

# GLOBAL DAIRY UPDATE



Dairy for life



• Early season New Zealand production assisted by favourable weather conditions. Australian production decreased in June over previous period.



• Exports down in New Zealand and Australia for June. Growth continues in Europe and the US.



• Latin America, Asia and Middle East and Africa imports record double-digit growth in April.



• Fonterra's early season milk collection across New Zealand for the two months to 31 July reached 31 million kgMS. This represents less than 3% of the full season forecast.

- Anchor announces the addition of the a2 Milk™ brand by Anchor to its milk portfolio.
- Chinese commuters are now able to enjoy Anchor's extra-stretchy mozzarella as they travel the world's largest rail network thanks to a new supply agreement with Pizza Seven.



- Fonterra is transitioning from coal to renewable energy at its Stirling site in Otago.

## KEY DATES



13 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 –

# EARLY SEASON NEW ZEALAND PRODUCTION ASSISTED BY FAVOURABLE WEATHER CONDITIONS. AUSTRALIAN PRODUCTION DECREASED IN JUNE OVER PREVIOUS PERIOD

## NEW ZEALAND

0%

Production change  
for the 12 months to  
July 2018

**Total New Zealand milk production** increased 6% in July, compared to the same month last year on the back of favourable weather conditions in some parts of the country for milk production and calving. In addition, production growth was supported by an increase in farms participating in winter milking. This early in the season, June and July account for only a small portion of total milk production for the full season.

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

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

## AUSTRALIA

3% ↑

Production change  
for the 12 months to  
June 2018

**Australian milk production** decreased 1% in June compared to the same period last year due to rising costs and scarcity of key on-farm inputs such as water, cereals and fodder, the costs of which are now trending substantially above long-term averages.

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

This annual growth continues to be driven by Victoria and Tasmania.

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

## EUROPEAN UNION

3% ↑

Production change  
for the 12 months to  
June 2018

**EU milk production** increased 1% in June compared to the same period last year, but is facing above average temperatures and water restrictions across some parts of Europe.

While there was growth in June, there are signs of hot weather impacting Germany and other dairy producing areas.

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

## USA

1% ↑

Production change  
for the 12 months to  
June 2018

**US milk production** increased 1% in June compared to the same period last year.

This was driven by a combination of higher production per cow, along with an increase in milking cows compared to the same period last year.

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



## EXPORTS DOWN IN NEW ZEALAND AND AUSTRALIA FOR JUNE. GROWTH CONTINUES IN EUROPE AND THE US

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

### NEW ZEALAND

**2%** ↓

Export change for the 12 months to June 2018

**Total New Zealand dairy exports** decreased 16%, or 46,000 MT, in June compared to the same period last year driven by WMP, down 42,000 MT. Growth in AMF and infant formula continued, up a combined 9,000 MT, partially offsetting the decline.

Exports for the 12 months to June were down 2%, or 52,000 MT, on the previous comparable period. This was driven by lower volumes across WMP, AMF, cheese and SMP, which were down a combined 104,000 MT. Continued gains in fluid and fresh dairy and infant formula, up a combined 76,000 MT, reduced the decline.

### AUSTRALIA

**5%** ↑

Export change for the 12 months to June 2018

**Australian dairy exports** decreased 5%, or 4,000 MT, compared to the same period last year. This was due to SMP and fluid and fresh dairy, down a combined 6,000 MT. This decrease was mostly offset by gains in cheese and infant formula, up a combined 3,000 MT.

Exports for the 12 months to June were up 5%, or 36,000 MT, on the previous comparable period.

Fluid and fresh dairy and infant formula comprised the majority of growth, up a combined 40,000 MT. These gains were offset by a continued decline in the WMP and butter categories of 11,000 MT.

### EUROPEAN UNION

**7%** ↑

Export change for the 12 months to April 2018

**EU dairy exports** increased by 2%, or 11,000 MT, in April compared to the same period last year.

This was primarily due to strong growth in the infant formula and fluid and fresh dairy categories, up a combined 17,000 MT, or 11%. A decline in whey powder of 3,000 MT softened this increase.

Exports for the 12 months to April were up 7%, or 333,000 MT, on the previous comparable period. This was driven by growth across the five largest categories, fluid and fresh dairy, cheese, SMP, infant formula and whey, up 364,000 MT, or 10%.

### USA

**9%** ↑

Export change for the 12 months to June 2018

**US dairy exports** increased by 15%, or 30,000 MT, in June on the back of strong production. SMP and lactose were the primary growth categories, up 16,000 MT, or 21%, over the same period last year.

Exports for the 12 months to June were up 9%, or 196,000 MT, on the previous comparable period.

Growth continued to be seen across most categories, especially SMP and lactose, which have grown by 41,000 MT and 38,000 MT respectively. This wide-spread growth was partially reduced by declines in fluid and fresh dairy, down 10,000 MT.



# LATIN AMERICA, ASIA AND MIDDLE EAST AND AFRICA IMPORTS RECORD DOUBLE-DIGIT GROWTH IN APRIL

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

## LATIN AMERICA

**1%** ↑

Import change for the 12 months to April 2018

**Latin American dairy import volumes<sup>1</sup>** increased 13%, or 20,000 MT, in April compared to the same period last year. This increase was driven by the three largest import categories, SMP, cheese and fluid and fresh dairy, which were up a combined 13,000 MT, or 15%, for the period.

Imports for the 12 months to April were up 1%, or 14,000 MT, compared to the same period the previous year. SMP and whey powder led the increase, up 84,000 MT combined. However, a decline in WMP of 77,000 MT, offset some of the increase.

## ASIA

**2%** ↑

Import change for the 12 months to April 2018

**Asia (excluding China) dairy import volumes<sup>1</sup>** increased 19%, or 65,000 MT, in April compared to the same period last year. Increased demand was seen across most categories. SMP, WMP and fluid and fresh dairy reported the largest gains, up 47,000 MT, while lactose and caseinate were down 1,000 MT.

Imports for the 12 months to April were up 2%, or 103,000 MT, compared to the same period the previous year. WMP and cheese continued to show strong growth, up a combined 103,000 MT. Declines in lactose and AMF of a combined 32,000 MT, offset these increases.

## MIDDLE EAST & AFRICA

**5%** ↑

Import change for the 12 months to April 2018

**Middle East and Africa dairy import volumes<sup>1</sup>** increased 11%, or 37,000 MT, in April, compared to the same period last year. Growth was seen across most major categories driven by WMP, fluid and fresh dairy and butter, up a combined 27,000 MT. Cheese and infant formula declined, down a combined 7,000 MT.

Imports for the 12 months to April were up 5%, or 193,000 MT, compared to the same period the previous year. SMP, fluid and fresh dairy and cheese were up a combined 181,000 MT. Import growth was offset by a continued decline in WMP, down 37,000 MT.

## CHINA

**17%** ↑

Import change for the 12 months to March 2018

**China dairy import volumes<sup>2</sup>** 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.

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

<sup>2</sup> China has suspended trade data, citing system technical issues. Based on exports to China, we estimate April volumes grew 19% compared to the previous comparable period.

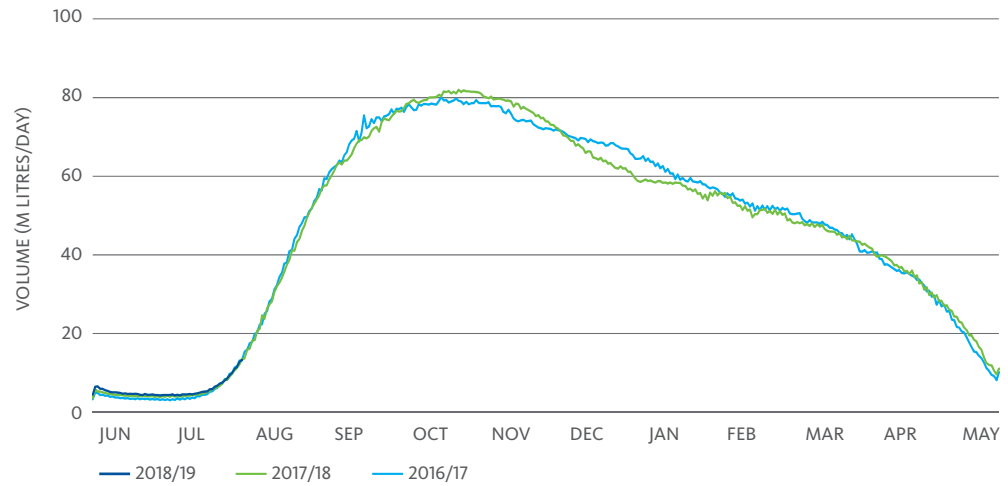
**OUR MARKETS**

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**

**8% ↑**

Increase for the season from 1 June to 31 July

Fonterra’s early season milk collection across New Zealand for the two months to 31 July reached 31 million kgMS. This represents less than 3% of the full season forecast.

New Zealand collections in July were 18 million kgMS, 4% up on the same month last season.

These volumes are small in the context of the full season, as is usual for this time of the year. The increase is being driven primarily by favourable weather and pasture conditions in the North Island. In addition, growth in winter milk contracts, have also contributed to supply.

**NORTH ISLAND**

**7% ↑**

Increase for the season from 1 June to 31 July

**North Island milk collection** in July was 16 million kgMS, 3% higher than July last season.

This was driven by good pasture conditions in central districts as a result of favourable weather conditions.

North Island milk collection for the 2018/19 season to date was 26 million kgMS, up 7%.

**SOUTH ISLAND**

**13% ↑**

Increase for the season from 1 June to 31 July

**South Island milk collection** in July was 2 million kgMS, 19% higher than July last season.

Favourable weather conditions, particularly in Canterbury, along with growth in winter milk contracts have contributed to this increase.

South Island milk collection for the 2018/19 season to date was 5 million kgMS, up 13%.

**AUSTRALIA**

**6% ↓**

Decrease for the season from 1 July to 31 July

Fonterra’s milk collection across Australia in July, the first month of the 2018/19 season reached 8 million kgMS, down 6% on the same period last season.

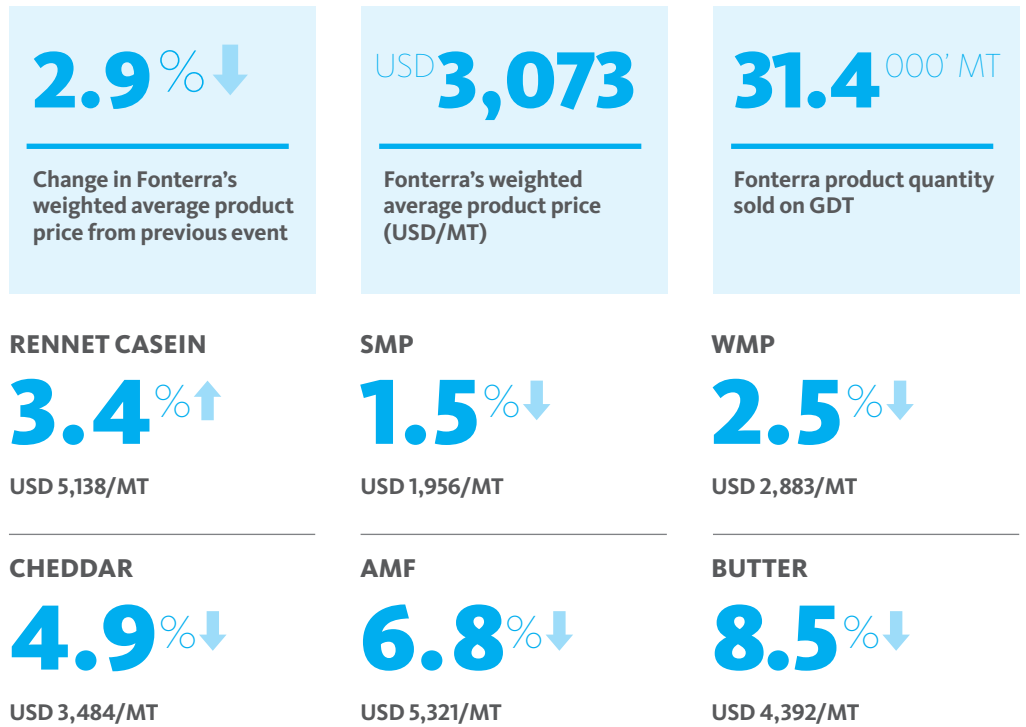
Rising costs and availability of key on-farm inputs including water, cereals and fodder, which are now trending substantially above long-term averages, combined with a deteriorating seasonal outlook will more than likely impact milk supply this season.

## OUR MARKETS

# FONTERRA GLOBAL DAIRY TRADE RESULTS

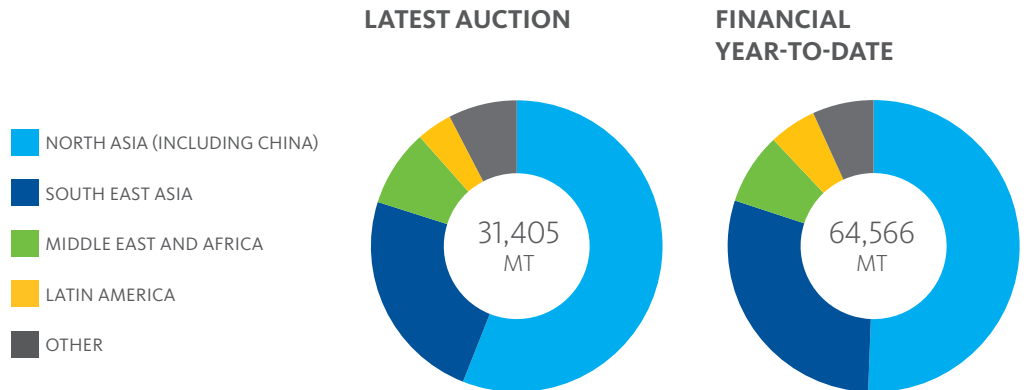


Fonterra GDT results at last trading event  
**21 August 2018:**



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 4 September 2018. Visit [www.globaldairytrade.info](http://www.globaldairytrade.info) for more information.

### Dairy commodity prices and New Zealand dollar trend

The New Zealand dollar traded flat in July. Continued strength in US economic data along with rising trade tensions helped keep the New Zealand dollar down around two-year lows.





# OUR PERFORMANCE



## Anchor announces addition of the a2 Milk™ brand by Anchor to its milk portfolio

Partnering with The a2 Milk Company (a2MC), Anchor is proud to continue its strong heritage of quality nutrition by offering natural fresh milk with only the A2 beta casein protein as an additional option to Kiwi households.

Fonterra Brands New Zealand Acting Sales Director Grant Watson says he is confident a2 Milk™ by Anchor will prove popular.

“a2 Milk™ by Anchor is set to give consumers more choice and we’re really pleased to bring another great tasting fresh milk option to Kiwi households. Anchor already has 10 varieties of milk and will continue catering to a variety of diets, ages and stages so that as many people as possible have the option to consume milk products,” says Watson.

“The a2 Milk Company is delighted to be entering into this partnership with Fonterra, and pleased to be finally providing our a2 Milk™ brand to New Zealanders for the first time,” says The a2 Milk Company Managing Director and CEO Jayne Hrdlicka. “Especially given this is where our company was founded,” she added.

While most cows carry both A1 and A2 proteins, a2 Milk™ by Anchor is a great tasting fresh milk from herds that produce milk naturally free of the A1 protein.

Hrdlicka says, “New Zealand produces some of the highest-quality dairy products in the world and the addition of a2 Milk™ to Anchor’s portfolio will prove to be beneficial for New Zealanders.”

a2 Milk™ brought to you by Anchor is available in Blue and Lite 1 and 2 litre Anchor Light Proof™ bottles in Pak ‘n Save and New World North Island stores. Full nationwide distribution of a2 Milk™ can be expected from October.



## Chinese commuters are now able to enjoy Anchor’s extra-stretchy mozzarella as they travel the world’s largest rail network thanks to a new supply agreement with Pizza Seven.

Pizza Seven is one of our foodservice customers in China and has recently become the designated pizza supplier for the Chinese high-speed trains. Jim Ruan, VP of Foodservice says it’s exciting to know millions of commuters will be trying our mozzarella. “Pizza is a popular snack for commuters. It’s quick and easy to eat. This deal means the snack will be offered on more than 2,000 of China’s high-speed train routes.” Jim says the Anchor logo will also be printed on pizza packages.

“Having the Anchor logo on tens of thousands of pizza boxes will be a game-changer for our brand recognition.

It means millions of train passengers will get to know Anchor, reinforcing its great reputation.” The logo was added because Chinese customers appreciate a premium product.

“Anchor resonates with consumers, who know they can trust our New Zealand product. That’s important in a market like China where food safety is a top concern.”

Pizza is fast becoming an obsession in China. Our Co-op is one of China’s biggest cheese suppliers eating 30,600 MT a year. Demand for mozzarella cheese made at our Clandeboye and Whareroa sites is predicted to continue to grow.

Pizza Seven has been a customer of our Co-op since 2013. They purchase around 200 MT of cheese every year, mainly Anchor Extra Stretch Shredded Mozzarella Cheese. China’s high-speed rail network is the largest in the world. It is 25,000 km long and passengers clocked up 1.7 billion trips in 2017. That’s a lot of trips to enjoy pizza.





## Fonterra to electrify Stirling site

This month Fonterra announced it is transitioning from coal to renewable energy at its Stirling site in Otago. The move will reduce Fonterra's coal use by more than 9,700 tonnes per year – about the same weight as 122 Boeing 737-800s.

With no gas or feasible alternatives available in the South Island, Fonterra has used coal in its plants to ensure it can process its perishable milk.

Reinforcing the shift toward renewable energy, Fonterra has also surrendered its Mangatangi coal mining permit, divested nearly 50% of land acquired for coal mining and will no longer mine coal.

The new moves are part of the pathway Fonterra mapped out with the Government last year to achieve net zero emissions across its manufacturing sites by 2050.

Robert Spurway, Fonterra's COO Global Operations, said these latest initiatives show Fonterra's commitment to a net zero emissions future and that the Co-operative is playing its role in helping the country meet its obligations under the Paris Agreement.

“Our targets are ambitious and our commitment to meeting them is resolute, because there is no alternative with climate change,” Mr Spurway said. “With 30 manufacturing sites across the country the challenge ahead of us is clear but we understand the importance of getting on with it to help the country meet its international (climate change) obligations.”

“We're confident that our continued investment in technology will help us achieve our targets and encourage others to invest in new technologies and innovation too. Achieving New Zealand's climate ambitions requires a sustained and collaborative approach with business, government and NGOs.”

By year's end, Fonterra will have divested a total of 296 hectares of land that had been acquired for coal mining – an area the combined size of Christchurch's Hagley Park, the Auckland Domain and New Plymouth's Pukekura Park. Planning is underway for the change of energy supply at Stirling and learnings from this project will then be replicated across similar sites.

“The juggle of meeting our commitments by 2050, ensuring we don't disrupt the processing of our farmers fresh milk, getting the right information and finding the best technology to make these changes at sites is a logistical tightrope,” Mr Spurway said.

He noted the momentum Fonterra has already built this year to make the changes, including:

- A switch to co-firing biomass at the Brightwater site near Nelson, due to go live by November.
- Reduction in use of ground water by 70% at its Darfield plant.
- And at Pahiatua site, the introduction of an employee's innovative idea for water recycling, leading to a saving of 500,000 litres of water a day.

“We're serious about supporting New Zealand's commitment to the Paris Agreement and the global goal of keeping temperature change to well below two degrees,” Mr Spurway said





# SUPPLEMENTARY INFORMATION

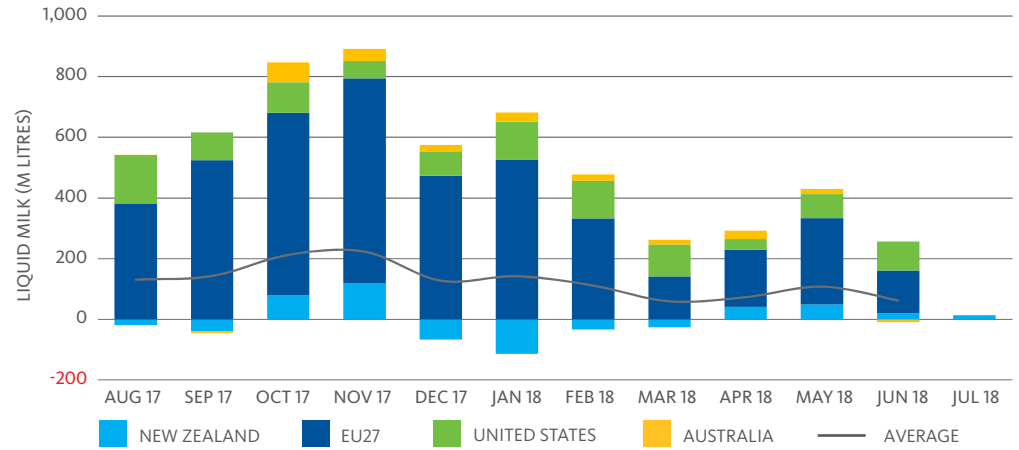
## Global Dairy Market

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.

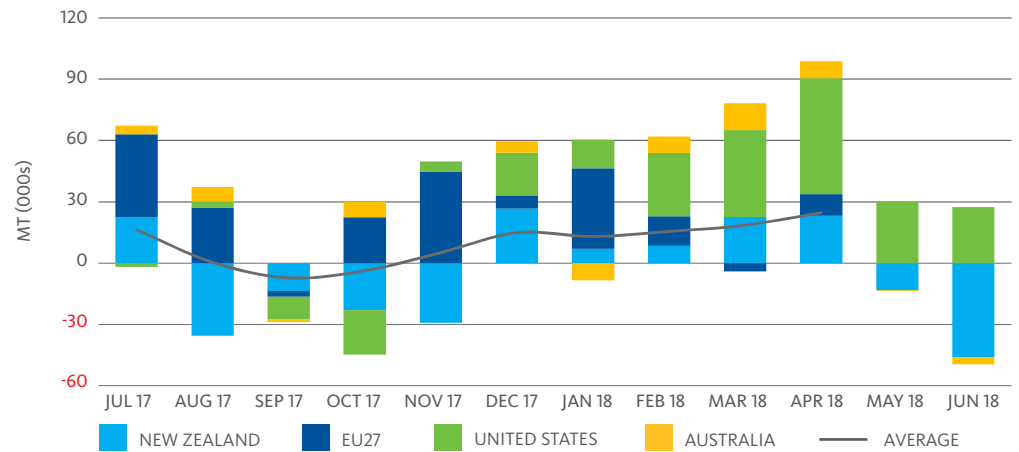
Averages are shown where data is complete for the regions presented.

### PRODUCTION



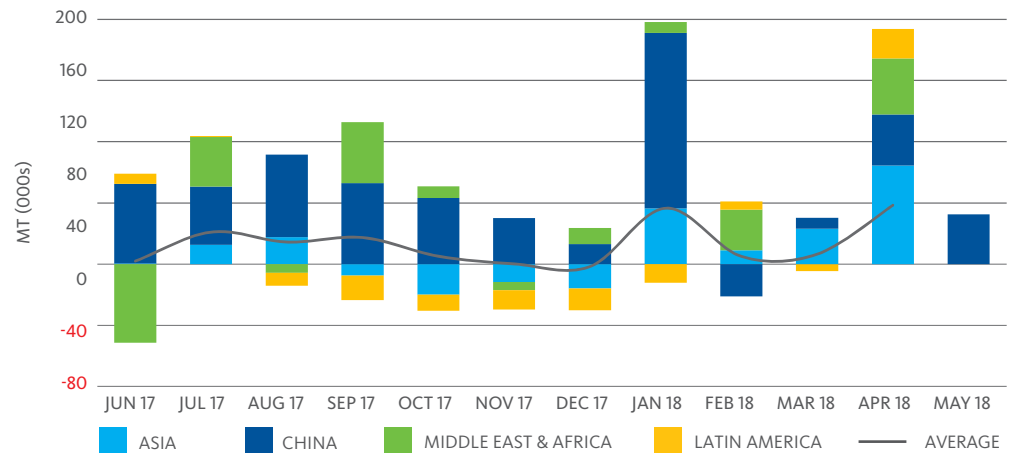
NOTE: Data for EU, US and Australia to June; New Zealand to July.

### EXPORTS



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

### IMPORTS



NOTE: Data for Asia, Middle East and Africa and Latin America to April; estimate for China in April and May.

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)	JULY 2018	JULY 2017	MONTHLY CHANGE	SEASON-TO-DATE 2018/19	SEASON-TO-DATE 2017/18	SEASON-TO-DATE CHANGE
Total Fonterra New Zealand	17.9	17.2	4.0%	31.2	29.0	7.7%
North Island	16.0	15.7	2.5%	26.4	24.8	6.8%
South Island	1.9	1.6	18.9%	4.8	4.2	12.8%
Fonterra Australia	7.6	8.1	(5.8%)	7.6	8.1	(5.8%)

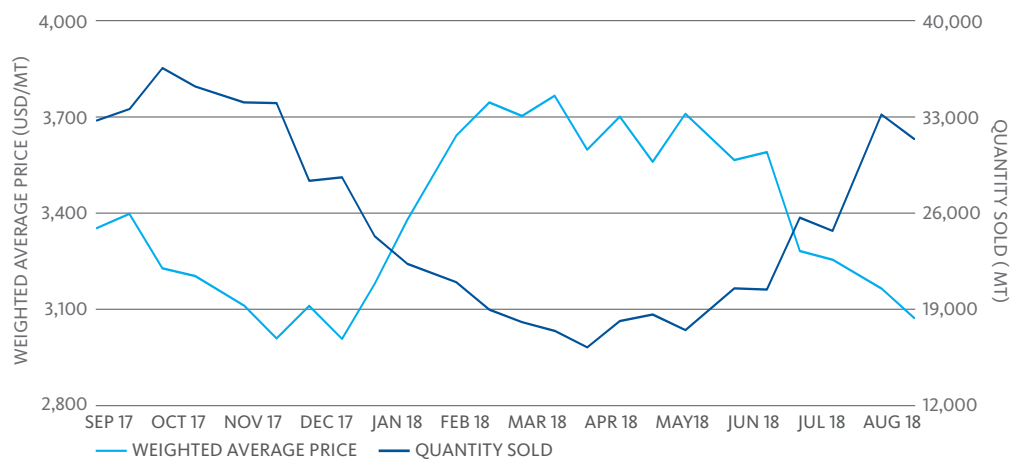
## Fonterra GDT results

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

	LAST TRADING EVENT (21 AUGUST 2018)	YEAR-TO-DATE (FROM 1 AUGUST 2018)
Quantity Sold on GDT (Winning MT)	31,405	64,566
Change in Quantity Sold on GDT over same period last year	0.1%	2.4%
Weighted Average Product Price (USD/MT)	3,073	3,121
Change in Weighted Average Product Price over same period last year	(9.3%)	(7.9%)
Change in Weighted Average Product Price from previous event	(2.9%)	-

## 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 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.