

# GLOBAL DAIRY UPDATE



- Production growth in New Zealand and the US is easing. EU growth and Australia production is declining.



- New Zealand exports increased in January. Exports from Australia and the EU continue to grow. US exports begin to ease.



- Imports into Asia and China show strong growth. Latin America increased but the Middle East and Africa region is declining.



- Fonterra has updated its forecast milk collection for the full season to 1,510 million kgMS, slightly above last season's collections of 1,505 million kgMS, following a prolonged period of dry weather particularly in the North Island and upper South Island.

- Forecast Farmgate Milk Price range \$6.30-\$6.60 per kgMS. [Visit our website for more details –](#)

- Returned to profitability in the first half of FY19 with a reported Net Profit After Tax (NPAT) of \$80 million but normalised EBIT of \$323 million, down 29%.
- Full year earnings guidance revised to 15-25 cents per share in February. No interim dividend.
- Significant progress made on three-point plan.
- Full strategic review underway.



- Fonterra's Waikato and Bay of Plenty tankers are now all up and running on biodiesel thanks to Z Energy.

## KEY DATES



May 2019  
Q3 Business Update

1 June 2019  
Measurement Date for Share Standard 2019/20 Season

September 2019  
FY19 Annual Results Announcement

1 December 2019  
Compliance Date for Share Standard 2019/20 Season



# PRODUCTION GROWTH IN NEW ZEALAND AND THE US IS EASING. EU GROWTH AND AUSTRALIA PRODUCTION IS DECLINING

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

## NEW ZEALAND



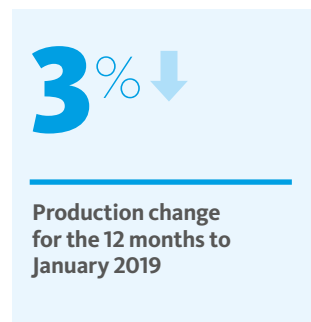
**Total New Zealand milk production** in February was broadly flat compared to the same period last year.

Dry conditions continued for most of February. Soil moisture has dropped to below normal, impacting key North Island dairy regions. Drought conditions prevail in the upper South Island but dairy regions in the lower part of the South Island have not been greatly impacted.

New Zealand milk production for the 12-months to February 2019 was 4% higher than last year.

Fonterra collections are reported for February, see page 5 for details.

## AUSTRALIA



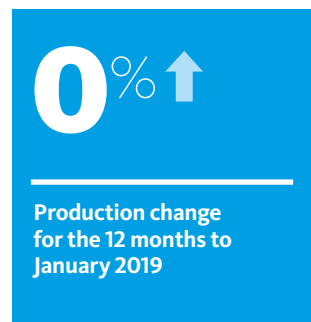
**Australian milk production** decreased 11% in January 2019 compared to the same period last year.

Production for the 12 months to January is down 3% on the previous 12 months.

High input costs, increased cow cull rates, and farm exits continue to severely impact milk production. Dairy Australia has forecast a milk production decline of between 7% and 9% for the season.

Fonterra collections in Australia are reported for February, see page 5 for details.

## EUROPEAN UNION



**EU milk production** decreased 1% in January compared to the same period last year. This is the fifth consecutive monthly decline on a year-on-year basis.

Growth continued to slow through the second half of 2018. Austria, The Netherlands, France and Germany saw negative monthly growth. This was offset by growth in Poland, UK, Denmark and Belgium. Ireland was broadly flat after an extended period of strong growth.

Production for the 12 months to January was up less than 1% compared to the same period last year.

## USA



**US milk production** was up less than 1% in February compared to the same period last year. Cow numbers have continued to decline with the small monthly growth on a year-on-year basis driven by increased yield per cow.

Margins continue to be squeezed and in many cases were negative in the last quarter of 2018. Growth is likely to remain constrained until some improvement in margin is achieved.

Milk production for the 12 months to February was just under 1% compared to the same period last year.



# NEW ZEALAND EXPORTS INCREASED IN JANUARY. EXPORTS FROM AUSTRALIA AND THE EU CONTINUE TO GROW. US EXPORTS BEGIN TO EASE

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

## NEW ZEALAND

**2%↑**

Export change for the 12 months to January 2019

**Total New Zealand dairy exports** increased by 16%, or 51,000 MT, in January compared to the same period last year. This was primarily driven by WMP, up 27,000 MT. AMF, fluid products, and butter were up a combined 22,000 MT.

Exports for the 12 months to January were up 2%, or 51,000 MT, on the previous comparable period. This was primarily driven by WMP, up 26,000 MT. AMF, fluid products, butter and SMP were up a combined 26,000 MT.

## AUSTRALIA

**8%↑**

Export change for the 12 months to January 2019

**Australian dairy exports** increased 32%, or 16,000 MT, in January compared to the same period last year. This growth was due to SMP, infant formula, fluid products and whey powder up a combined 18,000 MT. This was offset by a decline in WMP of 3,000 MT.

Exports for the 12 months to January were up 8%, or 59,000 MT, on the previous comparable period.

Infant formula, SMP, fluid products and whey powder make up most of the growth in Australian exports, up a combined 55,000 MT.

## EUROPEAN UNION

**1%↑**

Export change for the 12 months to December 2018

**EU dairy exports** increased by 4%, or 15,000 MT, in December compared to the same period last year. This was primarily driven by SMP, lactose, whey powder, and WPC up a combined 31,000 MT. This was offset by declines in WMP, cultured products, fluid products and cheese of a combined 15,000 MT.

Exports for the 12 months to December were up 1%, or 48,000 MT, on the previous comparable period. Infant formula alone was up 46,000 MT to 586,000 MT.

There was continued growth in a broad range of products, led by infant formula, SMP, and lactose offset by declines in fluid products and WMP.

## USA

**9%↑**

Export change for the 12 months to December 2018

**US dairy exports** declined by 18%, or 36,000 MT, in December compared to the same period last year. This was primarily driven by whey powder, SMP, lactose and WPC, down a combined 37,000 MT.

Although SMP was down in December compared to the same period last year, it was up 108,000 MT, for the 12 months to December.

Exports for the 12 months to December were up 9%, or 208,000 MT, on the previous comparable period.



# IMPORTS INTO ASIA AND CHINA SHOW STRONG GROWTH.

## LATIN AMERICA INCREASED BUT THE MIDDLE EAST AND AFRICA REGION IS DECLINING

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

### LATIN AMERICA

**3%↑**

Import change for the 12 months to December 2018

**Latin American dairy import volumes<sup>1</sup>** increased 2%, or 3,000 MT, in December compared to the same period last year. The increase was primarily SMP and infant formula, up a combined 7,000 MT. This was offset by a decline in WMP and whey powder.

Imports for the 12 months to December were up 3%, or 65,000 MT, compared to the same period the previous year. SMP, lactose, fluid products and MPC were up a combined 73,000 MT offset by declines in AMF and WMP of 18,000 MT.

### ASIA

**6%↑**

Import change for the 12 months to December 2018

**Asia (excluding China) dairy import volumes<sup>1</sup>** increased 12%, or 44,000 MT in December compared to the same period last year. SMP, WMP and fluid products were up but offset by declines in ice cream and cheese.

Imports for the 12 months to December were up 6%, or 285,000 MT, compared to the same period the previous year. This growth continues to be driven by fluid products, WMP, SMP, lactose and whey powder of 277,000 MT. The market remains in a solid growth phase.

### MIDDLE EAST & AFRICA

**5%↓**

Import change for the 12 months to December 2018

**Middle East and Africa dairy import volumes<sup>1</sup>** decreased 10% or 35,000 MT in December compared to the same period last year. Small growth in infant formula and AMF was offset by declines in most other products, principally cheese, WMP and butter, down a combined 31,000 MT.

Imports for the 12 months to December were down 5%, or 222,000 MT, compared to the same period the previous year. The reduction was driven by fluid products and cheese, down a combined 212,000 MT. This was offset by a small increase in SMP.

### CHINA

**6%↑**

Import change for the 12 months to January 2019

**China dairy import volumes** increased 17%, or 64,000 MT in January compared to the same period last year. This was driven by increases across a broad range of products, particularly WMP, SMP, and infant formula up a combined 64,000 MT. WMP imports reached a record peak of 182,000 MT.

Imports for the 12 months to January were up 6%, or 162,000 MT, compared to the same period last year. Strong demand continued with imports across key categories, particularly WMP, SMP and infant formula which were up a combined 128,000 MT.

<sup>1</sup> Estimates are included for those countries that have not reported data.

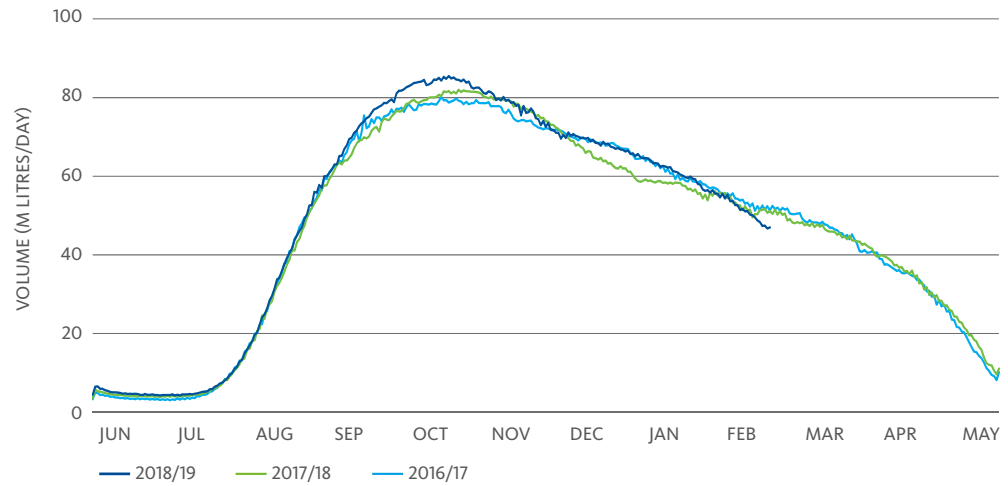
**OUR MARKETS**

FONTERRA MILK COLLECTION 2018/19 SEASON



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**

**4% ↑**

Increase for the season from 1 June to 28 February

Fonterra’s milk collection across New Zealand for the current season from 1 June to 28 February was 1,216 million kgMS, up 4% on the same period last season. Low rainfall and above average temperatures continued through February, slowing milk production across most regions but particularly in the North Island and upper South Island. Collections in February were 133m kgMS, 2% down on the same month last season, the first month this season where total New Zealand production was below the equivalent month last season.

**Forecast Fonterra Milk Collection Across New Zealand**

**1,510M**  
KGMS

**NORTH ISLAND**

**4% ↑**

Increase for the season from 1 June to 28 February

**North Island milk collection** in February was 73 million kgMS, down 5% on February last season. Much of the North Island has been affected by on-going hot and dry conditions, with adverse impacts on pasture condition and milk flows. Supplementary feed is being used to maintain good animal condition and provide a degree of support for milk volumes. Milk collection for the 2018/19 season to date reached 738 million kgMS, up 4%.

Fonterra has reduced its full season forecast milk collection for the 2018/19 season to 1,510 million kgMS, down from 1,530 million kgMS announced in February. Whilst collections are 4% ahead on a season to

**SOUTH ISLAND**

**4% ↑**

Increase for the season from 1 June to 28 February

**South Island milk collection** in February was 60 million kgMS, 3% higher than February last season. The Upper South Island area has been classified as experiencing a medium-scale drought, with other regions also seeing pasture growth rates slow. Increased use of supplementary feed has contributed to overall milk flow from the South Island remaining strong. Milk collection for the 2018/19 season to date reached 478 million kgMS, up 4%.

date basis, the influence of prolonged dry weather, particularly in the North Island, has had an adverse impact on on-farm conditions and therefore production in the second half of the season.

**AUSTRALIA**

**17% ↓**

Decrease for the season from 1 July to 28 February

Fonterra’s milk collection across Australia for the eight months to 28 February reached 91 million kgMS, down 17% on the same period last season. Fonterra collections in February were 8 million kgMS, down 28% on February last season. Fonterra’s share of monthly collection continues to reduce due to adverse on-farm conditions, cull cow rates, retirements in key regions, and milk collection losses in a highly competitive market.

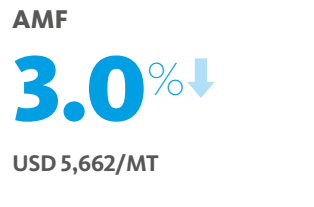
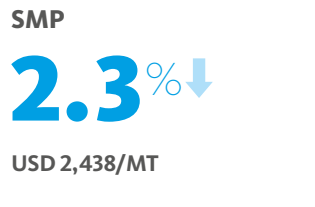
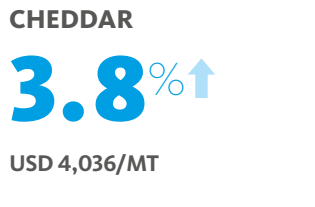
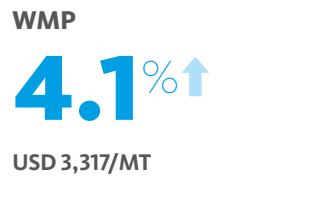
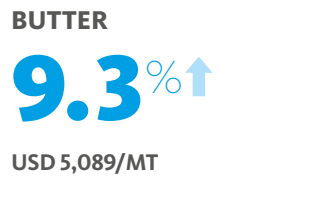
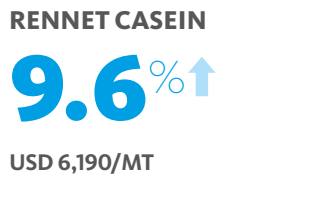
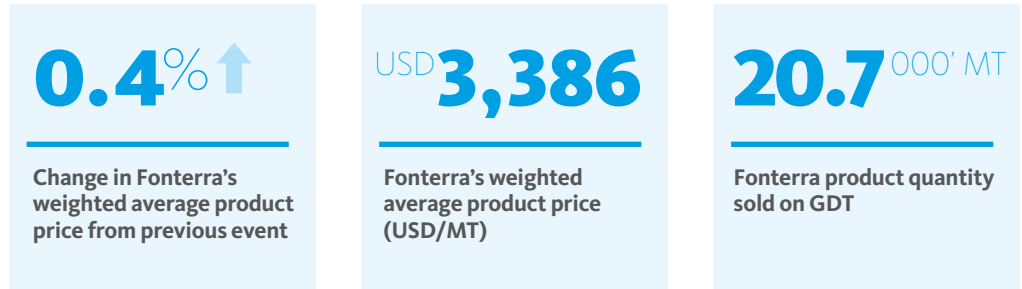
On farm conditions will continue to be an important factor on the milk supply for the remainder of the season. We will continue to provide updates as the season progresses.

# OUR MARKETS

## FONTERRA GLOBAL DAIRY TRADE RESULTS

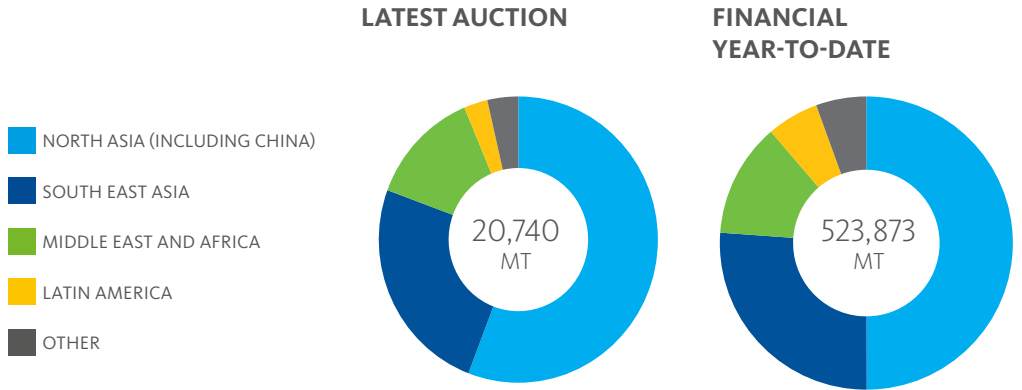


Fonterra GDT results at last trading event  
**19 March 2019:**



Fonterra GDT sales by destination:

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



► The next trading event will be held on 2 April 2019. Visit [www.globaldairytrade.info](http://www.globaldairytrade.info) for more information.

### Dairy commodity prices and New Zealand dollar trend

The New Zealand dollar declined marginally during February as the Reserve Bank signalled their intent to keep New Zealand interest rates on hold for the foreseeable future against a backdrop of global growth concerns.





## Fonterra to explore opportunities in complementary nutrition

Fonterra has taken a stake in Motif Ingredients, a US-based food ingredients company that develops and commercialises bio-engineered animal and food ingredients.

Fonterra joins Ginkgo Bioworks, Breakthrough Energy Ventures, Louis Dreyfus Companies and Viking Global Investors.

Judith Swales, head of Fonterra's Global Consumer and Foodservice business, says the move is part of the Co-operative's commitment to its farmer-owners to stay at the forefront of innovation to understand and meet the changing preferences of consumers. While the terms will not be disclosed, Fonterra's investment represents a minority stake in the business.

"Farmers expect their co-op to get the most value from every drop of their milk and also keep an eye on tomorrow to future-proof their co-op for generations to come.

"Dairy nutrition will always be at our core, but we also want to explore how we can capture more value from new types of nutrition.

"The complementary nutrition category – where plant, insect, algae and fermentation-produced nutrition co-exist alongside animal proteins, including cows' milk – is fast evolving. It's not a case of either/or, but both," says Judith.

"If we fast forward 30 years, there'll be two billion more mouths to feed and there simply won't be enough food to go around just using today's methods. A combination of traditional and complementary nutrition sources will be required to meet the world's increasing need for food, especially protein.

"Consumers around the world will continue to want natural, grass fed dairy as a premium source of nutrition. At the same time, we recognise that no two consumers are the same. As diets and preferences

continue to evolve, we want to be there, providing people with choices.

"Our stake in Motif will help us be part of this emerging next-generation fermentation-produced nutrition sector," says Judith.

Motif has been established by Ginkgo Bioworks, one of the world's leading organism companies. Using a process similar to how insulin, vitamins and beer are made, Motif's team of world leading biotech experts will harness state-of-the-art genetic science and fermentation technology to recreate and sell animal proteins and food ingredients, including those similar to dairy ingredients.

Jonathan McIntyre, Motif Ingredients' CEO, says "Through biotechnology and fermentation, Motif will propel the next food revolution with affordable, sustainable and accessible ingredients that meet the standards of chefs, food developers, and visionary brands."

## Skim UHT milk reaches #1 spot in China

Anchor™ Skim Milk UHT has become the top skim milk brand in Greater China.

This follows our skim milk sales doubling in the first half of 2018/19, up 131% compared to last year.

Greater China President Christina Zhu says achieving the number one spot is a fantastic result. "Skim Milk UHT joins our Anchor UHT which is number one both online and offline. In 2018, Anchor milk powder reached the top spot and our Anchor butter reached second place in market share."

As Chinese consumers become more diet conscious, they're looking for lower-fat options. Not only low in fat, Anchor™ skimmed milk is rich in calcium and protein, making it popular with fitness-focused consumers and gym-goers. The brands team in China launched a "calorie killer" campaign to generate high consumer interest on a tight marketing budget.

"Health has always been a big focus for Chinese but they're now looking to balance their busy lives

with a more well-rounded lifestyle. Younger consumers, in particular, are looking for brands and products that help them manage a healthier lifestyle while on the go."

Globally, the wellness market is valued at around US\$3.7 trillion, and the number of low-fat products is growing as the competition for a bigger share of this market grows.

The inclusion of off-GDT sales has contributed 8 cents per kgMS for the season to date to 31 January 2019



## FUELLED BY BIODIESEL

Fonterra's Waikato and Bay of Plenty tankers are now all up and running on biodiesel thanks to Z Energy.

The Co-op has been working closely with Z Energy since 2014 to help introduce biodiesel to New Zealand as part of its commitment to reduce emissions across its operations.

Fast forward to 2019, Fonterra now has its 156 tankers in the Waikato and Bay of Plenty area producing 4% less emissions per year.

Fonterra General Manager National Transport and Logistics Barry McColl

says, it's a step in the right direction for reaching our climate targets.

"Over the course of a year, our use of 160,000 litres of biodiesel, mainly in the Waikato and Central North Island, will prevent around 425 tonnes of carbon dioxide being emitted.

"By working with Z Energy, we're taking another step toward reducing our carbon footprint. We're also supporting the commercialisation of biodiesel which will eventually help other businesses, the public and farmers use it to reduce their emissions.

"We're one of the most emissions efficient producers of dairy in the world. We're proud of that, but we're also up for the challenge of doing better."

No modifications are needed to use the new fuel, which is a blend of up to 5% biodiesel and ordinary diesel.

Using biofuel is just one of the ways we're working toward our target to reduce emissions by 30% across all our operations by 2030, with a goal to achieve net zero by 2050.





# SUPPLEMENTARY INFORMATION

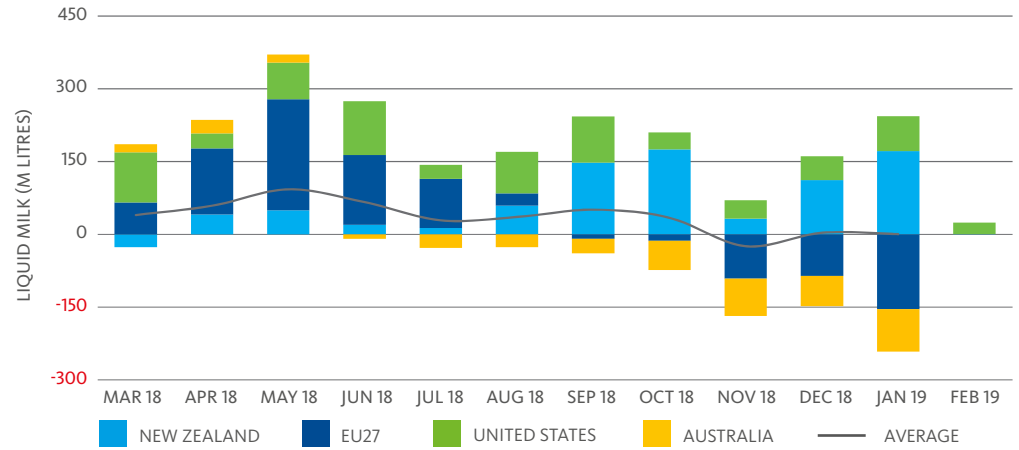
## Global Dairy Market

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.

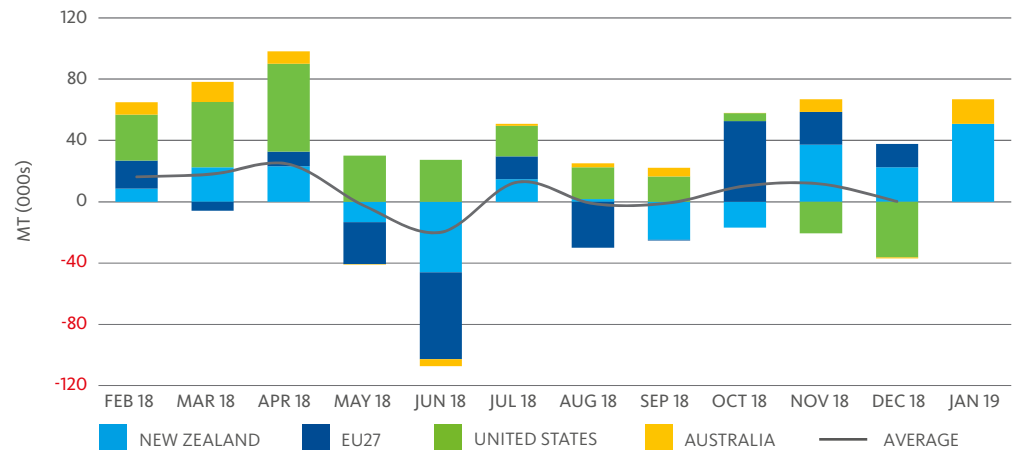
Averages are shown where data is complete for the regions presented.

### PRODUCTION



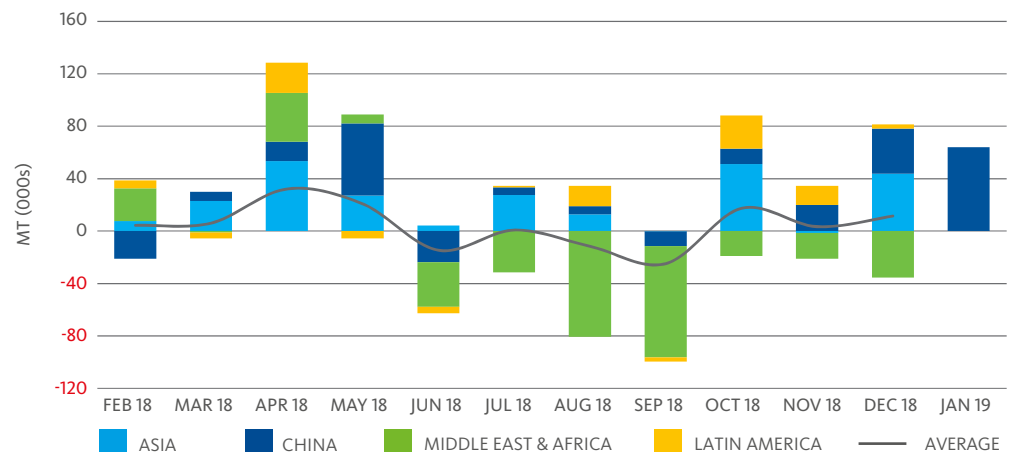
NOTE: Data for EU and Australia to January; New Zealand and US to February.

### EXPORTS



NOTE: Data for EU and US to December; New Zealand and Australia to January.

### IMPORTS



NOTE: Data for China to January; Asia, Middle East and Africa, Latin America to December.

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)	FEBRUARY 2019	FEBRUARY 2018	MONTHLY CHANGE	SEASON-TO-DATE 2018/19	SEASON-TO-DATE 2017/18	SEASON-TO-DATE CHANGE
Total Fonterra New Zealand	133.1	135.3	(1.7%)	1,215.7	1,171.2	3.8%
North Island	72.8	76.7	(5.1%)	737.6	712.8	3.5%
South Island	60.3	58.7	2.8%	478.1	458.4	4.3%
Fonterra Australia	7.8	10.8	(27.8%)	90.9	109.1	(16.7%)

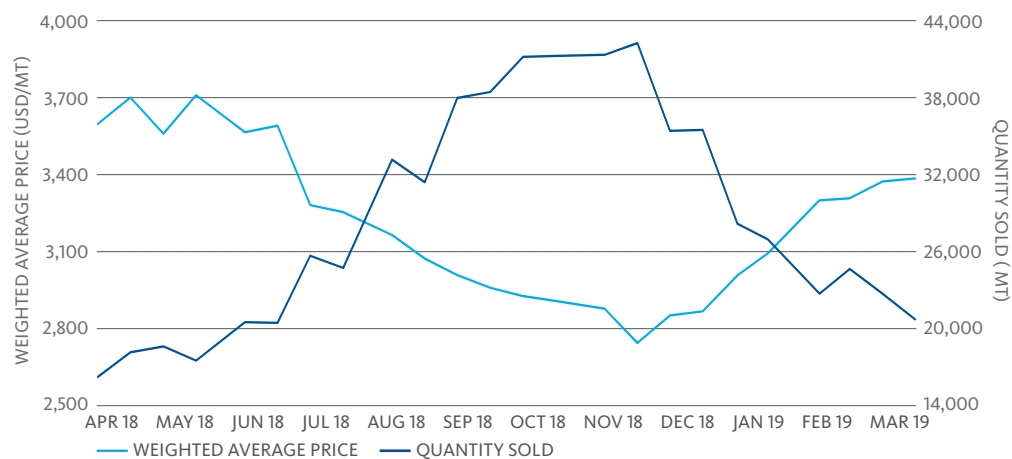
## Fonterra GDT results

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

	LAST TRADING EVENT (19 MARCH 2019)	YEAR-TO-DATE (FROM 1 AUGUST 2018)
Quantity Sold on GDT (Winning MT)	20,740	523,873
Change in Quantity Sold on GDT over same period last year	18.8%	16.9%
Weighted Average Product Price (USD/MT)	3,386	3,014
Change in Weighted Average Product Price over same period last year	(10.1%)	(8.9%)
Change in Weighted Average Product Price from previous event	0.4%	-

## Fonterra GDT Results

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



# GLOSSARY

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## 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 Products

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.