NOVEMBER 2021

Global Dairy UPDATE

Our Markets

- New Zealand, Australia and US monthly production down. EU production flattens.

- New Zealand monthly exports up. Australia, US and EU monthly exports continue to grow.

- China and Middle East and Africa monthly imports decline. Asia and Latin America monthly imports up.

- Fonterra New Zealand milk collection for October was 207 million kgMS, down 2.9% on the prior season.
- Fonterra New Zealand full season forecast milk collection confirmed at 1,525 million kgMS, down on last season's 1,539 million kgMS.
- Fonterra Australia milk collection for October was 11.8 million kgMS, down 4.8% on last season.

Our Performance

- First quarter business update.

For further details, view our website –

CLICK HERE

- Partnering with VitaKey.

Our Co-op

- A day in the life of a Tanker Operator.

Coming Up ...

- The next issue of the Global Dairy Update will be published on 28 January 2022.

Key Dates

December to February 2022
Application Period to Supply Fonterra

9 December 2021
Fonterra Co-operative Group Annual Meeting

13 December 2021
Fonterra Shareholders' Fund Annual Meeting

March 2022
FY22 Interim Results Announcement

Global Production

New Zealand, Australia and US monthly production down. EU production flattens

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

CLICK HERE

NEW ZEALAND

3.3% ↓
Change for October 2021 compared to October 2020

0.6% ↑
Change for the 12 months to October 2021

New Zealand milk production[1] decreased 3.3% on a litres basis, (down 3.1% on milk solids basis) in October compared to October last year.

Changeable weather patterns across the country impacted production for the third consecutive month.

New Zealand milk production for the 12 months to October was 0.6% higher than last year.

Fonterra New Zealand collections are reported for October, see page 5 for details.

AUSTRALIA

2.9% ↓
Change for September 2021 compared to September 2020

0.7% ↓
Change for the 12 months to September 2021

Australia milk production decreased 2.9% in September compared to September last year.

Dairy Australia and Rabobank have forecast 0% to 2% growth for FY22. Production figures through to September 2021 increasingly point to a decline in FY22.

Australia milk production for the 12 months to September was 0.7% lower than last year.

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

EUROPEAN UNION

0.2% ↓
Change for September 2021 compared to September 2020

0.2% ↑
Change for the 12 months to September 2021

EU milk production[2] decreased 0.2% in September compared to the same period last year.

Lower production volumes from Germany and the Netherlands continued and were partially offset by strong output from Italy and Ireland.

EU milk production for the 12 months to September was up 0.2% compared to the same period last year, driven by higher volumes across several countries including Ireland, Italy, Hungary and Poland.

USA

0.5% ↓
Change for October 2021 compared to October 2020

1.9% ↑
Change for the 12 months to October 2021

US milk production decreased by 0.5% in October, compared to the same period last year.

Rising input costs contributing to herd size contractions as well as lower milk per cow yield, are impacting milk production.

Milk production for the 12 months to October was 1.9% higher compared to the same period last year.

1 New Zealand production is measured in litres.

2 Excludes UK.

Global Exports

New Zealand monthly exports up. Australia, US and EU monthly exports continue to grow

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

CLICK HERE

NEW ZEALAND

0.6%↑ Change for October 2021 compared to October 2020

4.5%↑ Change for the 12 months to October 2021

Total New Zealand dairy exports increased by 0.6%, or 1,654 MT, in October compared to the same period last year.

Cheese exports increased year-on-year and SMP export to China continue to be strong. These were partially offset by lower shipments of butter and infant formula.

Exports for the 12 months to October were up by 4.5%, or 155,715 MT, on the previous comparable period. This was primarily driven by WMP, cheese and fluid milk products.

AUSTRALIA

38.0%↑ Change for September 2021 compared to September 2020

12.8%↑ Change for the 12 months to September 2021

Australia dairy exports increased 38.0%, or 23,364 MT, in September compared to the same period last year.

Fluid milk products to China continue to be in high demand, together with increased cheese exports.

Exports for the 12 months to September were up 12.8%, or 95,022 MT, on the previous comparable period.

This was predominantly driven by increases in fluid milk products, SMP and WMP but partially offset by declines in infant formula.

EUROPEAN UNION

3.4%↑ Change for August 2021 compared to August 2020

0.5%↓ Change for the 12 months to August 2021

EU dairy exports increased 3.4%, or 19,197 MT, in August compared to the same period last year.

August exports reflected higher sales of fluid milk products to Mauritania and United Arab Emirates and of cheese and butter to the US, up a combined 29,228 MT.

Exports for the 12 months to August were down 0.5%, or 32,366 MT, on the previous comparable period. Infant formula, cultured products, butter and SMP were the main drivers of this decline but partially offset by an increase in fluid milk products.

USA

14.2%↑ Change for September 2021 compared to September 2020

9.5%↑ Change for the 12 months to September 2021

US dairy exports increased 14.2%, or 28,029 MT, in September compared to the same period last year with gains observed across most product categories.

Sustained strong demand for SMP and cheese from Mexico as well as cheese from Japan are driving this increase. Exports of whey to China and fluid milk products are also contributing to the increase.

Exports for the 12 months to September 2021 were up 9.5%, or 238,085 MT, on the previous comparable period, driven by whey, SMP, butter, fluid milk products and WPC up a combined 221,652 MT.

China and Middle East and Africa monthly imports decline. Latin America and Asia monthly imports up

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

CLICK HERE

LATIN AMERICA

5.0%↑ Change for August 2021 compared to August 2020

2.9%↑ Change for the 12 months to August 2021

Latin America dairy import volumes[1] increased 5.0%, or 8,906 MT, in August compared to the same period last year.

The increase was driven by higher demand for cheese in the Dominican Republic, Mexico and Chile.

Imports for the 12 months to August were up 2.9%, or 58,121 MT, compared to the same period last year.

ASIA

20.5%↑ Change for August 2021 compared to August 2020

1.3%↓ Change for the 12 months to August 2021

Asia (excluding China) dairy import volumes[1] increased 20.5%, or 81,949 MT, in August compared to the same period last year.

The increase was driven by higher demand for whey in Vietnam, SMP in Pakistan and Thailand and cheese in Japan.

Imports for the 12 months to August were down 1.3%, or 64,958 MT, compared to the same period last year, driven by lower volumes of WMP and SMP, and offset by fluid milk product and cheese.

MIDDLE EAST & AFRICA

5.9%↓ Change for August 2021 compared to August 2020

2.5%↓ Change for the 12 months to August 2021

Middle East and Africa dairy import volumes[1] decreased 5.9%, or 28,896 MT, in August compared to the same period last year.

The decrease was predominantly driven by lower volumes of SMP to Ethiopia, WMP to Algeria and infant formula to Nigeria.

Imports for the 12 months to August were down 2.5%, or 119,881 MT, compared to August last year, driven by decreases in WMP, SMP and fluid milk products.

CHINA

5.6%↓ Change for October 2021 compared to October 2020

21.8%↑ Change for the 12 months to October 2021

China dairy import volumes decreased by 5.6%, or 15,782 MT, in October compared to the same period last year. This is the second consecutive month of decline following six months of year-on-year growth.

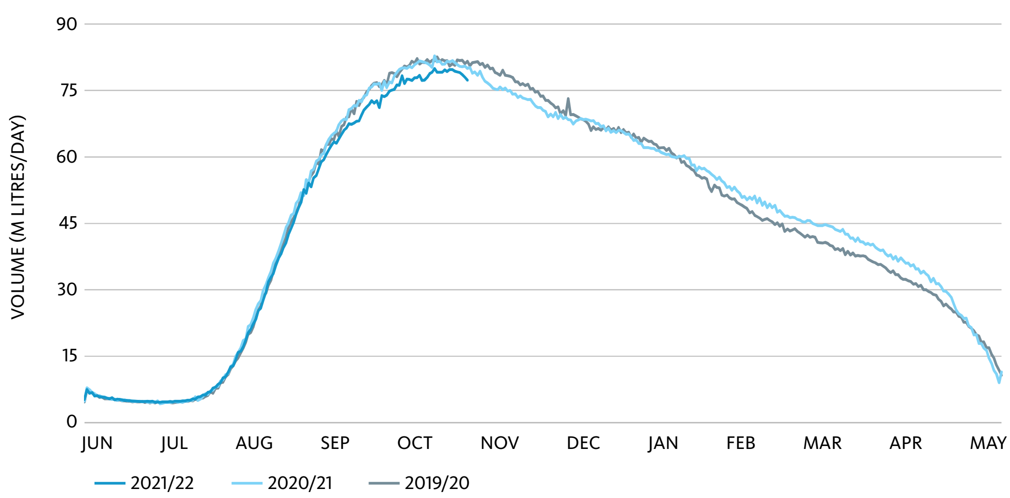
Declines in infant formula, fluid milk products, whey and WMP import volumes were observed in October

Imports for the 12 months to October were up 21.8%. or 745,795 MT, driven by fluid milk products, WMP, whey and SMP and partially offset by decreases in infant formula.

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

Fonterra Milk Collections

New Zealand Milk Collection



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

CLICK HERE

NEW ZEALAND

2.9% ↓
Change for October 2021 compared to October 2020

3.2% ↓
Season-to-date 1 June to 31 October

Fonterra's New Zealand collections for October were 207.0 million kgMS, 2.9% down on last October. Season-to-date collections were 510.9 million kgMS, 3.2% behind last season.

October was warmer than normal, particularly during the second half of the month, in addition to the usual mixture of unsettled spring weather.

Improving weather conditions and expectations that milk collections for the balance of the season that are generally on par with last season support the current forecast of 1,525 million kgMS.

NORTH ISLAND

3.9% ↓
Change for October 2021 compared to October 2020

2.7% ↓
Season-to-date 1 June to 31 October

North Island milk collections in October were 123.5 million kgMS, 3.9% lower than October last season.

Season-to-date collections were 334.6 million kgMS, 2.7% behind last season.

Many eastern regions of the North Island were generally drier than average for the time of year, while Northland, Auckland, Coromandel and Bay of Plenty were much wetter than average.

SOUTH ISLAND

1.2% ↓
Change for October 2021 compared to October 2020

4.1% ↓
Season-to-date 1 June to 31 October

South Island milk collections in October were 83.5 million kgMS, 1.2% lower than October last season.

Season-to-date collections were 176.3 million kgMS, 4.1% behind last season.

Regular westerlies led to near normal rainfall across much of the South Island, although Kaikoura, north Canterbury and Southland were drier than average.

AUSTRALIA

4.8% ↓
Change for October 2021 compared to October 2020

3.3% ↓
Season-to-date 1 July to 31 October

Fonterra's Australia collections for October were 11.8 million kgMS, a 4.8% decrease on October last season. Farm collections increased 4.2% while third-party volumes decreased by 57.5%.

Fonterra collections across Australia for the season-to-date were 34.5 kgMS, a 3.3% decline on last season.

Average rainfall and cooler conditions this spring are reducing growth rates and pasture availability as farmers manage grazing rotations and silage preparation.

The inclusion of off-GDT sales contributed approximately six cents per kgMS to the Milk Price for the season to 31 October 2021.

Outlook for New Zealand

NZD per kgMS **8.40–9.00**
Forecast Farmgate Milk Price for the 2021/22 season

1,525M kgMS
Forecast milk collection for the 2021/22 season

Fonterra Global Dairy Trade Results

Fonterra GDT results at last trading event **16 November 2021:**

1.8% ↑
Change in Fonterra's weighted average product price from previous event

USD 4,322
Fonterra's weighted average product price (USD/MT)

29.5 000' MT
Fonterra product quantity sold on GDT

BUTTER
3.4% ↑
USD 5,534/MT

CHEDDAR
2.1% ↑
USD 5,162/MT

WMP
1.7% ↑
USD 3,987/MT

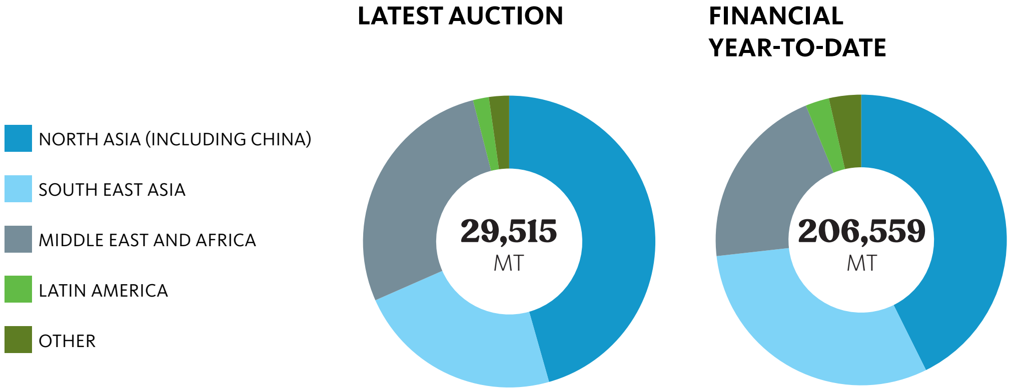
SMP
1.4% ↑
USD 3,680/MT

AMF
1.4% ↑
USD 6,472/MT

Fonterra GDT sales **by destination**:

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

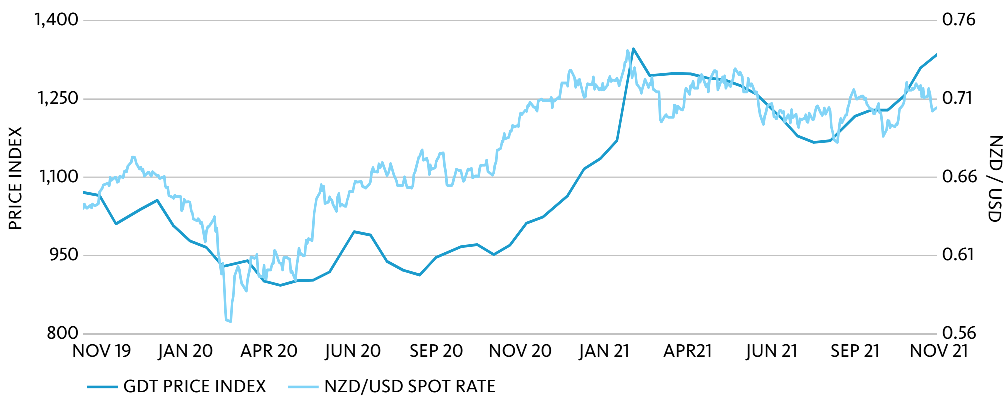
CLICK HERE ▸



▸ The next trading event will be held on 7 December 2021. Visit www.globaldairytrade.info for more information.

Dairy commodity prices and New Zealand dollar trend

The NZD/USD exchange rate declined during November driven by broad based support for the USD as expectations for recovery in the US economy firmed, inflation lifted, and financial markets projected a quickening in the pace of US monetary policy normalisation.



Our Performance

Fonterra and VitaKey partner to enhance dairy's contribution to health and wellness

Looking to a future where it is likely that many foods will be more valued for their specific health benefits, Fonterra and VitaKey Inc. have announced a transformative dairy science collaboration to further unlock the benefits of Fonterra's probiotic strains.

VitaKey specialises in precision delivery of nutrition – an emerging area of research that seeks to deliver the right nutrients, in the right amount, to the right part of the body at the right time.

Co-founded by Dr. Robert Langer, the VitaKey delivery technology platform for nutrients is based on technology licensed from the Massachusetts Institute of Technology and developed at the Langer Lab, the largest academic biomedical engineering lab in the world.

Utilising VitaKey's proprietary technology and customised solutions, Fonterra is looking to design dairy products that incorporate targeted and time-controlled release of specific dairy nutrients, starting with probiotics, in a way that locks in the freshness for longer and allows the nutrients to be more active and beneficial in the body.

Judith Swales, CEO for Fonterra's Asia Pacific region, says the collaboration is part of Fonterra's long-term strategy and ambition to be a leader in dairy innovation and nutrition science.

"Our Co-op has a long and proud heritage of dairy innovation, pioneering many world firsts and, increasingly, new solutions which aim to help people live healthier and longer lives.

"Home to one of the largest dairy culture libraries in the world, our Research and Development Centre contains more than 40,000 strains. Two of these strains, LactoB 001 and BifidoB 019, address key health concerns such as digestive issues and immunity and are recognised as being in the top five global probiotics.

"By partnering with VitaKey, we aim to 'make nature better' by combining the goodness of our New Zealand milk with VitaKey's technology. In this way, we can really drive our Active Living business by appealing to the growing health and wellness consumer segment that desire the maximum functional benefits from food and are motivated by scientific credibility.

"Because the nutrients are encapsulated and highly targeted, it also means we can use less milk in our production, making our milk go further while reducing food waste," says Ms. Swales.

Dr. Robert Langer, co-founder of Vitakey

The first step in the collaboration aims to stabilise probiotics and deliver them to the digestive tract. This will leverage related MIT technology developed in the Langer Lab that NASA may use to deliver probiotics to astronauts in their planned mission to Mars.

VitaKey's founder, Dr. Langer, has extensive experience in commercialising science, resulting in more than 40 biotech companies with an estimated market value of $250 billion. The VitaKey delivery platform has already been shown to preserve and enhance 11 different micro-nutrients, including Vitamin D, A, B12, and C as well as iron, zinc, niacin, and folic acid. Fonterra intends to leverage the VitaKey technology across a range of micro-nutrients, such as Vitamin D, and introduce them into its products.

Dr. Langer, who oversees more than 150 researchers at MIT, says that the technology can be customised for every link of the food supply chain.

Dr. Langer's vision for Fonterra and VitaKey working together is "to do something that really can change the world, rather than something incremental." He is excited to collaborate with Fonterra to help further unlock dairy's nutrition.

"The Covid pandemic has underscored the need for solutions to enhance health and wellness and boost the immunity of men, women and children at every stage of life. We believe that good nutritious food can help people of all ages lead healthier lives," says Dr. Langer.

A day in the life of a Tanker Operator

Ever wondered what a day in the life of a Fonterra Tanker Operator is like?

Take a look at the video to see how a day goes for our Lower South Island Milk Collection team based at our Edendale depot.

CLICK HERE

And if that isn't enough for you, Stirling Tanker Operator Richard Lumb also tells his story.

It's 6.30am in mid-September and Richard Lumb is listening to the morning briefing with the rest of the red team at our Stirling tanker depot near Balcluttha. Richard shares the tanker with a member of each of the blue and green teams.

"We work three days starting at 6.30am if it's mornings and then three nights starting at 5pm and then three days off so it's a nine-day roster. On days you work about nine hours and drive up to 500kms and nights are usually about ten hours or a bit more and you're driving up to 650kms."

His family don't mind the roster, especially as he's often around to help out with kids' sports, cook dinner and do renovations on the house. "I can't be there every Saturday for sport – but I do make it there for most of them. When I started with the Co-op back in 2018 the kids suddenly noticed I was around a lot more."

His kids and wife have all been on a run in the tanker with him. The depot holds two days every year when family or friends can ride in the cab.

But now, with an empty tanker, he's heading for his first dairy farm in Waipahi about 50km away. All the information, including the route, is on the Incab display mounted on the cab's floor to Richard's left. "It shows your fuel consumption – we're aiming to reduce fuel burn every season."

Richard is at his first pickup. There's no one around and he drives up to the vat, gets out and hooks up the hose to the vat and starts the process, getting three pottles ready for sampling. "The kids on the farms are great. They love seeing the tanker."

"Making sure everything is okay on the farm is really important for Fonterra and if we can help, or get help to someone, we do it."

With volumes changing day to day, especially in the Spring, the route is always different. "No two days are ever the same. You go places you would never go otherwise. It's been an awesome way to see the South Island."

Richard's always had a passion for driving. "I had someone ask me when I was younger what I wanted to do and I said 'I've always wanted to drive milk tankers' and he said 'only dropouts became truck drivers', so I didn't do it. I shouldn't have listened to him."

He worked doing forestry roading and other trucking jobs in Northland then decided a move south, to Balclutha, at the other end of the country and his family haven't looked back. "The kids love it down here. The weather is so much better."

And today, there are thousands of lambs being born all along his route.

Supplementary Information

Global Dairy Market

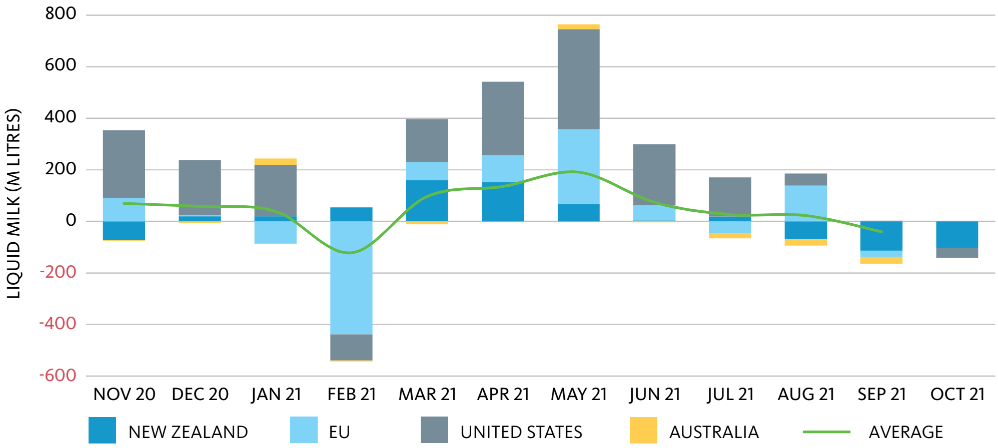
The charts on the right illustrate the year-on-year changes in imports, exports and production for a range of countries that are important players in global dairy trade.

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.

BACK TO SUMMARY ▶

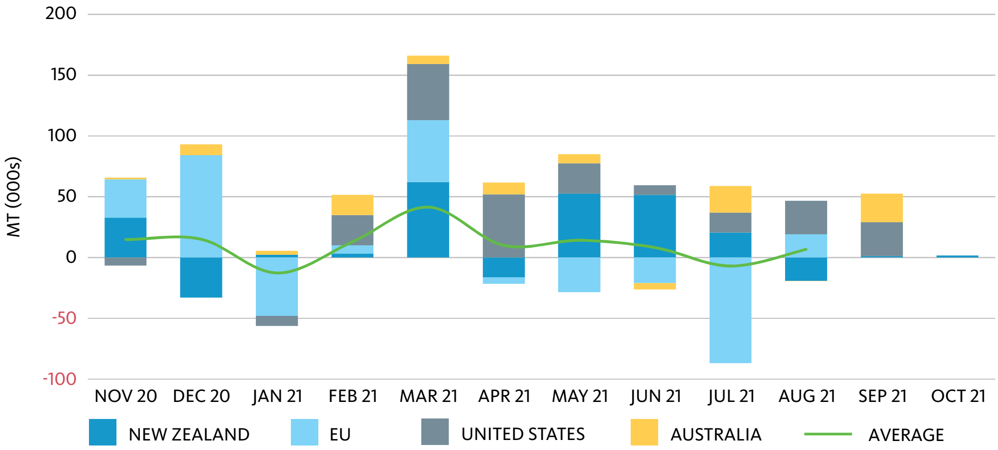
PRODUCTION



NOTE: Data for EU and Australia to September; New Zealand and US to October.

BACK TO SUMMARY ▶

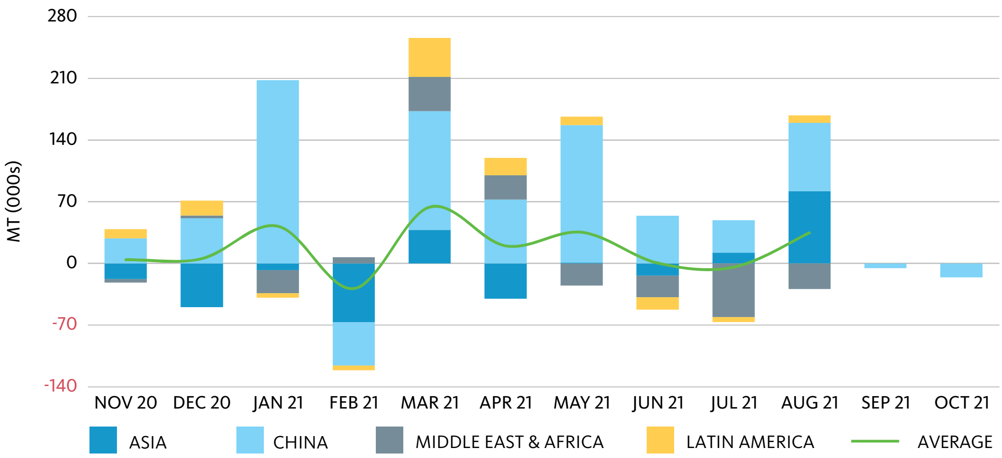
EXPORTS



NOTE: Data for EU to August; US and Australia to September; New Zealand to October.

BACK TO SUMMARY ▶

IMPORTS



NOTE: Data for Asia, Middle East & Africa and Latin America to August; China to October.

SOURCES: Government milk production statistics (DCANZ, Dairy Australia, Eurostat, USDA)/GTA 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.

BACK TO SUMMARY ▶

MILK COLLECTION (MILLION KGMS)	OCTOBER 2021	OCTOBER 2020	MONTHLY CHANGE	SEASON-TO-DATE 2021/22	SEASON-TO-DATE 2020/21	SEASON-TO-DATE CHANGE
Total Fonterra New Zealand	207.0	213.1	(2.9%)	510.9	527.5	(3.2%)
North Island	123.5	128.6	(3.9%)	334.6	343.7	(2.7%)
South Island	83.5	84.5	(1.2%)	176.3	183.9	(4.1%)
Australia	11.8	12.4	(4.8%)	34.5	35.7	(3.3%)

Fonterra GDT results

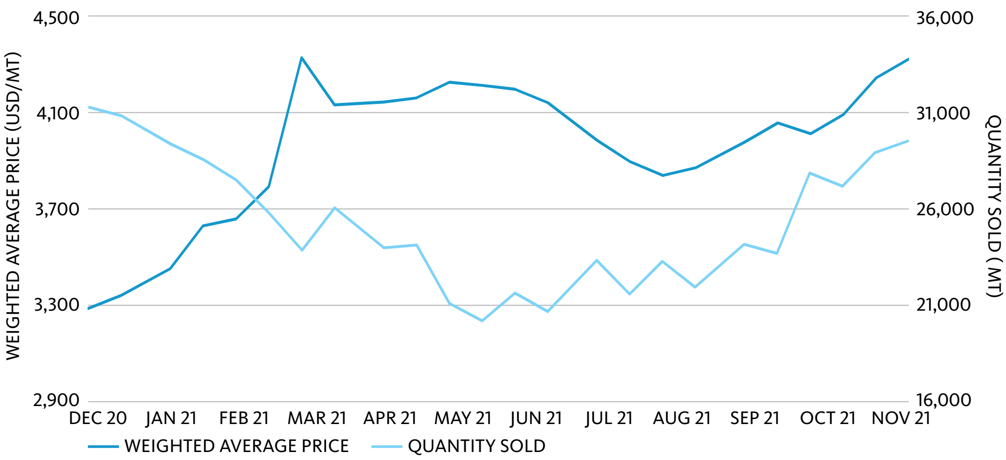
This table provides more information on the latest results, including a snapshot of the year-to-date results.

	LAST TRADING EVENT (16 NOVEMBER 2021)	YEAR-TO-DATE (FROM 1 AUGUST 2021)
Quantity Sold on GDT (Winning MT)	29,515	206,559
Change in Quantity Sold on GDT over same period last year	(14.7%)	(22.8%)
Weighted Average Product Price (USD/MT)	4,322	4,065
Change in Weighted Average Product Price over same period last year	36.1%	31.1%
Change in Weighted Average Product Price from previous event	1.8%	–

Fonterra GDT results

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

BACK TO SUMMARY ▶



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 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.

MPC
Milk Protein Concentrate.

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.

WPC
Whey Protein Concentrate.