

Good Together

from one generation
to the next

Farmgate Milk Price Statement

For the season ended 31 May 2022

Pūrongo Utu Hoko Miraka
Te Mātāpuna



Dairy for life

Contents

2022 SEASON FARMGATE MILK PRICE	03
FARMGATE MILK PRICE REVENUE	06
FARMGATE MILK PRICE CASH COSTS	09
FARMGATE MILK PRICE CAPITAL COSTS	11
APPENDIX 1: INDEPENDENT REASONABLE ASSURANCE REPORT	12
APPENDIX 2: UPDATES TO THE FARMGATE MILK PRICE MANUAL AND CALCULATION	14
APPENDIX 3: FARMGATE MILK PRICE OVERVIEW	15
APPENDIX 4: MILK SUPPLIED AND PRODUCTION VOLUMES	18
APPENDIX 5: SALES VOLUMES	18
APPENDIX 6: AVERAGE NUMBER OF MONTHS PRIOR TO SHIPMENT THAT PRICES WERE STRUCK	19
APPENDIX 7: AVERAGE % OF SALES CONTRACTED IN EACH MONTH PRIOR TO SHIPMENT	19
APPENDIX 8: AVERAGE USD PRICES	20
APPENDIX 9: AVERAGE NZD/USD CONVERSION AND SPOT RATES	21
GLOSSARY	22

IMAGE:
Karla, Whareroa



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2022 Season Farmgate Milk Price

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

The Farmgate Milk Price is the average price paid by Fonterra for each kilogram of milk solids (kgMS) supplied by Fonterra's farmer shareholders under Fonterra's standard terms of supply¹. It is calculated in accordance with the Farmgate Milk Price Manual (the Manual). The Manual is maintained by the Fonterra Board in accordance with the Dairy Industry Restructuring Act 2001 (DIRA) and the Fonterra Constitution.

The 2022 season Farmgate Milk Price of **\$9.30** per kgMS is:

- The Aggregate Farmgate Milk Price of \$13.746 billion; *divided by*
- New Zealand milk supplied to Fonterra in the 2022 season of 1.478 billion kgMS.

The Aggregate Farmgate Milk Price is calculated as revenue less costs. Revenue assumes:

- The entire volume of milk collected is processed into commodity specifications of the five Reference Commodity Products (RCPs) which are Whole Milk Powder (WMP) and Skim Milk Powder (SMP), and their by-products Butter, Anhydrous Milk Fat (AMF) and Buttermilk Powder (BMP).²
- The RCPs are sold in USD on and off GDT.
- USD sales revenue is converted into NZD at exchange rates achieved by Fonterra.

1 This price may differ from the "farm gate milk price" published in accordance with the Dairy Industry Restructuring (Raw Milk) Regulations 2012 due to the way "farm gate milk price" is defined in those Regulations and the impact of Fonterra's fixed milk price offers.

2 Most of the increase in milk supplied over the past decade in New Zealand to Fonterra and its competitors used to manufacture commodity dairy products has been used to manufacture milk powders. As 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.

Costs comprise:

- **Cash Costs:** costs of collecting raw milk, efficiently manufacturing the five RCPs, delivering finished product to New Zealand export ports, and selling and administration expenses.
- **Capital Costs:** depreciation of fixed assets, an appropriate return on investment including on working capital, and corporate tax.
- **Additional Commodity Milk Payments and Standard Supply Adjustments³:** adjustments for milk quality issues and additional payments or deductions for milk not supplied on standard terms, to the extent these would apply to the Notional Milk Price business.

Numbers in this Statement have been rounded and, as a result, some tables may not exactly total or sum to 100%.

2022 Season Farmgate Milk Price

\$9.30 per kgMS

3 Additional Commodity Milk Payments are payments for milk supplied other than on standard terms of supply where it would be appropriate for the Notional Milk Price business to source that milk for conversion into RCPs. Examples of these payments include the portion of Winter Milk premiums that would be payable by the Notional Milk Price business and discounts for contract milk. Standard Supply Adjustments arise from adjustments to payments for milk supplied under Fonterra's standard terms of supply, such as where milk quality demerits have been applied.

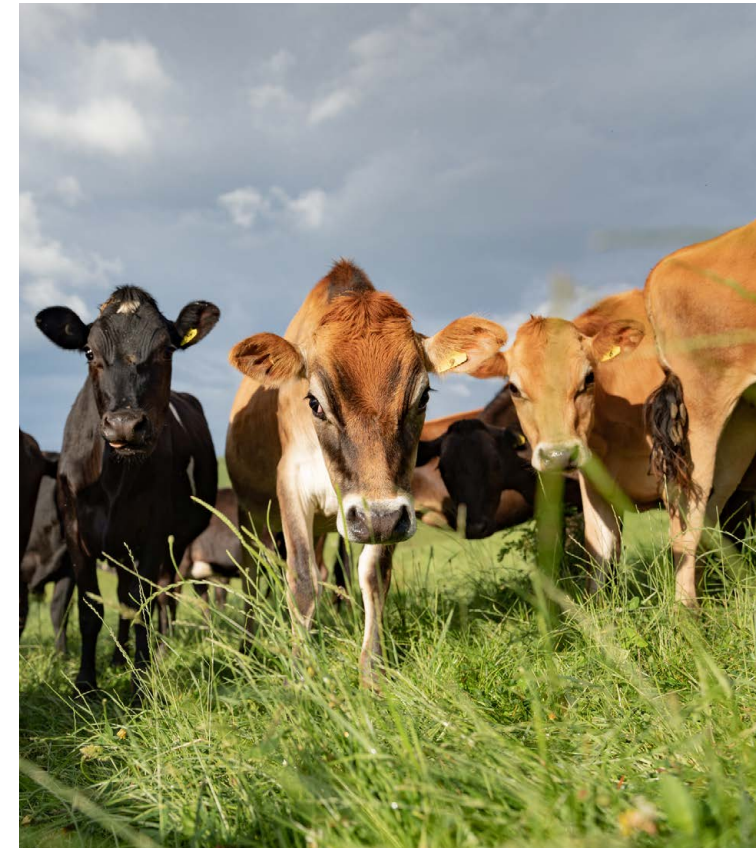
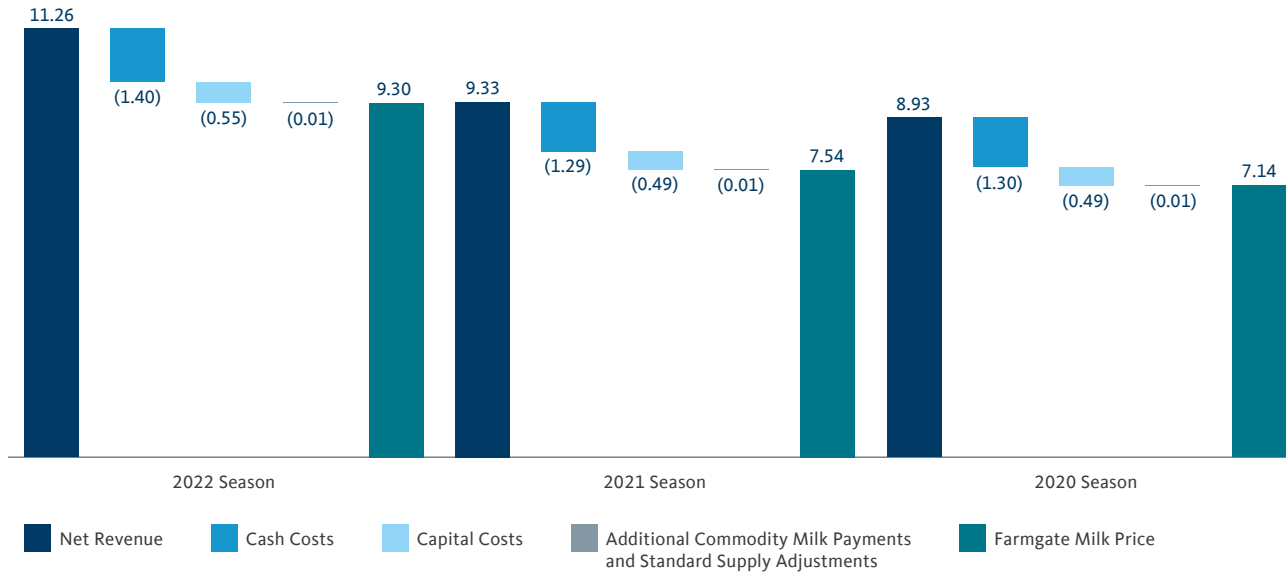


Billie, Taranua

2022 Season Farmgate Milk Price CONTINUED

Changes in revenue drive most of the movements in the Farmgate Milk Price between seasons. Figure 1 shows this.

Figure 1: Changes in the Farmgate Milk Price Between Seasons
\$ per kgMS



2022 Season Farmgate Milk Price CONTINUED

Table 1 shows the summary Farmgate Milk Price calculation for the last three seasons. Lactose is shown in Table 1 as a deduction from Farmgate Milk Price Revenue.

Table 1: Farmgate Milk Price Summary

SEASON	2022 \$ MILLION	2021 \$ MILLION	2020 \$ MILLION
Farmgate Milk Price Revenue	17,316	15,014	14,061
Lactose	(679)	(648)	(508)
Net Revenue	16,637	14,366	13,553
Farmgate Milk Price Cash Costs	(2,074)	(1,986)	(1,968)
Farmgate Milk Price Capital Costs	(806)	(754)	(746)
Additional Commodity Milk Payments and Standard Supply Adjustments	(10)	(15)	(11)
Aggregate Farmgate Milk Price	13,746	11,611	10,829
Million kgMS	1,478	1,539	1,517
Farmgate Milk Price calculated under the Manual (\$ per kgMS)	9.30	7.54	7.14

The following sections provide more detail on revenue, costs and drivers of change between seasons.



Farmgate Milk Price Revenue

Farmgate Milk Price Revenue uses a combination of actual Fonterra results and key assumptions:

- 1.478 billion kgMS of milk actually supplied to Fonterra during the 2022 season.
- All milk supplied is converted into the five RCPs based on Fonterra's actual mix of those products.
- Sales volumes are assumed to reflect Fonterra's actual shipments of RCPs.
- Selling prices reflect relevant prices achieved by Fonterra for RCPs on and off GDT.

Milk Supply, Production and Sales Volumes

Figure 2 shows the relationship between:

- Milk collected during a season (the dark blue line). This shows very little milk is supplied in June and July and that supply peaks in late October / early November.
- Volume of products manufactured from that milk (the mid blue line).
- When that product is sold (the light blue line). There is typically a lag of between one to three months between when milk is collected and manufactured into RCPs and when those RCPs are sold.

Sales of product manufactured in a season do not normally start until August and are normally complete by October of the following year.

Revenue is recognised when sales are invoiced, which is at the time of shipment. Sales prices are always struck before the month of shipment.

Figure 2: Timing of Supply, Production and Sales Volumes

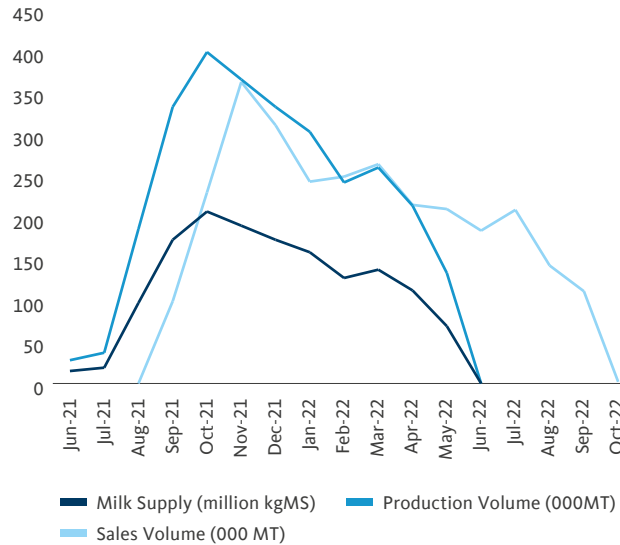


Figure 3: Average Lag Between When Prices Were Struck and Shipment

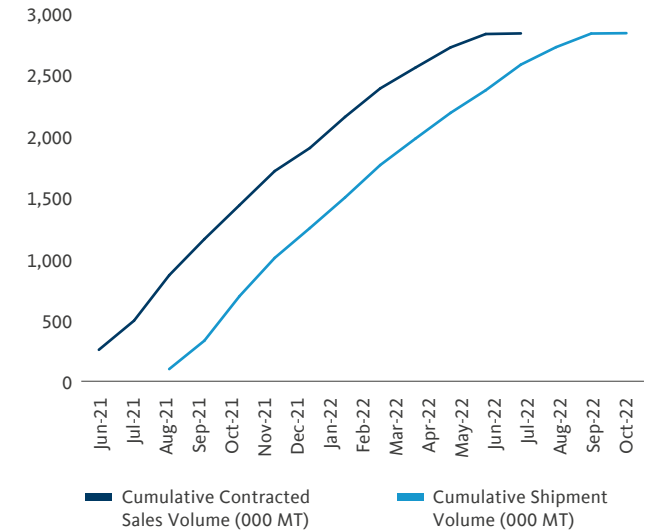


Figure 3 shows the average lag between when prices are struck and when products are shipped. This lag matches Fonterra's actual average lag for relevant sales.

Farmgate Milk Price Revenue CONTINUED

Prices

The Farmgate Milk Price uses weighted average monthly prices achieved by Fonterra on relevant sales of RCPs on and off-GDT.

The Manual outlines the criteria which Fonterra's sales must meet to inform the Farmgate Milk Price, which include:

- Only arm's length sales at current market prices to customers in freely contestable global markets can be included. Sales to Fonterra subsidiaries are excluded.
- Only sales contracted by Fonterra between one and five months before shipment are included.
- Off-GDT sales are only included when they are of commodity products with similar specifications to products sold on GDT.

Between the 2012 and 2016 seasons, GDT was the sole source of prices for WMP, SMP and AMF whereas both on and off-GDT prices were used for Butter and BMP. Since the 2017 season, certain off GDT sales of all RCPs inform the Farmgate Milk Price. In the 2022 season, off-GDT sales comprised 41% of the Farmgate Milk Price-informing sales. The inclusion of these off-GDT sales of WMP, SMP and AMF in the Farmgate Milk Price resulted in an increase of 11 cents per kgMS relative to not including these off-GDT sales.

Table 2 shows weighted average selling prices for each RCP for the last three seasons. It shows that weighted average USD selling prices per metric tonne (MT) were 24.1% higher for the 2022 season than last season.

Table 2: Weighted Average USD Contract Price⁴

WEIGHTED AVERAGE PRICE (USD) PER MT	2022	2021	2020	2022/2021 % CHANGE	2021/2020 % CHANGE
WMP	4,019	3,323	3,110	20.9%	6.9%
SMP	3,750	3,012	2,755	24.5%	9.3%
Butter	5,601	4,117	4,140	36.0%	(0.6)%
AMF	6,425	4,792	4,891	34.1%	(2.0)%
BMP	3,946	3,194	2,833	23.5%	12.8%
				24.1%	5.7%

⁴ Average shipment prices include an allowance for lower prices received for downgrade product. These are products that do not meet standard manufacturing specifications, some of which may only be suitable for stock feed.

Impact of NZD/USD Foreign Exchange Rate Movements

As RCPs are sold in USD, Fonterra enters into foreign exchange hedge contracts to reduce volatility and exposure to movements in NZD/USD rates.⁵

Fonterra hedges the forecast USD exposures progressively over an 18-month period, therefore the FX conversion rate for the Farmgate Milk Price for a specific season is largely based on the weighted average spot rate over the previous season. As a result, hedging provides increased certainty on what the average conversion rate for the season will be and means a narrower range of possible outcomes for the Farmgate Milk Price relative to not hedging.

Fonterra's hedging programme resulted in an average NZD/USD conversion rate for the 2022 season of 0.6884, against an average spot rate of 0.6616. Table 3 shows this across the last three seasons.

Table 3: Impact on the Farmgate Milk Price of Fonterra's Hedging, Relative to Not Hedging

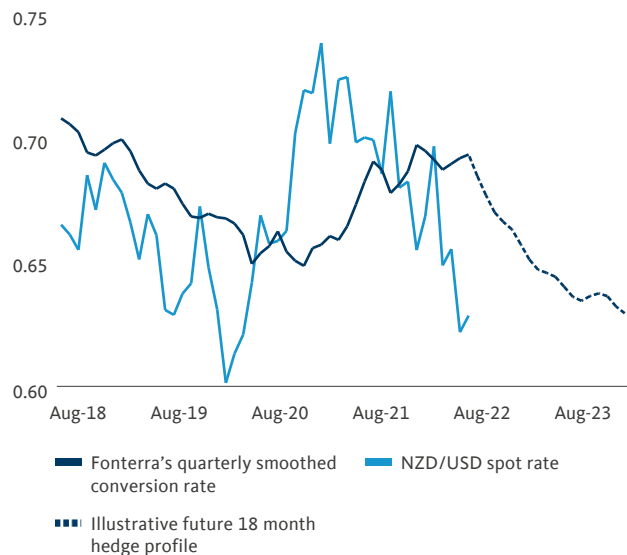
SEASON	2022	2021	2020
Average Hedged Rate (NZD/USD)	0.6884	0.6677	0.6638
Average Spot Rate (NZD/USD)	0.6616	0.7067	0.6375
Impact on Milk Price of hedging, relative to not hedging (\$ per kgMS)	(0.48)	0.53	(0.38)

⁵ Fonterra's hedging policies are outlined in Fonterra's Financial Statements for the year ended 31 July 2022.

Farmgate Milk Price Revenue CONTINUED

The hedging approach means that changes in the NZD/USD exchange rate will still impact the Farmgate Milk Price but spread over time allowing the impact to be estimated with a greater degree of certainty. Figure 4 illustrates how the hedging strategy results in a smoothing of the conversion rate.

Figure 4: Foreign Exchange NZD/USD Spot Vs Conversion Rate



Lactose

Lactose is contained in the raw milk supplied and additional lactose is used as an ingredient in the production of WMP, SMP and BMP. The Notional Milk Price business manufactures greater quantities of these commodities than Fonterra, and therefore has greater lactose requirements to achieve a product composition in line with internationally recognised standards.

The Farmgate Milk Price assumes this further lactose is purchased on global markets.

Table 4 shows volume and average purchase prices of lactose over the past three seasons.

Table 4: Purchased Lactose and Price

SEASON	2022	2021	2020	2022/2021 % CHANGE	2021/2020 % CHANGE
Purchased Lactose (000's MT)	354	369	361	(4.0)%	2.1%
Average Price (USD per MT)	1,322	1,154	946	14.6%	21.9%
Total Lactose Purchases (USD million)	468	425	342	10.0%	24.4%



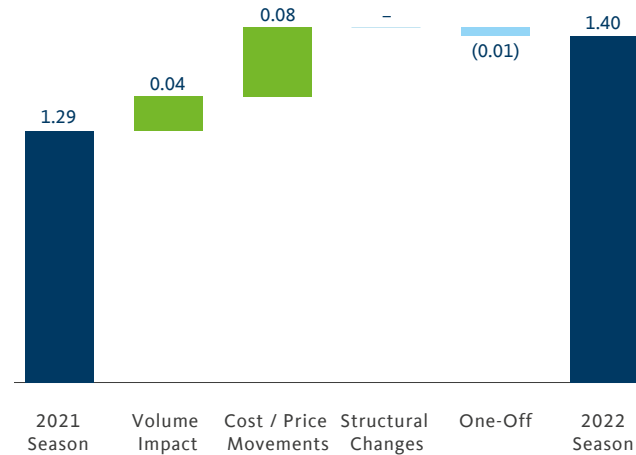
Farmgate Milk Price Cash Costs

Farmgate Milk Price Cash Costs reflect:

- Fonterra’s actual collection costs, and supply chain costs determined by reference to Fonterra’s actual costs.
- Costs of operating modern plants capable of processing the same volume of milk Fonterra collects, but only manufacturing the five RCPs. These assume plant operating parameters consistent with manufacturers’ specifications and Fonterra’s per unit costs, and include the full range of overhead costs associated with running these plants.
- Overhead and selling costs that would be incurred by a business selling the five RCPs from New Zealand. These are determined by reference to Fonterra’s actual costs for undertaking those activities.

Figure 5 and Table 5 summarise the major categories of cash costs and movements between the 2021 and 2022 seasons.

Figure 5: Sources of Movements in Average Cash Costs \$ per kgMS



Farmgate Milk Price Cash Costs CONTINUED

Table 5: Summary of Movements in Cash Costs

\$ MILLION	2021 ⁶	VOLUME	COST/PRICE	STRUCTURAL	ONE-OFF	2022	% CHANGE COST/PRICE	TOTAL % CHANGE
Sales costs	132	(1)	(0)	-	-	131	(0.4%)	(1.0%)
Variable manufacturing and supply chain costs	719	(20)	80	-	-	779	11.1%	8.3%
Fixed manufacturing (including repairs and maintenance)/site overheads and supply chain costs	433	-	7	-	-	440	1.7%	1.7%
Collection costs	359	(6)	19	-	-	373	5.4%	3.8%
Other costs	343	-	17	-	(8)	352	5.0%	2.7%
Total Cash Costs	1,986	(27)	123	-	(8)	2,074	6.2%	4.5%
% Movement		(1.3%)	6.2%	-	(0.4%)			

Movements between the 2021 and 2022 seasons were due to:

- \$27 million of volume-related costs due to a decrease in milk collected from 1.539 billion kgMS to 1.478 billion kgMS.
- \$123 million of inflationary increases in the cost of a range of inputs, including packaging, energy, diesel and supply chain costs, among other operating costs.
- A reduction in one-off costs of \$8 million, with the only material item in this category involving provisions made in the 2020 and 2021 Seasons in respect of the Employment Court's decision in the case of Metropolitan Glass and Glazing, relating to the holiday pay treatment of short-term incentive payments. Consistent with the treatment of corresponding provisions in Fonterra's accounts, these provisions have now been reversed following the Court of Appeal decision in October 2021 to overturn the Employment Court's ruling.⁷

⁶ The 2021 Variable and supply chain, and Other costs of \$718 million and \$344 million have been reclassified as \$719 million and \$343 million respectively.

⁷ See page 31 of Fonterra's Reasons Paper in support of Fonterra's base milk price for the 2022 season, at https://comcom.govt.nz/_data/assets/pdf_file/0026/287360/Fonterra-Reasons-paper-on-review-of-2021-22-base-milk-price-calculation-1-July-2022.pdf

Farmgate Milk Price Capital Costs

Farmgate Milk Price Capital Costs provide for:

- Depreciation of manufacturing and other assets.
- A return at a benchmark Weighted Average Cost of Capital (WACC) on the book value of those assets.
- A WACC return on net working capital balances from the sale and manufacture of the RCPs and on the phasing of milk payments to suppliers.
- Corporate income tax.

The Notional Milk Price business manufactures RCPs in modern plants with current industry-standard technology. These plants have manufacturing capacity that approximates the average of Fonterra's RCP plants. 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 2013 have an average daily processing capacity of approximately 2.5 million litres, equivalent to plants installed by Fonterra at Darfield in 2013 and Pahiatua in 2015. The Notional Milk Price business ensures there is always sufficient capacity to process all milk collected by Fonterra and it does so by maintaining or adding incremental plants where necessary.

Table 6 shows capital costs and the total book value of the Notional Milk Price business fixed asset base and average net working capital for the last three seasons.

The WACC rate has been generally declining since 2012. This is primarily because it incorporates a rolling five-year average of the five-year New Zealand Government bond rates, which have declined from an average of 5.5% over the five-year period to June 2012 to 1.6% over the five-year period to June 2022. An amendment to DIRA passed into law in July 2020 mandated a change to the methodology used to determine the asset beta, a key input into the WACC rate

for the 2022 season. Fonterra first applied the new methodology in 2021, when it increased the asset beta from 0.38 to 0.45 and reduced the specific risk premium in the cost of equity from 0.22% to nil, and this year has further increased the asset beta to 0.48, after fully aligning the calculation methodology to the Commerce Commission's interpretation of the new legislative provision. In addition, the Post Tax Market Risk Premium was increased from 7.0% to 7.5%, consistent with the Commerce Commission's current estimate, as the outcome of a four-yearly review. The net impact of these changes is a WACC of 5.0%, compared to a WACC of 4.6% if the asset beta and Post Tax Market Risk Premium remained unchanged from their previous values. The WACC will also be 5.0% for the 2023 season.

For the 2022 season the higher WACC, in isolation, resulted in:

- An increase of \$6 million in the capital charge on fixed assets.
- An increase of \$1 million in the capital charge on net working capital.
- An increase of \$3 million in the provision for corporate tax.
- Lower depreciation of \$2 million.

Changes in the average age of the asset base do not result in material season on season movements in the capital charge. This is because the capital charge is calculated so that growth each season is approximately in line with long-term capital goods inflation as long as the WACC does not change. This methodology means that a decrease in the WACC will, other things being equal, result in an increase in depreciation.

Movements between the 2021 and 2022 season in Net Working Capital and the associated WACC charge were due to increased inventory balances, resulting from the higher cost of milk and the shipment profile of the 2022 season sales.

Table 6: Capital Costs, Book Value of Fixed Asset Base and Average Net Working Capital

\$ MILLION	2022	2021	2020
WACC % (post-tax)	5.00%	4.90%	5.00%
Depreciation	283	278	269
WACC Charge – Fixed Assets	326	316	330
WACC Charge – Net Working Capital	67	43	31
Tax	130	117	116
Total Capital Costs	806	754	746
Total Fixed Assets (Book Value)	6,595	6,532	6,684
Average Net Working Capital	1,181	622	635

Appendix 1: Independent Reasonable Assurance Report

TO THE DIRECTORS OF FONTERRA CO-OPERATIVE GROUP LIMITED

Opinion

Our reasonable assurance opinion has been formed on the basis of the matters outlined in this report.

In our opinion, in all material respects,

- the Farmgate Milk Price has been calculated in accordance with the Farmgate Milk Price Manual for the season ended 31 May 2022; and
- the information presented in the Farmgate Milk Price Statement is consistent with the data in the calculation of the Farmgate Milk Price.

Information subject to assurance

We have performed an engagement to provide reasonable assurance in relation to the Fonterra Co-operative Group Limited (“Fonterra”) Farmgate Milk Price and Farmgate Milk Price Statement for the season ended 31 May 2022.

Criteria

The Farmgate Milk Price Calculation and the Farmgate Milk Price Statement are assessed against the requirements of the Farmgate Milk Price Manual for the season ended 31 May 2022, dated 1 August 2021.

Key Assurance Matters

Key assurance matters are those matters that, in our professional judgement, were of most significance in our reasonable assurance engagement in relation to the Farmgate Milk Price and the Farmgate Milk Price Statement for the season ended 31 May 2022. We summarise below those matters and our key procedures to address those matters in order that the Directors may better understand the process by which we arrived at our opinion. Our procedures were undertaken in the context of and solely for the purposes of our opinion on the Farmgate Milk Price and the Farmgate Milk Price Statement as a whole and we do not express discrete opinions on separate elements of the Farmgate Milk Price and the Farmgate Milk Price Statement.

Net Sales

We consider the calculation of Net Sales to be a key assurance matter due to the nature and detail of the policies and judgements included in the Principles and Rules of the Farmgate Milk Price Manual. In respect of Net Sales, there is complexity relating to (a) determining and calculating Benchmark Selling Prices from underlying Fonterra sales data, that are applied to notionally derived Referenced Commodity Product volumes and (b) the judgement in determining the phasing of sales volumes relating to actual Fonterra collections.

The procedures we performed to evaluate Net Sales include:

- examining the processes, judgements and models used to extract sales data from underlying Fonterra systems, considering whether there is manipulation of the transactional price and quantity data that forms the basis of the statutory financial statements of the Co-operative. We also examined the bespoke IT program that extracts the data;
- evaluating these assumptions and judgements used in the models that calculate Net Sales. This involved challenging management and the Milk Price Group regarding the basis for each assumption. This included examining management’s F22 refresh of Reference Commodity Products included in benchmark selling prices and ocean freight recovery rates that are referred to in the Base Milk Price Reasons Paper; and
- assessing whether the requirements of the Fonterra Farmgate Milk Price Manual had been correctly applied in the models used to calculate Net Sales.

We did not identify any instances where the models and the judgements and assumptions therein, used to calculate Net Sales were inconsistent with the requirements of the Farmgate Milk Price Manual.

Appendix 1: Independent Reasonable Assurance Report CONTINUED

Standards we followed

We conducted our reasonable assurance engagement in accordance with International Standard on Assurance Engagements (New Zealand) 3000 (Revised) *Assurance Engagements other than audits or reviews of historical financial information* and Standard on Assurance Engagements SAE 3100 (Revised) *Assurance Engagements on Compliance*. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion. In accordance with those standards we have:

- used our professional judgement to assess the risk of material misstatement and non-compliance and plan and perform the engagement to obtain reasonable assurance that the Farmgate Milk Price and Farmgate Milk Price Statement are free from material misstatement and non-compliance, whether due to fraud or error;
- considered relevant internal controls when designing our assurance procedures, however we do not express an opinion on the effectiveness of these controls; and
- ensured that the engagement team possesses the appropriate knowledge, skills and professional competencies.

How to interpret reasonable assurance and material misstatement and non-compliance

Reasonable assurance is a high level of assurance but is not a guarantee that it will always detect a material misstatement or non-compliance when it exists.

Misstatements, including omissions, within the Farmgate Milk Price and Farmgate Milk Price Statement and non-compliance is considered material if, individually or in aggregate, they could reasonably be expected to influence the relevant decisions of the intended users taken on the basis of the Farmgate Milk Price and Farmgate Milk Price Statement.

Use of this Assurance Report

Our report should not be regarded as suitable to be used or relied on by any parties other than the Directors of Fonterra for any purpose or in any context. Any party other than the Directors of Fonterra who obtains access to our report or a copy thereof and chooses to rely on our report (or any part thereof) will do so at its own risk.

To the fullest extent permitted by law, we accept or assume no responsibility and deny any liability to any party other than the Milk Price Panel and Directors of Fonterra for our work, for this independent reasonable assurance report, or for the opinions we have reached.

Our report is released to the Directors of Fonterra on the basis that it shall not be copied, referred to or disclosed, in whole (save for Fonterra's own internal purposes or in the Farmgate Milk Price Statement) or in part, without our prior written consent.

Milk Price Group's responsibility for the Farmgate Milk Price and Farmgate Milk Price Statement

The Milk Price Group of Fonterra are responsible for the preparation and presentation of the Farmgate Milk Price and Farmgate Milk Price Statement in accordance with the Farmgate Milk Price Manual. This responsibility includes such internal control as the Milk Price Group determine is necessary to enable the preparation of the Farmgate Milk Price and Farmgate Milk Price Statement that are free from material misstatement and non-compliance whether due to fraud or error.

Our responsibility

Our responsibility is to express an opinion to the Directors on:

- whether the Farmgate Milk Price has been calculated, in all material respects, in accordance with the Farmgate Milk Price Manual; and

- whether the information presented in the Farmgate Milk Price Statement is materially consistent with the data in the calculation of the Farmgate Milk Price.

Our independence and quality control

We have complied with the independence and other ethical requirements of Professional and Ethical Standard 1 International Code of Ethics for Assurance Practitioners (Including International Independence Standards) (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board, which is founded on 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.

Our firm has also provided other services to Fonterra Co-operative Group Limited in relation to the statutory audit of the financial statements and other assurance services. The firm has no other relationship with, or interest in, the Fonterra Co-operative Group Limited.



KPMG
Auckland

21 September 2022

Appendix 2: Updates to the Farmgate Milk Price Manual and Calculation

Minor refinements to address practical issues in a timely and efficient way have regularly been made to the Manual since it was introduced in the 2009 season. These refinements play an important part in ensuring the Farmgate Milk Price methodology continues to be robust. Refinements to the Manual must be consistent with the Milk Price Principles.

Adjustments can be made to a number of parameters and inputs without any change being required to the Manual. An example is the rule that allows for new RCPs to be added if certain criteria are met. The Manual also provides for reviews of important aspects to be carried out at least every four years, and the Board or Milk Price Panel may initiate additional reviews if circumstances warrant.

Farmgate Milk Price Manual Updates

The Fonterra Board approved one substantive amendment to the Manual for the 2023 season, to address matters raised by the Commerce Commission in its final report on the Manual for the 2022 season relating to the calculation of the asset beta. This amendment is not expected to have any impact on the calculation methodology or quantum of the Farmgate Milk Price. An explanation of this change is provided in the 'reasons paper' provided by Fonterra to the Commerce Commission in support of the Manual for the 2023 season, located at:

https://comcom.govt.nz/_data/assets/pdf_file/0031/262867/Fonterra-Reasons-paper-in-support-of-FonterraE28099s-Base-Milk-Price-Manual-for-the-2021-22-season-30-July-2021.pdf

The Manual for the 2023 season is available at:

https://www.fonterra.com/content/dam/fonterra-public-website/fonterra-new-zealand/documents/pdf/milk-prices/2022/F23_Milk_Price_Manual_Final_1_August_2022.pdf

As part of its oversight role, the Commerce Commission reviews and reports annually on whether the Manual is consistent with ensuring Fonterra is operating efficiently, and whether it allows for competition in the market for farmers' milk. The Commerce Commission's final report on the Manual for the 2022 season was released on 15 December 2021. That report can be found at:

https://comcom.govt.nz/_data/assets/pdf_file/0026/273338/Final-report-Review-of-Fonterra27s-2021-22-Milk-Price-Manual-15-December-2021.pdf

Changes in Approach to the Calculation of the Farmgate Milk Price

There were three changes in the application of the Manual for the 2022 season that resulted in materially different values of inputs into the Farmgate Milk Price calculation.

In 2021 we undertook a comprehensive review of all RCP product specifications, and in consequence removed several specifications from the schedule of Qualifying Materials. If this change had been implemented in the 2021 season, it would have resulted in a reduction of 2.7 cents per kgMS in the 2021 Farmgate Milk Price.

Differences between Fonterra's actual average ocean freight costs and the average amounts charged to Fonterra's customers are included in the Farmgate Milk Price. Since 2015, we have included in this calculation a portion of Fonterra's share of the earnings generated by Kotahi, the logistics business which manages Fonterra's ocean freight requirements, as a proxy for the average ocean freight rebate which Fonterra could be expected to be able to negotiate in the absence of the Kotahi relationship. This year, we identified data which was not available in 2015 which has enabled us to implement an alternative methodology. This alternative approach has resulted in a reduction of approximately

\$6 million, or 0.4 cents per kgMS, in the 2022 Farmgate Milk Price relative to the equivalent allowance included in the 2021 season.

The asset beta used in the WACC calculation has been updated, as discussed on [page 11](#).



Michael, Kiri & Alan, Rerewhakaaitu

Appendix 3: Farmgate Milk Price Overview

Rationale for Farmgate Milk Price

Fonterra currently collects around 80% 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.

The Aggregate Farmgate Milk Price is different from the cost of New Zealand sourced milk disclosed in Fonterra's financial statements due to:

- The financial statements report the cost of milk for the 12 months ending 31 July whereas the Aggregate Farmgate Milk Price relates to milk supplied in the 12 months of the season ending 31 May;
- Differences between what Fonterra is willing to pay in premiums for value-added products such as organic milk which a commodity-only processor would not pay;
- The higher premium that Fonterra pays for Winter Milk compared to the premium that would be paid by a commodity-only processor;
- The amount of Additional Commodity Milk Payments and Standard Supply Adjustments.

Rationale for Reference Commodity Products

Manufacture of the RCPs comprised approximately 70% of Fonterra's total New Zealand ingredients production in the 2022 season.

Most of the increase in milk supplied over the past decade in New Zealand to Fonterra and its competitors has been used to make milk powders.

As 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 non-commodity or 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

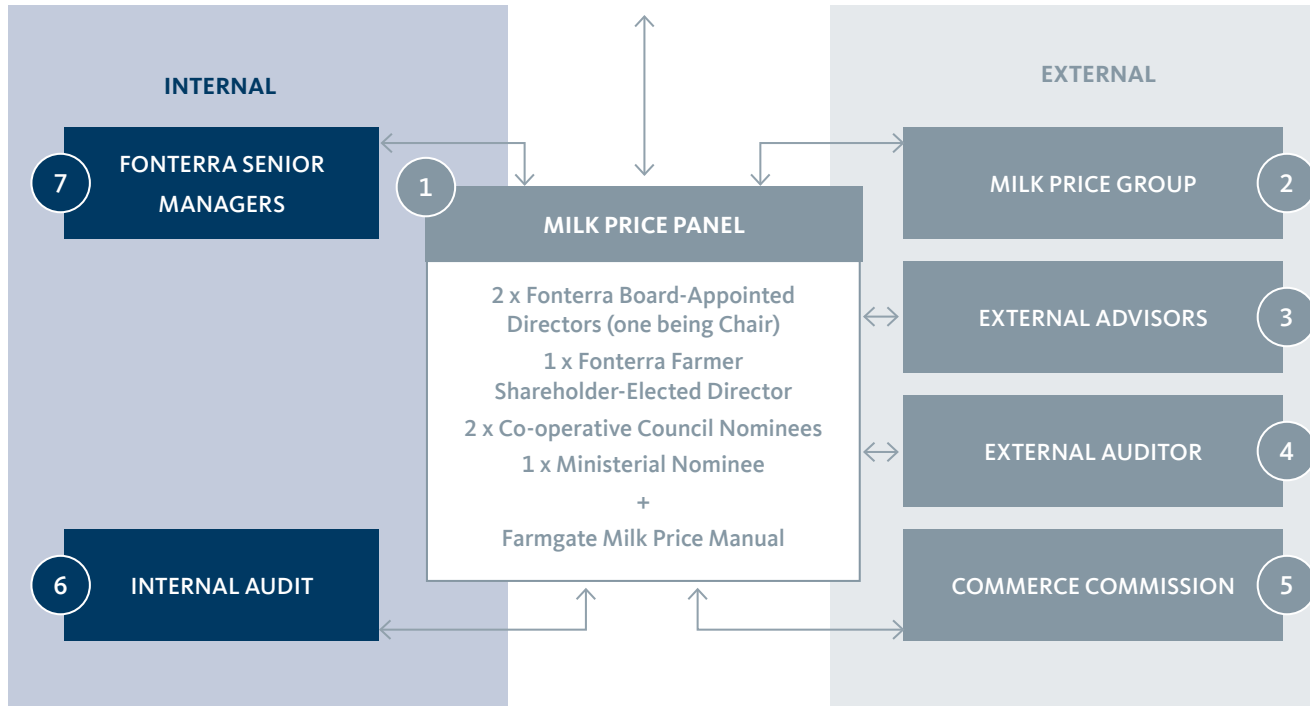
The Fonterra Board sets the total amount to be paid by Fonterra for all milk supplied to it in New Zealand in each season.

Both Fonterra's Constitution and 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 16](#).

Appendix 3: Farmgate Milk Price Overview CONTINUED

BOARD MAKES DECISIONS ON THE RECOMMENDATIONS OF THE MILK PRICE PANEL



1 Milk Price Panel

The Milk Price Panel plays a key role in overseeing the integrity of the Farmgate Milk Price. It currently has six members: two are Fonterra Board-appointed directors (one of whom is the Chair); one is a Fonterra farmer shareholder-elected director; two are appropriately qualified nominees of the Fonterra Co-operative Council; and one is a nominee of the Minister of Agriculture.

The current members of the Panel are: Scott St John (Chair) and Bruce Hassall, who are Fonterra Board-appointed directors; Brent Goldsack, who is a Fonterra farmer shareholder-elected director; Bill Donaldson and Fred Ohlsson, who are nominees of the Fonterra Co-operative Council; and Professor Hamish Gow, who is the nominee of the Minister of Agriculture.

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).

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 in accordance with the Manual.

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

Appendix 3: Farmgate Milk Price Overview CONTINUED

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 advisors.
- 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 EY and other technical experts who are not employees of Fonterra.

3 External Advisors

External advisors 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 examines 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 KPMG.

5 Commerce Commission

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.

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. Fonterra management is also responsible for engagement with the Commerce Commission.



Stephanie, Waiuku

Appendix 4: Milk Supplied and Production Volumes

	MILK SUPPLIED (MILLION KGMS)			PRODUCTION OF FINISHED PRODUCT (000'S MT)																	
				WMP			SMP			BUTTER			AMF			BMP			TOTAL		
	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020
JUN TO AUG	131	135	130	177	179	151	43	46	61	11	13	11	17	16	23	5	5	6	251	259	250
SEP TO NOV	570	585	595	754	772	760	194	201	222	81	87	87	50	47	55	19	20	21	1,098	1,127	1,145
DEC TO FEB	458	488	488	562	626	609	176	174	182	79	84	82	42	36	42	18	18	19	878	938	934
MAR TO MAY	318	332	304	427	504	401	93	58	96	43	39	41	30	21	30	13	11	13	607	633	581
TOTAL	1,478	1,539	1,517	1,919	2,080	1,921	506	479	561	214	223	221	139	121	150	55	53	58	2,834	2,957	2,911

Appendix 5: Sales Volumes

	SHIPMENTS OF FINISHED PRODUCT (000'S MT)																	
	WMP			SMP			BUTTER			AMF			BMP			TOTAL		
	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020
AUG TO OCT	226	269	251	74	61	83	13	19	22	14	16	20	3	6	3	330	370	379
NOV TO JAN	646	667	662	149	168	203	79	84	94	29	36	38	14	12	17	917	967	1,014
FEB TO APRIL	481	569	514	141	114	146	61	58	52	31	33	43	14	15	19	728	788	774
MAY TO JULY	386	530	434	110	122	115	44	43	35	47	31	44	15	15	17	603	741	644
AUG TO OCT	180	45	60	32	15	14	18	20	19	18	5	5	8	4	3	256	90	100
TOTAL	1,919	2,080	1,921	506	479	561	214	223	221	139	121	150	55	53	58	2,834	2,957	2,911

Appendix 6: Average Number of Months Prior to Shipment that Prices were Struck

AVERAGE NUMBER OF MONTHS PRIOR TO SHIPMENT															
	WMP			SMP			BUTTER			AMF			BMP		
	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020
AUG TO OCT	2.2	3.1	2.6	3.0	3.1	2.9	2.3	2.4	2.9	2.6	2.7	2.2	2.0	2.5	1.8
NOV TO JAN	2.6	3.2	2.8	2.9	3.3	3.1	2.7	3.2	2.8	2.7	3.0	2.7	2.1	2.6	2.9
FEB TO APRIL	2.6	3.2	2.8	3.0	3.1	2.9	3.2	3.6	3.3	2.9	2.9	3.0	2.5	2.7	2.6
MAY TO JULY	2.7	2.8	2.6	3.1	2.9	2.9	2.8	2.9	2.6	2.8	2.8	2.6	2.6	2.7	2.4
AUG TO OCT	2.6	2.8	2.7	3.2	3.2	2.9	2.7	2.8	2.7	2.7	3.3	2.8	3.1	2.4	2.3
TOTAL	2.6	3.1	2.7	3.0	3.1	3.0	2.8	3.1	2.9	2.8	2.9	2.7	2.5	2.6	2.6

Appendix 7: Average % of Sales Contracted in Each Month Prior to Shipment

AVERAGE % SALES CONTRACTED IN EACH MONTH PRIOR TO SHIPMENT															
NUMBER OF MONTHS	WMP			SMP			BUTTER			AMF			BMP		
	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020
1	11%	8%	10%	9%	6%	6%	13%	8%	13%	14%	7%	12%	21%	13%	20%
2	43%	30%	39%	31%	32%	35%	32%	25%	31%	33%	33%	39%	41%	39%	38%
3	29%	27%	28%	28%	24%	27%	26%	29%	24%	25%	31%	24%	19%	26%	23%
4	11%	19%	14%	19%	22%	19%	17%	22%	22%	18%	19%	14%	11%	15%	10%
5	5%	17%	9%	14%	17%	13%	13%	16%	11%	10%	10%	10%	8%	7%	9%

Appendix 8: Average USD Prices

	USD / MT OF FINISHED PRODUCT														
	WMP			SMP			BUTTER			AMF			BMP		
	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020
AUG TO OCT	3,813	2,974	3,129	3,255	2,699	2,549	4,711	3,568	4,420	5,789	4,010	5,408	3,598	2,612	2,820
NOV TO JAN	3,827	3,020	3,184	3,377	2,797	2,680	5,025	3,552	4,257	6,122	4,095	5,210	3,696	2,754	2,794
FEB TO APRIL	4,064	3,247	3,203	3,803	3,045	2,980	5,753	4,102	4,128	6,643	4,729	4,954	3,911	2,962	3,033
MAY TO JULY	4,355	3,899	2,916	4,339	3,383	2,761	6,472	5,183	3,883	6,752	5,891	4,394	4,168	3,771	2,691
AUG TO OCT	4,123	4,077	2,825	4,359	3,412	2,673	6,140	4,757	3,732	6,151	5,873	4,198	4,158	4,066	2,561
TOTAL WEIGHTED AVERAGE PRICE	4,019	3,323	3,110	3,750	3,012	2,755	5,601	4,117	4,140	6,425	4,792	4,891	3,946	3,194	2,833
FULL SEASON GDT-ONLY PRICES	3,978	3,288	3,069	3,706	2,966	2,719	5,557	4,039	4,108	6,367	4,726	4,835	3,947	3,141	2,758

Appendix 9: Average NZD/USD Conversion and Spot Rates

	2022		2021		2020	
	FONTERRA'S AVERAGE CONVERSION RATE	SPOT EXCHANGE RATE	FONTERRA'S AVERAGE CONVERSION RATE	SPOT EXCHANGE RATE ⁹	FONTERRA'S AVERAGE CONVERSION RATE	SPOT EXCHANGE RATE
AUG TO OCT	0.6829	0.7039	0.6477	0.6746	0.6651	0.6366
NOV TO JAN	0.6964	0.6779	0.6570	0.7134	0.6693	0.6541
FEB TO APRIL	0.6892	0.6707	0.6637	0.7159	0.6627	0.6079
MAY TO JULY	0.6878	0.6294	0.6889	0.7049	0.6565	0.6477
AUG TO OCT	0.6695	0.6287 ⁸	0.6825	0.7039	0.6568	0.6647
REVENUE-WEIGHTED ANNUAL AVERAGE	0.6884	0.6616	0.6677	0.7067	0.6638	0.6375

As at 31 July 2022, Fonterra had hedged approximately 65% of the forecast cash flows related to the 2023 season Farmgate Milk Price. If the remaining 35% of the forecast cash flows were to be hedged at the 29 July 2022 spot rate, the average NZD/USD conversion rate would be around 65 cents.

⁸ This Milk Price Statement presents the spot exchange rate for August 22 to October 22 as the spot rate at 9am on 29 July 2022, which is the last business day of Fonterra's financial year.

⁹ Certain average spot exchange rate figures for the 2021 season differ from those disclosed in the 2021 Farmgate Milk Price Statement, as forecast exchange rates have been replaced with actual exchange rates.

Glossary

In this Statement the following terms have the meanings as set out below:

Additional Commodity Milk Payments as defined in the Manual for the 2022 season.

Aggregate Farmgate Milk Price as defined in the Manual for the 2022 season.

AMF means anhydrous milk fat.

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 for the 2022 season.

Farmgate Milk Price Capital Costs as defined in the Manual for the 2022 season.

Farmgate Milk Price Cash Costs as defined in the Manual for the 2022 season.

Farmgate Milk Price Manual or **Manual** means Fonterra's Farmgate Milk Price Manual which is available on: https://www.fonterra.com/content/dam/fonterra-public-website/fonterra-new-zealand/documents/pdf/milk-prices/2022/F23_Milk_Price_Manual_Final_1_August_2022.pdf

Farmgate Milk Price Revenue as defined in the Manual for the 2022 season.

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

Fixed Asset Capital Charges as defined in the Manual for the 2022 season.

Fonterra means Fonterra Co-operative Group Limited.

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

kgMS means kilograms of milk solids.

Methodology means the methodology for calculating the Farmgate Milk Price as 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.

Net Working Capital Charges as defined in the Manual for the 2022 season.

NZD means New Zealand dollars.

Reference Commodity Products or **RCP** 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.

Standard Supply Adjustments as defined in the Manual for the 2022 season.

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.



Billie, Taranaki



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