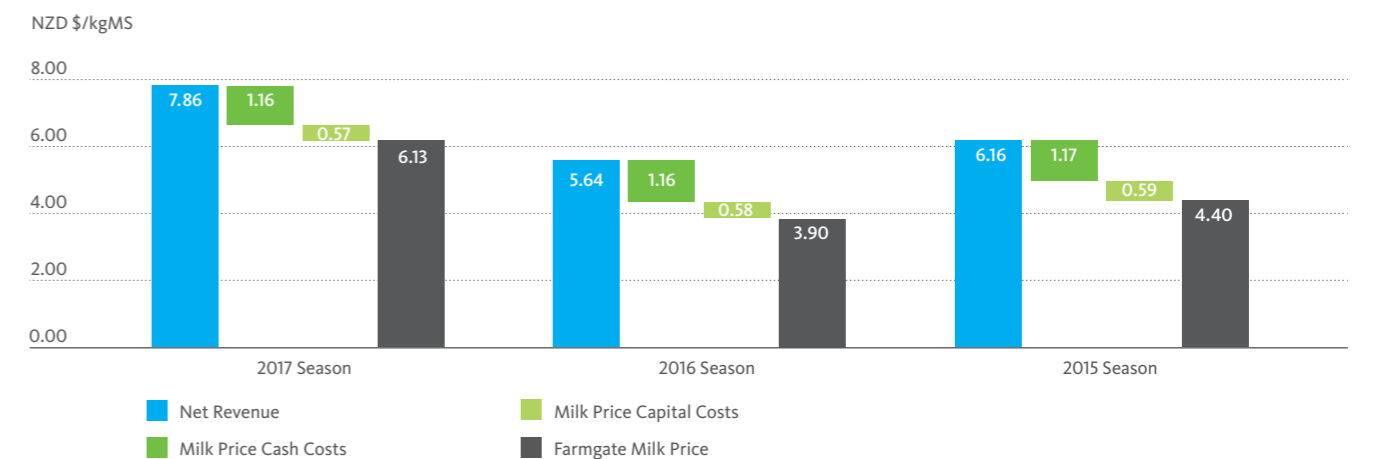
Table 2 below summarises the Farmgate Milk Price for the milk supplied in the 2015, 2016 and 2017 Seasons. Both Table 2 and Figure 1 below show that changes in the Farmgate Milk Price over the past three seasons have been driven mainly by changes in commodity prices converted into NZD.

The first three subsections below describe the key factors that influence revenue. Key determinants of the movements in average costs between the 2016 and the 2017 Seasons are explained in later subsections.

**TABLE 2: FARMGATE MILK PRICE SUMMARY**

SEASON	2017 NZD \$ MILLION	2017 \$/kgMS	2016 NZD \$ MILLION	2016 \$/kgMS	2015 NZD \$ MILLION	2015 \$/kgMS	2017/2016 % CHANGE (\$/kgMS)	2016/2015 % CHANGE (\$/kgMS)
Farmgate Milk Price Revenue	12,400	8.13	9,134	5.83	10,540	6.53	39.4%	-10.7%
Lactose	(415)	(0.27)	(302)	(0.19)	(603)	(0.37)	41.3%	-48.4%
<b>Net Revenue</b>	<b>11,985</b>	<b>7.86</b>	<b>8,832</b>	<b>5.64</b>	<b>9,937</b>	<b>6.16</b>	<b>39.3%</b>	<b>-8.4%</b>
Farmgate Milk Price Cash Costs	(1,763)	(1.16)	(1,815)	(1.16)	(1,889)	(1.17)	-0.3%	-1.0%
Farmgate Milk Price Capital Costs <sup>3</sup>	(873)	(0.57)	(915)	(0.58)	(952)	(0.59)	-2.1%	-0.9%
<b>Total Costs</b>	<b>(2,636)</b>	<b>(1.73)</b>	<b>(2,731)</b>	<b>(1.74)</b>	<b>(2,841)</b>	<b>(1.76)</b>	<b>-0.9%</b>	<b>-1.0%</b>
Farmgate Milk Price	9,349	6.13	6,101	3.90	7,096	4.40	57.3%	-11.4%
Million kgMS		1,526		1,566		1,614	-2.6%	-3.0%

**FIGURE 1: CHANGES IN THE FARMGATE MILK PRICE SEASONS: 2015-2017**



<sup>3</sup> Includes depreciation, tax and capital charge.

# FARMGATE MILK PRICE REVENUE AND COSTS

CONTINUED

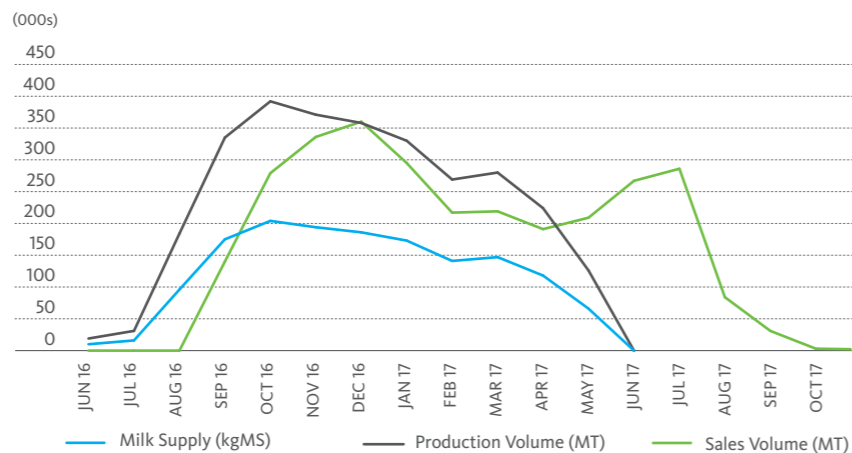
## MILK SUPPLY, PRODUCTION AND SALES VOLUMES

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.

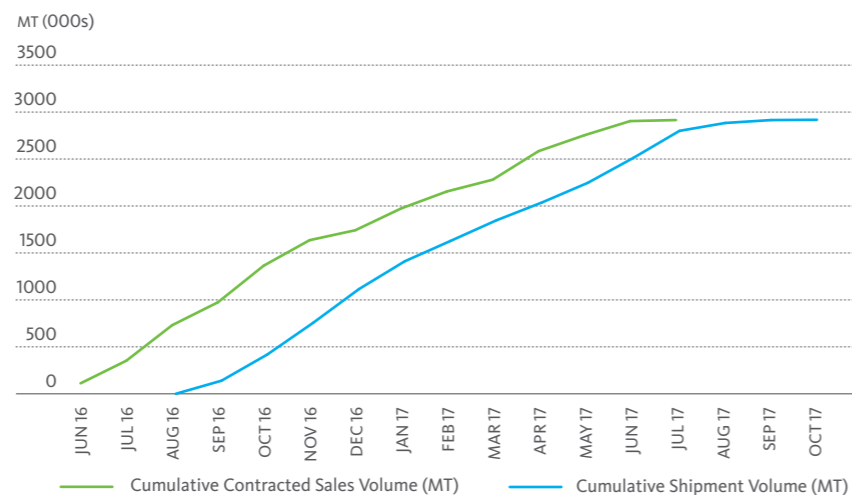
Figure 2 shows the relationship between when milk is collected during a season (the blue line), the volume of products manufactured from that milk (the grey line) and when that product is shipped (the green line). The key points to note are as follows:

- Milk supplied during the 2017 Season comprised 1.526 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.
- 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 3.

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



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



Attachment 2 sets out sales volumes by quarter for each of the past three seasons. 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 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>4</sup>. Attachment 3 sets out the average number of months prior to shipment that prices were struck 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.

<sup>4</sup> For each of the 2015, 2016 and 2017 Seasons, approximately 7 per cent of Fonterra's sales of Reference Commodity Products were sold under contracts with more than 5 months between the price being set and shipment occurring.

**TABLE 3: WEIGHTED AVERAGE USD CONTRACT PRICE 2015 – 2017 SEASONS**

WEIGHTED AVERAGE PRICE (USD) PER MT	2017	2016	2015	2017/2016 % CHANGE	2016/2015 % CHANGE
WMP	2,854	2,111	2,639	35.2%	-20.0%
SMP	2,216	1,803	2,552	22.9%	-29.4%
Butter	4,221	2,830	3,027	49.2%	-6.5%
AMF	5,076	3,227	3,577	57.3%	-9.8%
BMP	2,211	1,723	2,657	28.3%	-35.2%
				<b>36.1%</b>	<b>-20.1%</b>

**2017 SEASON AVERAGE PRICES WERE HIGHER THAN 2016 SEASON BY**

↑36.1%

## PRICES

Between the 2012 and 2016 Seasons, GDT was the sole source of prices for WMP, SMP and AMF, and was a primary reference point for BMP and butter. Non-GDT contracts Fonterra entered into were also used to establish prices for butter and BMP.

For the 2017 Season, non-GDT contracts were also used to establish prices for WMP, SMP and AMF. The relevant contracts were for product of a similar specification and sold on similar terms to product sold on GDT.

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 (2,599,000 MT) accounted for 89 per cent of the Farmgate Milk Price production of Reference Commodity Products (2,918,000 MT) in the 2017 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 3 above shows the weighted average USD contract prices of Reference Commodity Products for the past three seasons. It shows that prices for the Reference Commodity Products increased on average by 36.1 per cent between the 2016 Season and the 2017 Season, compared to a decrease of 20.1 per cent between the 2015 Season and the 2016 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 Farmgate Milk Price of volatility in

the NZD, 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.

Table 4 shows that Fonterra's hedging policy resulted in an average foreign exchange conversion rate for the 2017 Season of USD:NZD 0.6924 against an average spot rate of USD:NZD 0.7171. This resulted in an increase in the Farmgate Milk Price of 28 cents relative to translation at the spot exchange rate. In comparison:

- In the 2015 and 2016 Seasons, hedging activities resulted in an average decrease in the Farmgate Milk Price of 37 cents relative to translation at the spot exchange rate.
- In the Seasons from 2011 to 2014, hedging activities resulted in an average increase in the Farmgate Milk Price of 46 cents per kgMS relative to translation at the spot exchange rate.

Attachment 5 on page 20 shows the average foreign exchange conversion rate (USD:NZD) for the Farmgate Milk Price Revenue for each quarter in the 2015 to 2017 Seasons, based on Fonterra's actual hedging contracts in place, compared to the weighted average spot exchange rate for the quarter.

# FARMGATE MILK PRICE REVENUE AND COSTS

CONTINUED

As at 31 July 2017, Fonterra had foreign exchange contracts in place for approximately 71 per cent of the USD equivalent operating cash flow exposure expected to impact on the Farmgate Milk Price for the 2018 Season. If the balance was hedged based on a spot exchange rate of 0.7504,<sup>5</sup> the average USD:NZD conversion rate would be 73 cents.<sup>6</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 2 and Figure 1 as a deduction from Farmgate Milk Price Revenue.

Table 5 provides the basis for the cost of purchased lactose in the 2017, 2016 and 2015 Seasons.

## FARMGATE MILK PRICE CASH COSTS

Farmgate Milk Price Cash Costs reflect:

- Fonterra's actual collection costs, and supply chain costs benchmarked to Fonterra's actual costs.
- Costs associated with modern plants with sufficient capacity to process all milk collected by Fonterra, located on more than 20 reference manufacturing sites (most 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.

**TABLE 4: EFFECT OF HEDGING POLICY ON THE FARMGATE MILK PRICE FOR THE 2015 – 2017 SEASONS**

SEASON	2017		2016		2015	
	MILK PRICE	SPOT	MILK PRICE	SPOT	MILK PRICE	SPOT
Average Conversion Rate (USD:NZD)	0.6924	0.7171	0.7082	0.6820	0.7882	0.7312
Farmgate Milk Price (NZD/kgMS)	6.13	5.85	3.90	4.11	4.40	4.92
Effect of Hedging (NZD/kgMS)	0.28		-0.21		-0.52	

**TABLE 5: PURCHASED LACTOSE AND PRICE**

SEASON	2017	2016	2015	2017/2016 % CHANGE	2016/2015 % CHANGE
Purchased Lactose (000 Metric Tonnes)	351	350	346	0.5%	1.2%
Average Price (USD) per MT	809	640	1,406	26.3%	-54.5%
Total Lactose Purchases (USD \$m)	284	224	486	26.9%	-53.9%

- 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 reflect the cost of selling product on GDT and through the relevant off-GDT channels, having regard to the volume of product assumed to be sold through each sales channel.

Table 6 and Figure 4 summarise the major categories of cash costs and the sources of movements in each category between the 2016 and 2017 Seasons.

The movements in costs are inclusive of the following:

- Milk supply decreased by 3 per cent in the 2017 Season compared to the 2016 Season. By itself, this resulted in fixed costs being spread across lower supply, increasing cash costs per kgMS by 0.8 cents. This was offset by the savings

from the mothballing of 5 plants in response to reduced milk supply. The lower milk supply also resulted in a decrease in variable manufacturing and supply chain costs of NZD\$20 million or 1.3 cents.

- Costs increased by an average of 1.1 per cent, or 1.3 cents per kgMS, due to price movements, net of the impact of various cost saving initiatives.
- The NZD\$12 million decrease in costs relating to structural movements mainly reflects a reduction of NZD\$14 million or 0.9 cents per kgMS, relating to savings arising out of the Velocity transformation programme that could reasonably be expected to also be realised by the Farmgate Milk Price business.

**TABLE 6: SUMMARY OF MOVEMENTS IN CASH COSTS**

NZD \$ MILLION	F16	VOLUME IMPACT <sup>7</sup>	COST / PRICE MOVEMENTS	STRUCTURAL CHANGES	ONE OFF	F17	% CHANGE DUE TO COST	TOTAL % CHANGE
Sales costs	108	(1)	3	(5)	-	106	2.9%	-1.9%
Variable manufacturing and supply chain costs	687	(20)	6	-	-	673	0.9%	-2.0%
Fixed manufacturing (including repairs and maintenance)/site overheads and supply chain costs	420	(15)	4	(3)	-	406	1.1%	-3.3%
Collection costs	349	(15)	1	4	-	339	0.3%	-2.8%
Other costs	252	-	5	(8)	(9)	239	1.9%	-5.1%
<b>Total Cash Costs</b>	<b>1,815</b>	<b>(51)</b>	<b>20</b>	<b>(12)</b>	<b>(9)</b>	<b>1,763</b>	<b>1.1%</b>	<b>-2.9%</b>
% movements		-2.8%	1.1%	-0.7%	-0.5%			

## FARMGATE MILK PRICE CAPITAL COSTS

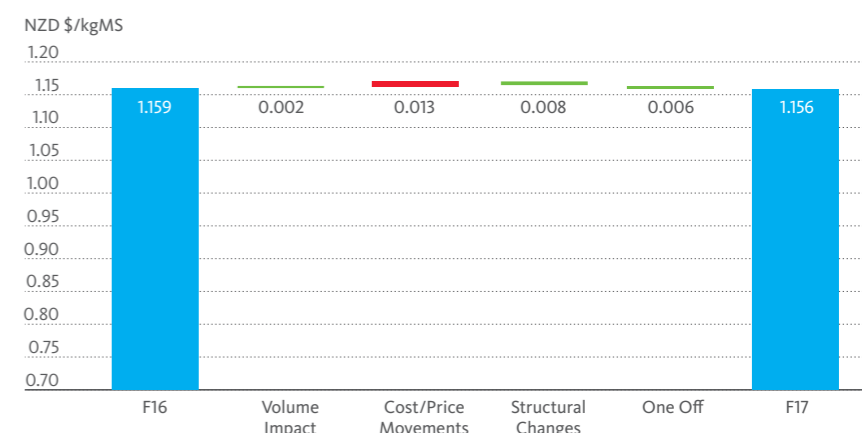
The Milk Price Model uses 'standard' plants to calculate both operating and plant-related capital costs. These plants have capacities that approximate Fonterra's average daily capacities for each type of plant and reflect current technology of the type typically employed across the industry.<sup>8</sup>

The standard plants are smaller than Fonterra's newest large manufacturing plants, such as the drier installed at Fonterra's Darfield Site in Canterbury in 2013 and the drier installed at Lichfield in 2016, 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.

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



- The capital charge is calculated in a manner that results in it growing each year approximately in line with 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.

<sup>5</sup> The spot exchange rate at 9am on 31 July 2017, the last working day of Fonterra's 2017 financial year.

<sup>6</sup> 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.

<sup>7</sup> Volume Impact considers only the change to milk solids collected in the 2017 Season on the 2016 Season cost base.

<sup>8</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 since 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 Pahiataua in 2015.

# FARMGATE MILK PRICE REVENUE AND COSTS

CONTINUED

Table 7 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 2017, 2016 and 2015 Seasons.

Two matters are relevant to a comparison of capital costs between the 2017 and 2016 Seasons:

- In the 2017 Season, the WACC was 5.6 per cent, down from 5.9 per cent in 2016. By itself, this change resulted in a reduction of NZD\$21 million in the capital charge on fixed assets, a reduction of NZD\$4 million in the charge on net working capital, and a reduction of NZD\$10 million in the tax charge, partially offset by an increase in depreciation expense of NZD\$7 million. The fixed asset-related reductions were partially offset by an increase in capital costs due to the 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.
- NZD\$14 million of the reduction in the WACC charge on net working capital between 2016 and 2017 is due to the reduction in average net working capital, which is primarily attributable to the later timing, on average, of payments for milk in 2017 relative to 2016, with a smaller contribution from the earlier receipt of cash due to sales on average occurring earlier in 2017 than 2016.

**TABLE 7: CAPITAL COSTS, BOOK VALUE OF FIXED ASSET BASE AND AVERAGE NET WORKING CAPITAL**

NZD \$ MILLION	2017	2016	2015
WACC rate % (post-tax)	5.6%	5.9%	6.1%
Depreciation	265	266	263
WACC Charge – fixed assets	398	407	393
WACC Charge – net working capital	55	73	120
Tax	155	169	176
Total capital costs	873	915	952
Total fixed assets (book value)	7,195	6,961	6,505
Average Net Working Capital	913	1,308	2,335

## 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>9</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 from 7.7 per cent for the 2012 Season to 6.8 per cent for the 2014 Season.

In the 2015 Season, the WACC methodology was changed to incorporate a 'specific risk premium' of 0.15 per cent and a reduction in the asset beta from 0.45 to 0.38, on the basis of a review by an independent expert, Associate Professor Alastair Marsden of the University of Auckland. At the request of the Commerce Commission Dr Marsden undertook further analysis in the 2016 and 2017 Seasons, the result of which was to confirm his previous recommendation. The 2017 Season WACC was 5.6 per cent and the 2018 Season WACC will be 5.4 per cent, both reflecting further reductions in five-year average government stock rates.

# 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.<sup>10</sup> 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. A review of overhead costs was undertaken in the 2015 and 2016 Seasons and the results were incorporated into the 2016 Farmgate Milk Price.

As noted in Appendix 1, the Commerce Commission's final report on the 2016/17 Manual was released on 14 December 2016.

The Board approved a number of amendments to the Manual in July 2017, which will take effect from the 2018 Season. The updated version of the Manual is available on [www.fonterra.com](http://www.fonterra.com). There are no amendments that could be considered substantive.

<sup>9</sup> See, for example, <http://www.comcom.govt.nz/regulated-industries/input-methodologies-2/input-methodologies-review/cost-of-capital-im-review/>

<sup>10</sup> Rule 3 in Part B of the Manual.

# CHANGES IN APPROACH TO THE CALCULATION

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 Farmgate Milk Price calculation.

One Manual amendment resulted in materially different values of inputs into the Farmgate Milk Price calculation for the 2017 Season. This amendment was disclosed in the 2016 Fonterra Farmgate Milk Price Statement:

- An amendment to the definition of Qualifying Reference Sales in Part C of the Manual. The practical implication of this change aligns the approach used to determine prices for WMP, SMP and AMF to the approach currently used for butter and BMP, by including sales undertaken off the GDT platform of similar specification product and sold on similar terms to GDT sales. The primary reason for making this change was that it has become increasingly clear in recent years that GDT sets the 'base' price for sales of Reference Commodity Products, with sales undertaken off GDT mostly being transacted at higher prices. This change has resulted in an increase in the Farmgate Milk Price for the 2017 Season that is 6 cents per kgMS.

# APPENDIX 1 FARMGATE MILK PRICE OVERVIEW

## RATIONALE FOR FARMGATE MILK PRICE

Fonterra currently collects around 82 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 Farmgate Milk Price that enables total returns to be allocated between payments for milk and returns on the capital invested by Fonterra farmer shareholders and by unit holders in the Fonterra Shareholders' Fund.

## FARMGATE MILK PRICE METHODOLOGY

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 reflect USD prices achieved on the twice-monthly GlobalDairyTrade (GDT) trading events, or prices achieved by Fonterra in off-GDT sales, all of which use the most recent relevant GDT price as a key reference point. Selling prices are converted to NZD using Fonterra's actual average monthly foreign exchange conversion rate<sup>11</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 approximately 74 per cent of Fonterra's total New Zealand ingredients production in the 2017 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 2017 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: Scott St John (Chair) and David Jackson, who are appointed Fonterra directors; Ashley Waugh, who is a farmer-elected Fonterra director; and Andrew Wallace and Bill Donaldson, who are nominees of the Fonterra Shareholders' Council.

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>11</sup> From the 2017 Season, a mixture of GDT and non-GDT prices were used for all Reference Commodity Product prices.

# APPENDIX 1 FARMGATE MILK PRICE OVERVIEW CONTINUED

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.

The Fonterra Board is responsible for the forecast of the annual Farmgate Milk Price.

## 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 Farmgate 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 Farmgate Milk Price.

The purpose of Subpart 5A is to promote the setting of a Farmgate 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 Farmgate Milk Price are consistent with this purpose:

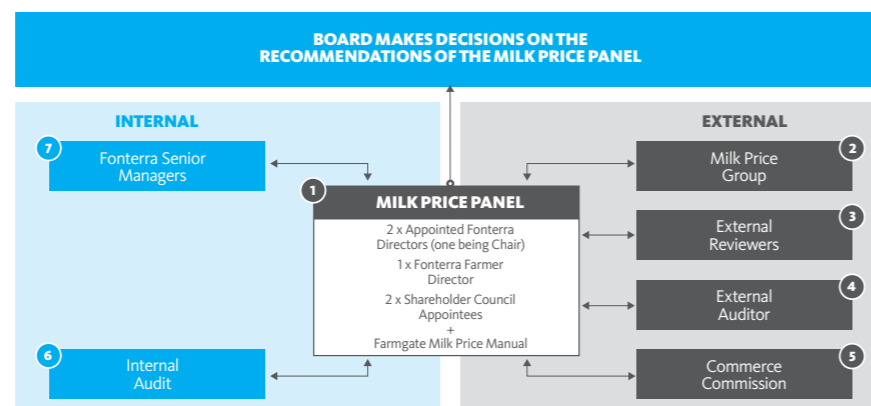
- The Commerce Commission's final report on the Manual for the 2016/17 Season was released on 14 December 2016 and can be found at <http://www.comcom.govt.nz/regulated-industries/dairy-industry/review-of-fonterra-s-farm-gate-milk-price-and-manual/statutory-review-of-milk-price-calculation-201617-season/>
- The final report on the F17 Farmgate Milk Price calculation was released on 15 September 2017 and can be found at <http://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-201617-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 2016 (the Manual) by the Milk Price Group (MPG) in deriving the aggregate amount payable for New Zealand supplied milk for the season ended 31 May 2017 of NZD\$9.349 billion, which is NZD\$6.13 on a per kilogram of milk solids (kgMS) basis (the Farmgate Milk Price). We have confirmed the balances contained in the Farmgate Milk Price Statement for the season ended 31 May 2017 (the Farmgate Milk Price Statement) are correctly extracted from the calculation of the Farmgate Milk Price.

## Information other than our scope and the assurance report

The Directors are responsible for the Farmgate Milk Price Statement. Our opinion on the Farmgate Milk Price Statement does not cover information other than the balances we confirm have been correctly extracted from the calculation of the Farmgate Milk Price and we do not express any form of assurance conclusions on the other information.

In connection with our scope, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the Farmgate Milk Price Statement or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed on the other information that we obtained prior to the date of this assurance report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

## Milk Price Group's Responsibilities

The MPG are responsible for the calculation of the Farmgate Milk Price based upon the Manual, ensuring the 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 Farmgate Milk Price Statement.

## Our Independence and Quality Control

We have complied with the independence and other ethical requirements of Professional and Ethical Standard 1 (Revised) issued by the New Zealand Auditing and Assurance Standards Board, which is founded on the fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Professional and Ethical Standard 3 (Amended) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

## Independent Auditors' Responsibilities

We are responsible for expressing an independent opinion on whether the MPG has complied, in all material respects, with the Principles, Methodologies and Detailed Rules set out in the Manual in deriving the Farmgate Milk Price, and that the balances, in all material respects, in the Farmgate Milk Price Statement have been correctly extracted from those calculations, 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, the MPG has complied, in all material respects, with Principles, Methodologies and Detailed Rules of the Manual in deriving the Farmgate Milk Price, and that the balances, in all material respects, in the Farmgate Milk Price Statement have been correctly extracted from those calculations.

## Inherent Limitations

Our engagement includes examining, on a test basis, evidence relevant to the amounts used to derive the Farmgate Milk Price and the balances in the Farmgate Milk Price Statement. It also includes assessing the significant assumptions, estimates and judgements made by the MPG in the calculation of the 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.



## APPENDIX 2

INDEPENDENT ASSURANCE REPORT  
TO THE DIRECTORS OF FONTERRA CO-OPERATIVE GROUP LIMITED CONTINUED

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

**Independent Assurance 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 aggregate amount payable for New Zealand-supplied milk for the season ended 31 May 2017 of NZD\$9.349 billion, which is NZD\$6.13 on a per kgMS basis. We have confirmed the balances contained in this Farmgate Milk Price Statement for the season ended 31 May 2017 are correctly extracted, in all material respects, from the 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, New Zealand

23 September 2017

ATTACHMENT 1  
MILK SUPPLIED AND  
PRODUCTION VOLUMES

2017 SEASON	MILK SUPPLIED (MILLION kgMS)	PRODUCTION (000 MT) OF FINISHED PRODUCT					
		WMP	SMP	BUTTER	AMF	BMP	TOTAL
JUN 16 TO AUG 16	122	134	59	16	19	5	234
SEP 16 TO NOV 16	573	668	250	98	59	23	1,098
DEC 16 TO FEB 17	500	604	200	88	46	20	957
MAR 17 TO MAY 17	331	421	110	54	30	14	630
<b>TOTAL</b>	<b>1,526</b>	<b>1,826</b>	<b>619</b>	<b>256</b>	<b>154</b>	<b>63</b>	<b>2,918</b>

2016 SEASON	MILK SUPPLIED (MILLION kgMS)	PRODUCTION (000 MT) OF FINISHED PRODUCT					
		WMP	SMP	BUTTER	AMF	BMP	TOTAL
JUN 15 TO AUG 15	127	165	44	11	18	5	243
SEP 15 TO NOV 15	609	727	255	99	64	24	1,169
DEC 15 TO FEB 16	515	587	225	100	49	22	984
MAR 16 TO MAY 16	315	382	115	51	35	15	597
<b>TOTAL</b>	<b>1,566</b>	<b>1,862</b>	<b>639</b>	<b>261</b>	<b>166</b>	<b>65</b>	<b>2,993</b>

2015 SEASON	MILK SUPPLIED (MILLION kgMS)	PRODUCTION (000 MT) OF 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>

# ATTACHMENT 2 SALES VOLUMES

2017 SEASON	SHIPMENTS (000 MT) OF FINISHED PRODUCT					
	WMP	SMP	BUTTER	AMF	BMP	TOTAL SALES
AUG 16 TO OCT 16	257	104	27	30	2	419
NOV 16 TO JAN 17	616	222	86	50	17	991
FEB 17 TO APR 17	405	115	62	29	16	628
MAY 17 TO JUL 17	485	155	59	39	24	761
AUG 17 TO OCT 17	62	24	23	6	3	118
<b>TOTAL</b>	<b>1,826</b>	<b>619</b>	<b>256</b>	<b>154</b>	<b>63</b>	<b>2,918</b>

2016 SEASON	SHIPMENTS (000 MT) OF FINISHED PRODUCT					
	WMP	SMP	BUTTER	AMF	BMP	TOTAL SALES
AUG 15 TO OCT 15	195	31	14	16	0	255
NOV 15 TO JAN 16	712	281	94	71	25	1,184
FEB 16 TO APR 16	413	147	58	27	13	658
MAY 16 TO JUL 16	447	147	65	41	19	720
AUG 16 TO OCT 16	94	33	29	11	9	176
<b>TOTAL</b>	<b>1,862</b>	<b>639</b>	<b>261</b>	<b>166</b>	<b>65</b>	<b>2,993</b>

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>

# ATTACHMENT 3 AVERAGE NUMBER OF MONTHS PRIOR TO SHIPMENT THAT PRICES WERE STRUCK

2017 SEASON	AVERAGE NUMBER OF MONTHS PRIOR TO SHIPMENT				
	WMP	SMP	BUTTER	AMF	BMP
AUG 16 TO OCT 16	2.9	3.2	3.0	2.8	2.7
NOV 16 TO JAN 17	3.1	3.1	3.2	3.1	2.6
FEB 17 TO APR 17	2.6	2.9	2.9	2.8	2.4
MAY 17 TO JUL 17	2.6	2.5	2.5	2.6	2.7
AUG 17 TO OCT 17	3.7	3.8	3.1	3.7	3.6
	<b>2.9</b>	<b>3.0</b>	<b>2.9</b>	<b>2.9</b>	<b>2.7</b>

2016 SEASON	AVERAGE NUMBER OF MONTHS PRIOR TO SHIPMENT				
	WMP	SMP	BUTTER	AMF	BMP
AUG 15 TO OCT 15	3.1	2.7	2.8	2.8	N/A <sup>12</sup>
NOV 15 TO JAN 16	3.1	3.4	2.8	3.3	3.3
FEB 16 TO APR 16	2.8	3.0	2.9	2.7	2.6
MAY 16 TO JUL 16	2.9	2.8	2.6	2.6	3.2
AUG 16 TO OCT 16	2.9	2.9	2.9	3.3	2.9
	<b>3.0</b>	<b>3.1</b>	<b>2.8</b>	<b>3.0</b>	<b>3.0</b>

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>

The tables on the next page supplement those above by providing information on the average percentages of sales contracted in each of months 1 to 5 prior to shipment in the 2015 to 2017 Seasons.

<sup>12</sup> Not applicable: No BMP sales informed the Farmgate Milk Price revenue in this quarter.

# ATTACHMENT 3

## CONTINUED

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

2017 SEASON	AVERAGE PERCENTAGE OF SALES CONTRACTED IN EACH OF MONTHS 1- 5 PRIOR TO SHIPMENT				
	WMP	SMP	BUTTER	AMF	BMP
1	11%	9%	9%	10%	11%
2	31%	31%	29%	29%	33%
3	29%	27%	29%	32%	37%
4	18%	19%	18%	20%	18%
5	11%	13%	14%	9%	1%

2016 SEASON	AVERAGE PERCENTAGE OF SALES CONTRACTED IN EACH OF MONTHS 1- 5 PRIOR TO SHIPMENT				
	WMP	SMP	BUTTER	AMF	BMP
1	8%	6%	7%	10%	7%
2	33%	29%	37%	33%	32%
3	28%	28%	32%	28%	24%
4	19%	24%	17%	19%	29%
5	13%	13%	6%	11%	8%

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%

# ATTACHMENT 4

## AVERAGE USD PRICES

2017 SEASON	USD PER MT OF FINISHED PRODUCT				
	WMP	SMP	BUTTER	AMF	BMP
SHIPMENT PERIOD					
AUG 16 TO OCT 16	2,271	1,919	2,936	3,840	1,767
NOV 16 TO JAN 17	2,709	2,236	3,589	4,655	2,338
FEB 17 TO APR 17	3,250	2,576	4,388	5,497	2,656
MAY 17 TO JUL 17	3,005	2,135	5,016	6,073	1,900
AUG 17 TO OCT 17	2,951	2,102	5,601	6,270	1,909
	<b>2,854</b>	<b>2,216</b>	<b>4,221</b>	<b>5,076</b>	<b>2,211</b>
<b>FULL SEASON GDT-ONLY PRICES</b>	<b>2,837</b>	<b>2,188</b>	<b>4,184</b>	<b>4,977</b>	<b>2,172</b>

Full season GDT-only prices are disclosed for the first time for the 2017 Season, following the inclusion of the non-GDT sales of WMP, SMP and AMF in the Farmgate Milk Price. Quarterly prices are the total weighted average prices informing the Farmgate Milk Price, consistent with prior season disclosures.

2016 SEASON	USD PER MT OF FINISHED PRODUCT				
	WMP	SMP	BUTTER	AMF	BMP
SHIPMENT PERIOD					
AUG 15 TO OCT 15	1,957	1,480	2,467	2,732	N/A <sup>13</sup>
NOV 15 TO JAN 16	2,093	1,789	2,769	3,093	1,868
FEB 16 TO APR 16	2,239	1,950	3,000	3,654	1,732
MAY 16 TO JUL 16	2,065	1,765	2,832	3,331	1,567
AUG 16 TO OCT 16	2,221	1,732	2,853	3,374	1,632
	<b>2,111</b>	<b>1,803</b>	<b>2,830</b>	<b>3,227</b>	<b>1,723</b>

2015 SEASON	USD PER MT OF FINISHED PRODUCT				
	WMP	SMP	BUTTER	AMF	BMP
SHIPMENT PERIOD					
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>

<sup>13</sup> Not applicable: No BMP sales informed the Farmgate Milk Price revenue in this quarter.

# 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. Certain average spot exchange rate figures for the 2016 Season differs from those disclosed in the 2016 Farmgate Milk Price Statement, as forecast exchange rates have been replaced with actual exchange rates.

2017 SEASON	FONTERRA'S AVERAGE CONVERSION RATE	SPOT EXCHANGE RATE
AUG 16 TO OCT 16	0.6766	0.7156
NOV 16 TO JAN 17	0.6830	0.7117
FEB 17 TO APR 17	0.6922	0.6978
MAY 17 TO JUL 17	0.7071	0.7364
AUG 17 TO OCT 17	0.7136	0.7504 <sup>14</sup>
<b>REVENUE-WEIGHTED ANNUAL AVERAGE</b>	<b>0.6924</b>	<b>0.7171</b>

2016 SEASON	FONTERRA'S AVERAGE CONVERSION RATE	SPOT EXCHANGE RATE
AUG 15 TO OCT 15	0.7359	0.6581
NOV 15 TO JAN 16	0.7231	0.6637
FEB 16 TO APR 16	0.7076	0.6803
MAY 16 TO JUL 16	0.6849	0.7130
AUG 16 TO OCT 16	0.6790	0.7275
<b>REVENUE-WEIGHTED ANNUAL AVERAGE</b>	<b>0.7082</b>	<b>0.6820</b>

2015 SEASON	FONTERRA'S AVERAGE CONVERSION RATE	SPOT 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	0.6727
AUG 15 TO OCT 15	0.7625	0.6492
<b>REVENUE-WEIGHTED ANNUAL AVERAGE</b>	<b>0.7882</b>	<b>0.7312</b>

<sup>14</sup> The spot exchange rate for the period from August to October 2017 equals the spot rate at 9am on 31 July 2017, the last working day of Fonterra's 2017 financial year.

## 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.

**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 milk solids.

**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.

**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.

**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.

**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.



Fonterra Co-operative Group Limited  
Private Bag 92032, Auckland 1142, New Zealand  
64 9 374 9000 (Phone)  
64 9 374 9001 (Fax)  
Shareholder And Supplier Services  
Freephone 0800 65 65 68  
For global locations visit [www.fonterra.com](http://www.fonterra.com)