

JULY 2018

GLOBAL DAIRY UPDATE



Dairy for life



- New Zealand production increased in June over previous period but accounts for only a small portion of total milk production for the full season.



- US and European exports up. New Zealand exports slightly down and Australian exports flat in May.



- In March import demand grew in all regions except Latin America and Middle East and Africa.



- Fonterra's early season milk collection in the first month of the 2018/19 season, stood at 13 million kgMS. This represents less than 1% of the full season forecast.



- Muddy Buns, Dirty Dirty Bread, or Zang Zang Bao as they're known in China, are creating a social media frenzy and driving a further craving for butter around the world.
- Creative tea and coffee trends good news for New Zealand dairy.



- Half a million litres of Pahiatua groundwater to be saved every day.

KEY DATES



Mid September 2018
FY18 Annual Results
Announcement

12 November 2018
Fonterra Shareholders' Fund
Annual Meeting

1 December 2018
Compliance Date for Share
Standard 2018/19 Season

December 2018
FY19 Q1 Business Update



To view a chart that illustrates year-on-year changes in production –

NEW ZEALAND PRODUCTION INCREASED IN JUNE OVER PREVIOUS PERIOD BUT ACCOUNTS FOR ONLY A SMALL PORTION OF TOTAL MILK PRODUCTION FOR THE FULL SEASON

NEW ZEALAND

0%

Production change for the 12 months to June 2018

Total New Zealand milk production increased 11% in June, compared to the same period last year. This early in the season, June accounts for only a small portion of total milk production for the full season. The increase over last season partly represents improved conditions at the start of the season. In the early part of the season, supply is also supported by winter milking.

For the 12 months to June, milk production was flat compared to the same period last year.

Fonterra collections have been reported for June, see page 5 for details.

AUSTRALIA

3%↑

Production change for the 12 months to May 2018

Australian milk production increased 3% in May, compared to the same period last year, despite variable winter conditions across key production regions.

Production for the 12 months to May was up 3% compared to the same period the previous year.

This growth continues to be driven by south east Australian production.

Fonterra collections in Australia have been reported for June, see page 5 for details.

EUROPEAN UNION

3%↑

Production change for the 12 months to May 2018

EU milk production increased 2% in May, compared to the same period last year, driven by better than expected weather conditions.

European growth continues to be driven by Germany, up 3%. Italy, France and the United Kingdom were up 8%, 2% and 4% respectively.

Production for the 12 months to May was up 3% compared to the same period the previous year.

USA

1%↑

Production change for the 12 months to May 2018

US milk production increased 1% in May, compared to the same period last year.

The US continues to increase production per cow, averaging 931kg, up 7kg relative to the prior comparable period.

Milk production for the 12 months to May increased by 1% compared to the same period the previous year.



US AND EUROPEAN EXPORTS UP. NEW ZEALAND EXPORTS SLIGHTLY DOWN AND AUSTRALIAN EXPORTS FLAT IN MAY

To view a chart that illustrates year-on-year changes in exports –

NEW ZEALAND

1%↑

Export change for the 12 months to May 2018

Total New Zealand dairy exports decreased 3%, or 8,000 MT, in May compared to the same period last year. AMF and infant formula grew 7,000 MT and 6,000 MT, respectively. This was offset by a decline in WMP of 23,000 MT, or 20%.

Exports for the 12 months to May were up 1%, or 26,000 MT, on the previous comparable period. Growth continued to be driven by fluid and fresh dairy up 19%, or 50,000 MT. WMP and infant formula were up a combined 62,000 MT for the period. These gains were partially offset by a combined decline of 54,000 MT in cheese and AMF.

AUSTRALIA

6%↑

Export change for the 12 months to May 2018

Australian dairy exports were flat in May compared to the same period last year. Combined growth in fluid and fresh dairy and infant formula of 3,000 MT, was offset by a combined decline in SMP and WMP of 3,000 MT.

Exports for the 12 months to May were up 6%, or 41,000 MT, on the previous comparable period.

Fluid and fresh dairy, SMP and infant formula make up the majority of the 6% growth, adding a combined 60,000 MT. However, these gains remain dampened by declines in butter, WMP and whey powder, down a combined 16,000 MT.

EUROPEAN UNION

7%↑

Export change for the 12 months to February 2018

EU dairy exports increased by 4%, or 14,000 MT, in February compared to the same period last year.

Growth was across the majority of export categories, in particular infant formula and SMP, up a combined 19%, or 19,000 MT. A decline of 11%, or 12,000 MT, was seen in the largest category, fluid and fresh dairy.

Exports for the 12 months to February were up 7%, or 341,000 MT, on the previous comparable period. SMP continued to be the primary driver, up 40%, or 225,000 MT. In addition, growth continued across most export categories except for caseinate and butter, down a combined 53,000 MT, or 23%.

USA

8%↑

Export change for the 12 months to May 2018

US dairy exports increased by 15%, or 30,000 MT, in May as US milk production growth continued. SMP, lactose and WPC and WPI remain the primary growth categories adding 27,000 MT over the same period last year.

Exports for the 12 months to May were up 8%, or 177,000 MT, on the previous comparable period.

Growth was seen across all categories apart from fluid and fresh dairy and casein, down a combined 10,000 MT. Cheese, SMP and lactose saw the highest growth, adding 37,000 MT, 34,000 MT and 33,000 MT respectively.



IN MARCH IMPORT DEMAND GREW IN ALL REGIONS EXCEPT LATIN AMERICA AND MIDDLE EAST AND AFRICA

To view a chart that illustrates year-on-year changes in imports –

LATIN AMERICA

2%↓

Import change for the 12 months to March 2018

Latin American dairy import volumes¹ decreased 6%, or 10,000 MT, in March, compared to the same period last year. This was driven by three out of the four largest categories: cheese, fluid and fresh dairy and WMP down a combined 10,000 MT, or 13%.

Imports for the 12 months to March were down 2%, or 39,000 MT, compared to the same period last year. Large declines in WMP and AMF of 95,000 MT and 18,000 MT respectively were the primary cause of this downside. This was partially offset by continued strong demand for SMP, which was up 53,000 MT.

ASIA

1%↑

Import change for the 12 months to March 2018

Asia (excluding China) dairy import volumes¹ increased 6%, or 23,000 MT, in March, compared to the same period last year. Increased demand for WMP, fluid and fresh dairy and SMP drove the upside for the period, up a combined 24,000 MT. These gains were partially offset by declines in whey powder of 3,000 MT.

Imports for the 12 months to March were up 1%, or 48,000 MT, compared to the same period last year. Continued growth in WMP and cheese, up a combined 102,000 MT, partially offset continued decline in SMP, which was down 35,000 MT.

MIDDLE EAST & AFRICA

1%↑

Import change for the 12 months to March 2018

Middle East and Africa dairy import volumes¹ decreased 2%, or 9,000 MT, in March, compared to the same period last year. This was driven by fluid and fresh dairy and cheese down a combined 32,000 MT. However growth in WMP and SMP of a combined 19,000 MT, slightly offset this downside.

Imports for the 12 months to March were up 1%, or 30,000 MT, compared to the same period last year. This was driven by strong growth in SMP and cheese, up a combined 91,000 MT. These gains were partially offset by the continuing decline in WMP of 50,000 MT.

CHINA

17%↑

Import change for the 12 months to March 2018

China dairy import volumes² increased 3%, or 7,000 MT, in March compared to the same period last year. This was driven by a combined 14,000 MT, or 22%, growth in fluid and fresh dairy, butter and lactose categories. Declines in WMP of 6,000 MT partially offset this growth.

Imports for the 12 months to March were up 17%, or 394,000 MT, compared to the same period last year. Strong demand out of China continued with imports across all key categories up for the period. Infant formula, WMP and SMP imports added a combined 220,000 MT of additional volumes.

¹ Estimates are included for those countries that have not reported data.

² China has suspended trade data, citing system technical issues. Based on exports to China, we estimate April volumes grew 18% compared to the previous comparable period.

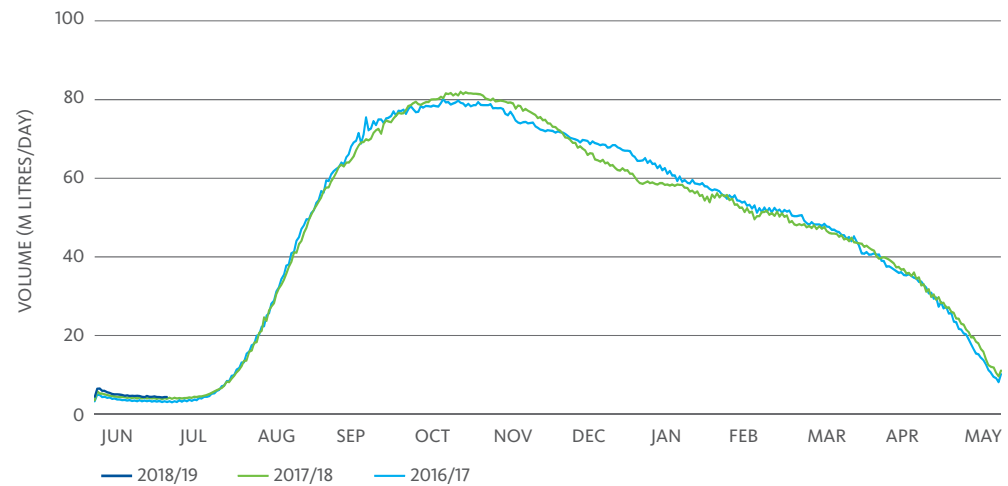
OUR MARKETS

FONTERRA MILK COLLECTION



To view a table that shows our detailed milk collection in New Zealand and Australia compared to the previous season –

NEW ZEALAND MILK COLLECTION



NEW ZEALAND

13%↑

Increase for the season from 1 June to 30 June

Fonterra's early season milk collection in the first month of the 2018/19 season stood at 13 million kgMS. This represents less than 1% of the full season forecast.

These volumes are small in the context of the full season, as is usual for this time of the year. The increases over last June are also small and are due partly to slightly more favourable weather and pasture conditions at the start of this season, in both the North and South Islands. A further increase in winter milk contracts this season has also contributed to supply.

NORTH ISLAND

14%↑

Increase for the season from 1 June to 30 June

North Island milk collection in June reached 10 million kgMS, 14% above June last season.

This was driven by volume growth in Northland, Waikato, Bay of Plenty and Taranaki.

SOUTH ISLAND

9%↑

Increase for the season from 1 June to 30 June

South Island milk collection in June reached 3 million kgMS, 9% above June last season.

Good pasture conditions in Otago and Southland due to favourable weather drove the increase.

AUSTRALIA

24%↑

Increase for the 2017/18 season compared to the previous season

Fonterra's milk collection across Australia for the 2017/18 season reached 153 million kgMS, 30 million kgMS higher than the 2016/17 season.

In June milk collection reached 10 million kgMS, 14% ahead of the same period last season. This was in part due to gains in market share.

Winter conditions have been variable across key production regions with rainfall surpluses (Tasmania and south-west Victoria) and rainfall deficits (northern Victoria and Gippsland) typifying winter to date. This has led to an increasing number of suppliers drying off herds earlier than usual in preparation for the 2018/2019 season.

OUR MARKETS

FONTERRA GLOBAL DAIRY TRADE RESULTS



Fonterra GDT results at
last trading event
17 July 2018:

0.8% ↓

Change in Fonterra's
weighted average product
price from previous event

USD **3,255**

Fonterra's weighted
average product price
(USD/MT)

24.7 '000' MT

Fonterra product quantity
sold on GDT

WMP

2.4% ↑

USD2,973/MT

SMP

1.5% ↑

USD1,974/MT

CHEDDAR

3.2% ↓

USD 3,596/MT

AMF

5.2% ↓

USD5,629/MT

BUTTER

8.1% ↓

USD4,953/MT

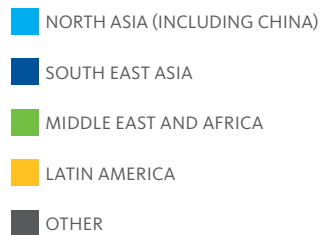
RENNET CASEIN

9.6% ↓

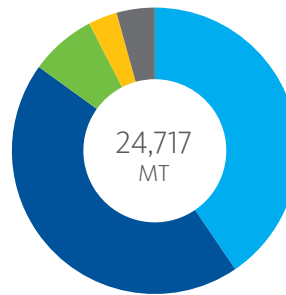
USD 4,602/MT

Fonterra GDT sales
by destination:

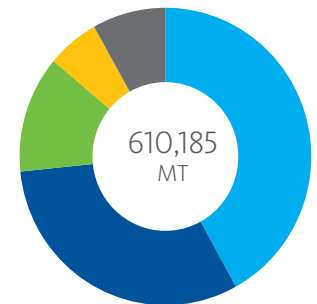
To view more information,
including a snapshot of the
rolling year-to-date results –



LATEST AUCTION



**FINANCIAL
YEAR-TO-DATE**



► The next trading event will be held on 7 August 2018. Visit www.globaldairytrade.info for more information.

Dairy commodity prices and New Zealand dollar trend

The New Zealand dollar fell
sharply late in the month
on the back of the stronger
US dollar.





'Muddy Buns' cleaning up the butter market

Muddy Buns, Dirty Dirty Bread, or Zang Zang Bao as they're known in China, are creating a social media frenzy and driving a further craving for butter around the world.

Fonterra Edgecumbe is all geared up to handle this global trend and is commissioning a new butter line which will nearly double the factory's butter sheet production from 4,500 metric tonnes to 7,000 metric tonnes.

Fonterra General Manager Marketing, Global Foodservice, Susan Cassidy says "The Dirty Dirty Bread can best be described as a chocolate croissant. People

love the flaky chocolate pastry that's coated in rich chocolate ganache and sprinkled with cocoa powder.

"It makes it impossible to keep your face clean while eating. They are popular with celebrities who have taken to social media to share images of their 'muddy bun face' experience."

Ms Cassidy says demand for butter is as strong as ever. People want natural products and they are prepared to pay for them. And that's why global butter prices, including here in New Zealand, continue to be strong.

"Even in temperatures of minus ten degrees, crowds of people are queuing for hours to get their hands on their Muddy Bun."

Edgecumbe's Operations Manager, Allan Muggeridge, says the first butter sheet will roll off the new butter line on 1 September.

"We've been watching demand for butter build for a number of years now. The building part of the project started in May so it's been a quick turnaround to get it up and running," says Mr Muggeridge.

Fifteen local contractors have been employed to complete the expansion at the site, which employees 380 people.

"It's been a real boost to the local business community, especially after the rough past 12 months Edgecumbe has had," says Mr Muggeridge.



FONTERRA EDGECUMBE CREAM PLANT MANAGER DOUG GERRY WITH ENGINEERING PROJECT MANAGER WILL ROUSE SHARING THEIR 'MUDDY BUN FACE' EXPERIENCE

Creative tea and coffee trends good news for New Zealand dairy



It's tea, but not as you know it. Right now people are adding more than just milk and sugar to their cuppa's and Fonterra is set to meet the demand for adventurous tea and coffee drinks around the world.

Beverages made with yoghurt, topped with cream cheese and mixed with cream are growing in popularity, leading Fonterra to establish a new channel within its Global Foodservice

business, Beverage House.

Almost 600 million cups of tea and coffee are consumed out-of-home daily in the Asia Pacific region, a 22% increase on five years ago.

General Manager Marketing, Global Foodservice, Susan Cassidy says Beverage House will provide premium Anchor Food Professionals products to the growing number of modern coffee and tea houses, beverage kiosks and dessert bars.

"In Asia, consumers are moving from traditional 'straight' brews to drinks with dairy, as they look for a more indulgent way to enjoy their daily fix of coffee or tea," says Ms Cassidy.

The trend of adding dairy to more traditional beverages started in China with the tea

macchiato, which is green tea topped with a mix of cream and cream cheese.

"This trend was really driven by youth and took off, with people queuing for hours to get the latest creation from their favourite tea house."

"We moved quickly and as a result the tea macchiato alone grew the volume of our cream and cream cheese sales by 47% in the first half of the 2017/18 financial year."

Since the start of 2018 Beverage House has sold more than 30,000 metric tonnes of product, enough to create the equivalent of more than 400 million tea macchiatos.

"Beverage House has mainly been focussed on China so far, but the potential for growth in other markets is

huge. We are now using what we've learnt to look at other markets where beverages with dairy are growing in popularity."

Beverage House sits alongside Fonterra's existing Foodservice channels: Quick Serve Restaurants, Italian Kitchen and Asian Bakery.

"Having a standalone channel within our Foodservice business means we can be more targeted with the service we offer our beverage customers and gain a better understanding of changing consumer tastes and trends," says Ms Cassidy.

Shifting more milk, quicker, into value-added products through our Consumer and Foodservice business is a key part of Fonterra's strategy to add more value to our farmers' milk.



Half a million litres of Pahiatua groundwater to be saved every day

Half a million litres of Pahiatua groundwater (about the same as 18 milk tanker loads) will be saved every day thanks to the development and installation of a ground-breaking reclaimed water system at the local Fonterra site.

The site team came up with an innovative way to reuse water from condensation that's produced during the milk powder manufacturing process.

Robert Spurway, Fonterra's COO Global Operations, says the water-saving initiative is a testament to the Pahiatua team's innovative and can-do approach to sustainability.

"Pahiatua is already Fonterra New Zealand's most water efficient site, and some clever thinking has taken it to the next level."

"As an organisation, we've committed to a 20% reduction in water use by 2020. Pahiatua is well ahead of the game."

Tracey Collis, Tararua District Council Mayor, says she is "extremely proud of the team at Fonterra and their ongoing commitment to sustainability. On several occasions they have hosted councillors, staff and Iwi on site to share information on new technology and view the systems in action."

"We very much appreciate the transparency and passion

shown by Fonterra to continually use technological efficiencies which also have environmental benefits. This creates a win-win outcome for all."

Horizons Regional Council's environment committee chair Gordon McKellar also commends the team and says it's great to see Fonterra introducing innovative systems that will directly reduce water use in Pahiatua.

"Practices like reclaimed water systems are a great way to involve staff in sustainability initiatives that will improve their local environment," says Cr McKellar.

The P3 milk powder plant at Pahiatua (built in 2015) was already 100% self-sufficient for water, meaning it does not use any groundwater in the manufacturing process. However, the evaporators often produced more water than was required and the excess was typically irrigated onto surrounding farmland.

Now, rather than irrigate the excess water, the new reclaimed water system treats the excess water via reverse osmosis and chlorination before combining it with the site's main water supply for general use.

The successful water re-use project is a hat tip to good old kiwi ingenuity and the benefit of a team-based approach to problem solving.



PAHIATUA OPS SITE MANAGER
GLENN BROUGHTON WITH
FONTERRA COO GLOBAL OPERATIONS
ROBERT SPURWAY

Site Operations Manager Glenn Broughton says he is incredibly proud of the project. "After seeing an opportunity to innovate, the team completed the project in an extremely cost-effective manner."

In 2017 Fonterra made six commitments to New Zealand water ways, including reducing water use (20% by 2020) and improving wastewater quality at all our manufacturing plants.

[For more details on the commitments –](#)

SUPPLEMENTARY INFORMATION

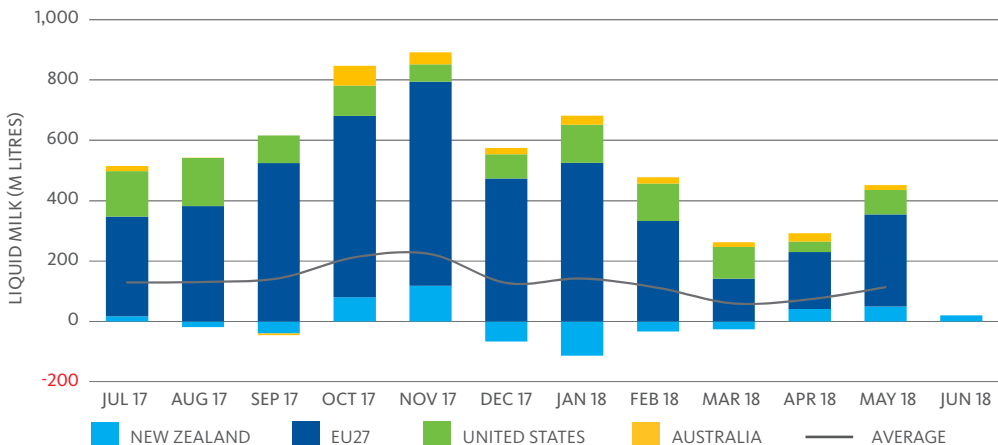
Global Dairy Market

The charts on the right illustrate the year-on-year changes in imports, exports and production for a range of countries that are important players in global dairy trade.

The absolute size of the bars represents the change in imports, exports or production, relative to the same period the previous year.

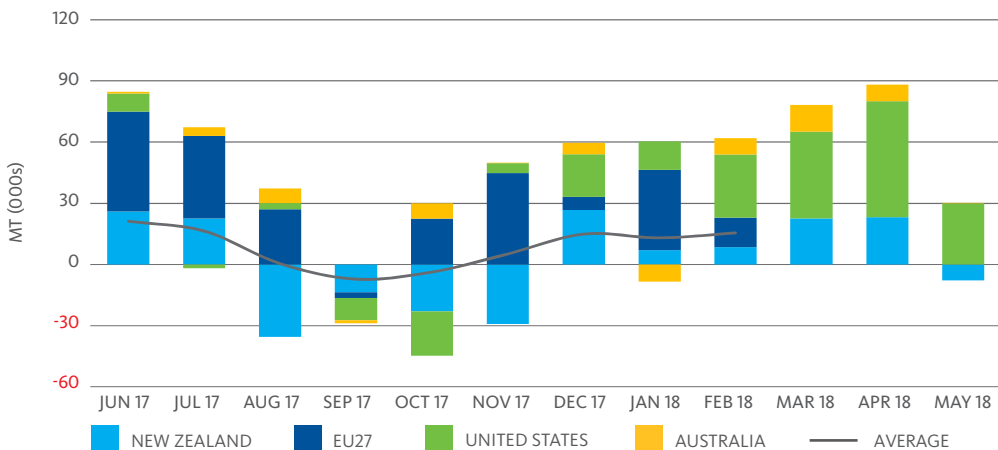
Averages are shown where data is complete for the regions presented.

PRODUCTION



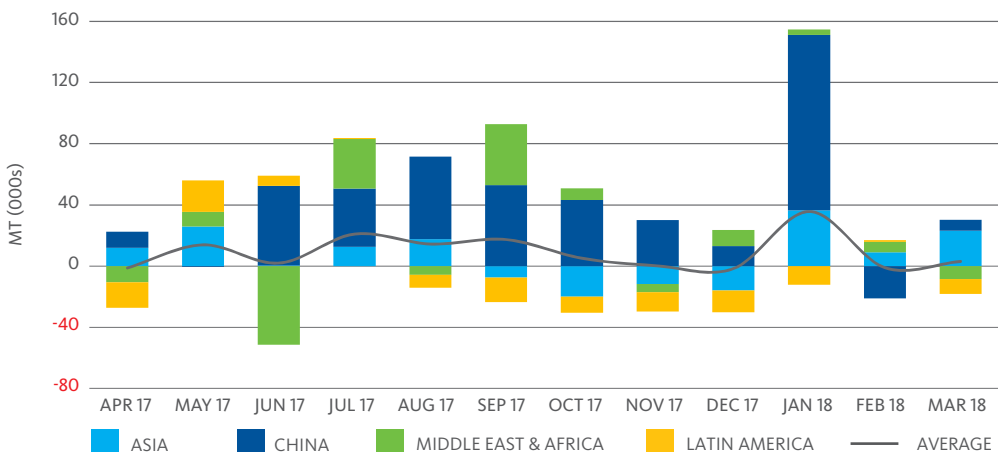
NOTE: Data for EU, US and Australia to May; New Zealand to June.

EXPORTS



NOTE: Data for EU to February; New Zealand, US and Australia to May.

IMPORTS



NOTE: Data for Asia, China, Middle East and Africa and Latin America to March.

SOURCE: Government milk production statistics/GTIS trade data/Fonterra analysis.

SUPPLEMENTARY INFORMATION

Fonterra milk production

The table on the right shows Fonterra milk solids collected in New Zealand and Australia compared to the previous season.

MILK COLLECTION (MILLION KGMS)	JUNE 2018	JUNE 2017	MONTHLY CHANGE	SEASON- TO-DATE 2018/19	SEASON- TO-DATE 2017/18	SEASON- TO-DATE CHANGE
Total Fonterra New Zealand	13.3	11.8	13.0%	13.3	11.8	13.0%
North Island	10.4	9.1	14.2%	10.4	9.1	14.2%
South Island	2.9	2.6	9.2%	2.9	2.6	9.2%

MILK COLLECTION (MILLION KGMS)	JUNE 2018	JUNE 2017	MONTHLY CHANGE	SEASON- TO-DATE 2017/18	SEASON- TO-DATE 2016/17	SEASON- TO-DATE CHANGE
Fonterra Australia	9.9	8.7	13.9%	153.4	123.4	24.3%

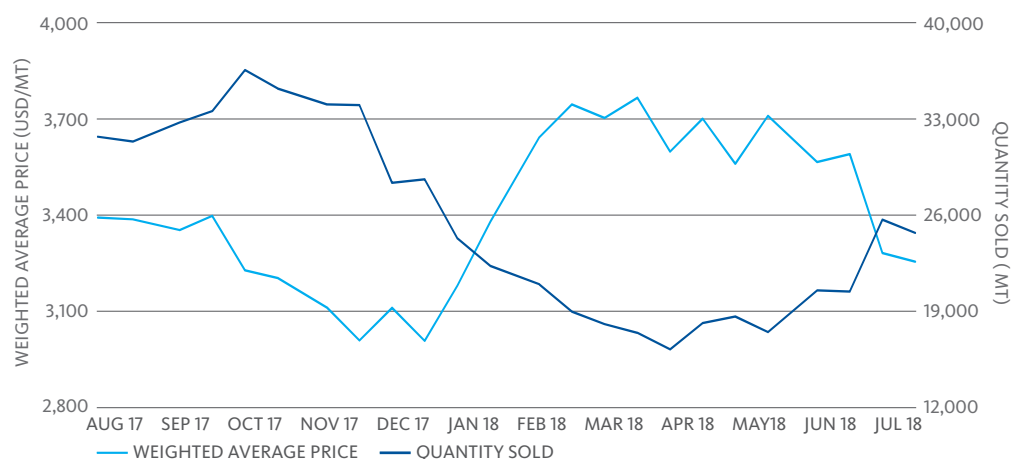
Fonterra GDT results

This table provides more information on the latest results, including a snapshot of the year-to-date results.

	LAST TRADING EVENT (17 JULY 2018)	YEAR-TO-DATE (FROM 1 AUGUST 2017)
Quantity Sold on GDT (Winning MT)	24,717	610,185
Change in Quantity Sold on GDT over same period last year	(3.4%)	1.8%
Weighted Average Product Price (USD/MT)	3,255	3,363
Change in Weighted Average Product Price over same period last year	(6.1%)	4.0%
Change in Weighted Average Product Price from previous event	(0.8%)	–

Fonterra GDT Results

This chart shows Fonterra GDT prices and volumes over the past 12 months.



GLOSSARY

AMF

Anhydrous Milk Fat.

BMP

Butter Milk Powder.

DIRA

Dairy Industry Restructuring Act 2001 (New Zealand).

Farmgate Milk Price

The price for milk supplied in New Zealand to Fonterra by farmer shareholders.

Fluid and Fresh Dairy

The Fonterra grouping of fluid milk products (skim milk, whole milk and cream – pasteurised or UHT processed), concentrated milk products (evaporated milk and sweetened condensed milk) and yoghurt.

GDT

Global Dairy Trade, the online provider of the twice monthly global auctions of dairy ingredients.

kgMS

Kilogram of milk solids, the measure of the amount of fat and protein in the milk supplied to Fonterra.

LME (Liquid Milk Equivalent)

A standard measure of the amount of milk (in litres) allocated to each product based on the amount of fat and protein (“milk solids”) in the product relative to the amount of fat and protein in a standardised raw milk.

Non-Reference Products

All dairy products, except for Reference Products, produced by the NZ Ingredients business.

Reference Products

The dairy products used in the calculation of the Farmgate Milk Price, which are currently WMP, SMP, BMP, butter and AMF.

Season

New Zealand: A period of 12 months to 31 May in each year.

Australia: A period of 12 months to 30 June in each year.

SMP

Skim Milk Powder.

WMP

Whole Milk Powder.