



JANUARY 2023

Global Dairy UPDATE



- New Zealand monthly production volumes in line with last season. Australia production continues to decline. US and EU monthly production increases.



- New Zealand, Australia and EU monthly exports decline. US exports continue to increase.



- China, Middle East & Africa and Asia monthly imports decline. Latin America imports continue to grow.



- Fonterra New Zealand milk collections for December were 174.0 million kgMS, 0.3% higher than December in the season prior.
- Fonterra Australia milk collections for December were 11.0 million kgMS, 3.2% down on December in the prior season.



- On 8 December, Fonterra provided a 2023 Q1 business update.

[For further details –](#)

- Deloitte Top 200 Awards.



- Net zero carbon emissions dairy farm.
- Fonterra partners with Government and industry to tackle on farm emissions.

Key Dates



December to February 2023
Application Period to
Supply Fonterra

16 March 2023
FY23 Interim Results
Announcement

May 2023
FY23 Q3 Business Update



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

New Zealand monthly production volumes in line with last season. Australia production continues to decline. US and EU monthly production increases

NEW ZEALAND

0.6% ↓

Change for December 2022 compared to December 2021

3.8% ↓

Change for the 12 months to December 2022

New Zealand¹ milk production was down 0.6% on a litres basis, (up 0.6% on milk solids basis) in December compared to the same period the year prior.

Warm temperatures with above normal rainfall have helped pasture condition but production in December remains low, largely in line with the weak production in the previous December.

New Zealand milk production for the 12 months to December was down 3.8% on the year prior.

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

AUSTRALIA

9.7% ↓

Change for November 2022 compared to November 2021

6.2% ↓

Change for the 12 months to November 2022

Australia milk production decreased 9.7% in November compared to the same period the year prior.

A significantly wetter and colder spring materially impacted the availability and quality of pasture, silage and hay.

Summer conditions have been more favourable and milk production is beginning to stabilise through December and January.

Australia milk production for the 12 months to November was 6.2% lower than the year prior.

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

EUROPEAN UNION

1.7% ↑

Change for October 2022 compared to October 2021

0.4% ↓

Change for the 12 months to October 2022

EU milk production²

increased 1.7% in October year-on-year, on the back of weak production in October last year.

The production increase was driven primarily by Germany, the Netherlands, Ireland and France and partially offset by declines in Spain and Italy.

Feed availability and higher input costs remain key constraints to milk production growth.

EU milk production for the 12 months to October declined 0.4% compared to the same period the year prior, driven by declines in Germany, France and Spain and partially offset by increases in Poland and Austria.

USA

0.8% ↑

Change for December 2022 compared to December 2021

0.2% ↑

Change for the 12 months to December 2022

US milk production

increased by 0.8% in December, compared to the same period the year prior.

This is the sixth consecutive month of increases following eight months of year-on-year production declines.

Herd sizes continued to grow and are supporting an increase in production for the foreseeable future.

Milk production for the 12 months to December increased 0.2% compared to the same period the year prior.

¹ New Zealand production is measured in litres.

² Excludes UK.



New Zealand, Australia and EU monthly exports decline. US exports continue to increase

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

NEW ZEALAND

6.5% ↓

Change for November 2022 compared November 2021

5.5% ↓

Change for the 12 months to November 2022

Total New Zealand dairy exports decreased 6.5%, or 25,061 MT, in November compared to the same period the year prior.

The decrease was driven by lower export volumes of WMP to China but partially offset by an increase in SMP to Algeria, and butter and cheese to China and Australia.

Exports for the 12 months to November were down by 5.5%, or 196,338 MT, on the previous comparable period. This was primarily driven by decreases in WMP and cheese and partially offset by increases in AMF, butter and SMP.

AUSTRALIA

6.0% ↓

Change for October 2022 compared to October 2021

9.0% ↑

Change for the 12 months to October 2022

Australia dairy exports decreased 6.0%, or 4,448 MT, in October compared to the same period the year prior as Australia milk production remains weak.

Fluid milk products, cheese and whey exports declined year-on-year and were partially offset by an increase in SMP and other powders.

Exports for the 12 months to October were up 9.0%, or 74,798 MT, on the previous comparable period.

This was predominantly driven by increases in fluid milk products, SMP and other powders.

EUROPEAN UNION

7.1% ↓

Change for October 2022 compared to October 2021

8.8% ↓

Change for the 12 months to October 2022

EU dairy exports decreased 7.1%, or 40,036 MT, in October compared to the same period the year prior.

The decline in export volumes continues to be driven by lower fluid milk products shipments to China and cheese to Ukraine, Egypt and Chile. The decrease was partially offset by an increase in infant formula to China.

Exports for the 12 months to October were down 8.8%, or 640,217 MT, on the previous comparable period, driven by declines in fluid milk products, SMP, cheese and WMP and partially offset by increases in infant formula, cultured products and MPC.

USA

7.1% ↑

Change for November 2022 compared to November 2021

3.7% ↑

Change for the 12 months to November 2022

US dairy exports increased 7.1%, or 15,918 MT, in November compared to the same period the year prior.

Stronger demand for butter by Canada, WPC by China and cheese by Mexico was partially offset by lower shipments of fluid milk products.

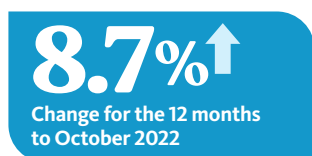
Exports for the 12 months to November were up 3.7%, or 100,850 MT, on the previous comparable period, driven by lactose, cheese and butter, and partially offset by declines in SMP.



China, Middle East & Africa and Asia monthly imports decline. Latin America imports continue to grow

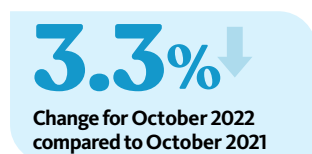
To view a chart that illustrates year-on-year changes in imports –

LATIN AMERICA



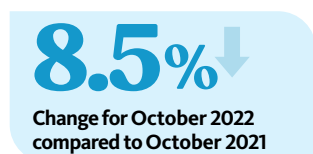
Latin America dairy import volumes¹ increased 13.5%, or 23,998 MT, in October compared to the same period the year prior. The increase was driven by stronger demand for WMP to Trinidad and Tobago and Brazil, and SMP to Mexico. Imports for the 12 months to October were up 8.7% on the previous comparable period driven by higher volumes of cheese, SMP, infant formula and WMP.

ASIA



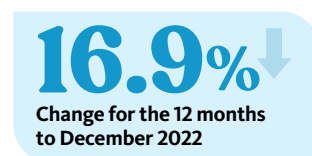
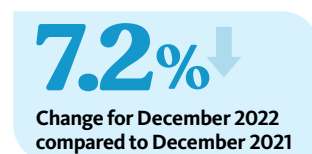
Asia (excluding China) dairy import volumes¹ decreased 3.3%, or 12,639 MT, in October compared to the same period the year prior. The decrease was driven by lower demand for SMP to Vietnam and Indonesia, fluid milk products to Afghanistan and infant formula to Vietnam and partially offset by an increase in demand for WMP to Indonesia. Imports for the 12 months to October were up 0.5%, or 22,798 MT, on the previous comparable period driven by increases in WPC, cultured products, SMP and butter.

MIDDLE EAST & AFRICA



Middle East and Africa dairy import volumes¹ decreased 8.5%, or 35,558 MT, in October compared to the same period the year prior. The decrease was driven by lower volumes of fluid milk products to Libya and Iraq, WMP to Algeria, and cheese to Iraq and Jordan. Imports for the 12 months to October were up 6.1%, or 300,407 MT, on the previous comparable period driven by increases in cheese, SMP, butter and whey.

CHINA



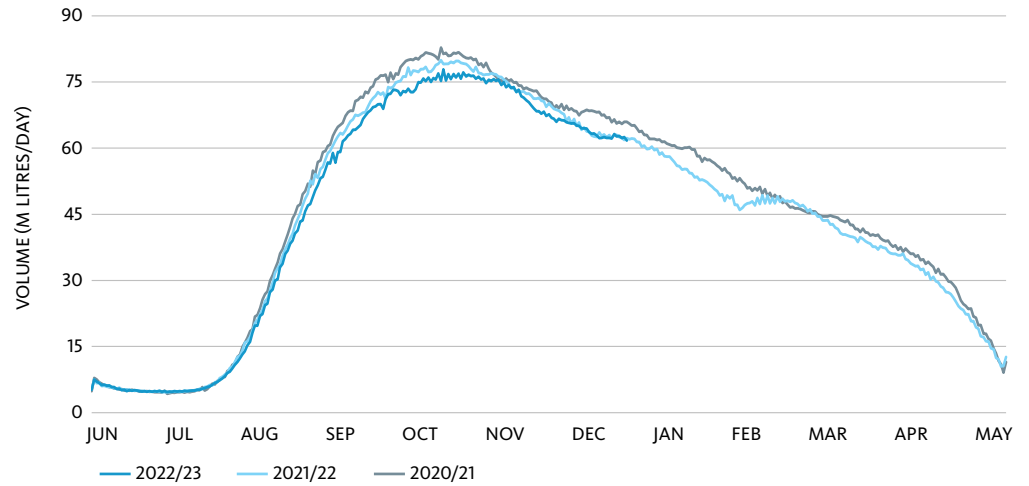
China dairy import volumes decreased by 7.2%, or 20,328 MT, in December compared to the same period the year prior. Lockdown restrictions continue to have an impact on volumes, particularly fluid milk products and infant formula. This was partially offset by an increase in demand for whey. SMP from New Zealand and WMP also increased and it was the first month of year-on-year increase following nine consecutive months of declines. Imports for the 12 months to December were down 16.9%, or 698,156 MT, driven by fluid milk products, WMP, whey, and SMP.

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



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

New Zealand Milk Collections



NEW ZEALAND

0.3%↑
Change for December 2022 compared to December 2021

2.3%↓
Season-to-date 1 June to 31 December

Fonterra's New Zealand collections for December were 174.0 million kgMS, 0.3% higher than last December. Season-to-date collections were 854.8 million kgMS, 2.3% behind last season. December weather was mixed with intermittent rain and warmer weather being conducive to strong pasture growing conditions. Overall, disruptive rain throughout the middle of the month caused lower milk production, with a recovery and flattening towards the end of the month.

NORTH ISLAND

0.2%↓
Change for December 2022 compared to December 2021

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

North Island milk collections in December were 98.1 million kgMS, 0.2% behind December last season. Season-to-date collections were 520.8 million kgMS, 4.1% behind last season. December showed glimpses of a recovery in the North Island with collections slightly below previous season collections. Continued wet weather throughout the middle of the month caused some disruption on milk volumes however pasture covers remain strong for this time of the year.

SOUTH ISLAND

1.0%↑
Change for December 2022 compared to December 2021

0.8%↑
Season-to-date 1 June to 31 December

South Island milk collections in December were 75.9 million kgMS, 1.0% higher than last December. Season-to-date collections were 334.0 million kgMS, 0.8% ahead of last season. South Island milk volumes remain strong with favourable warm weather and adequate rain in the lower south supporting milk production and pasture growth.

AUSTRALIA

3.2%↓
Change for December 2022 compared to December 2021

2.8%↓
Season-to-date 1 June to 31 December

Fonterra's Australia collections for December were 11.0 million kgMS, a 3.2% decrease from December last season due to record Spring rainfall impacting milk production. Farm collections decreased 0.1 million kgMS and third-party collections decreased 0.3 million kgMS year-on-year. Season-to-date collections reached 56.7 million kgMS, 2.8% behind last season.

Outlook for Fonterra in New Zealand

NZD per kgMS 8.50–9.50
Forecast Farmgate Milk Price for the 2022/23 season

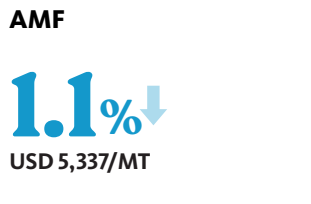
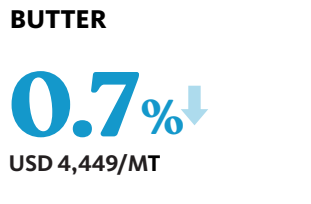
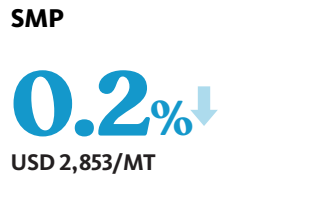
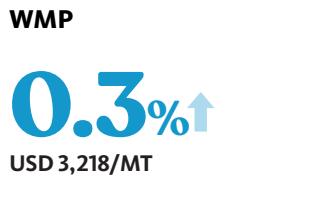
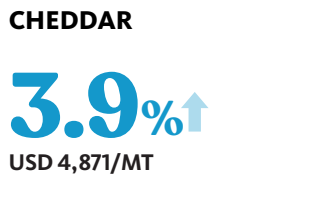
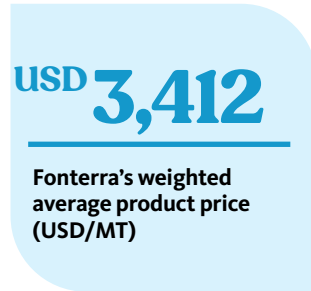
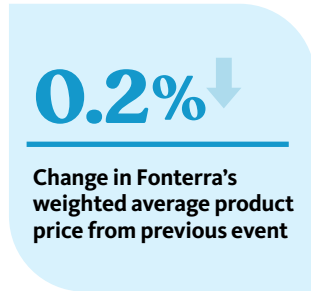
1,480 million kgMS
Forecast milk collections for the 2022/23 season

OUR MARKETS

Fonterra Global Dairy Trade Results

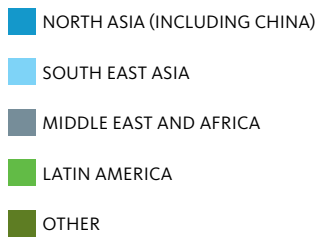


Fonterra GDT results at last trading event
17 January 2023:

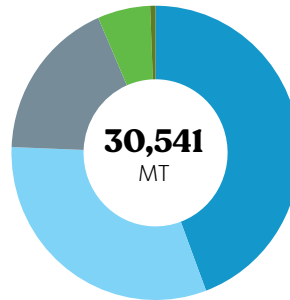


Fonterra GDT sales by destination:

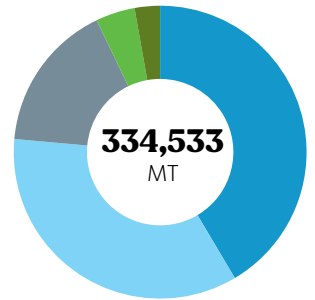
To view more information, including a snapshot of the rolling year-to-date results –



LATEST AUCTION



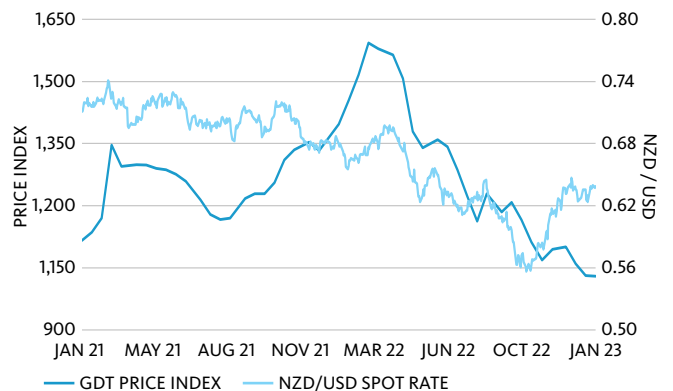
FINANCIAL YEAR-TO-DATE



▶ The next trading event will be held on 7 February 2023. Visit www.globaldairytrade.info for more information.

Dairy commodity prices and New Zealand dollar trend

Tentative signs emerged that indicate the rate of US inflation has peaked and, together with a growing risk that the US economy enters recession later in 2023, resulted in a re-pricing of US interest rate expectations which in turn led to a decline in the USD. The NZD/USD exchange rate increased swiftly before settling around 64 US cents.



Our Performance



Deloitte Top 200 Awards

The Deloitte Top 200 Awards were held in Tāmaki Makaurau (Auckland) in December, and we're pleased to share that Fonterra won the trophy for BusinessNZ's Most Improved Performance.

The Most Improved Performance award celebrates the Co-op's outstanding change in business performance despite the ongoing challenges resulting from the pandemic, the overall improvement over the previous year and the impact of this improvement on the organisation.

The judging panel noted positive improvements across the business, playing an important role in the New Zealand economy, saying:

"Fonterra sometimes faces vocal opposition to their industry, but they have made moves to become more sustainable, along with trialling seaweed as a supplemental feed for dairy cows and working



with the Government on reducing permanent agricultural emissions."

Fonterra's Chief Executive Officer, Miles Hurrell, accepted the award on behalf of the Co-op at the event saying:

This is testament to the resilience and the focus of our people. I am really proud of what we've been able to achieve together.

"While our operating environment has significantly changed, we have shifted from reset to growth and we are

delivering for our customers, farmer shareholders and New Zealand as a whole by driving greater value and meeting the increasing demand for sustainable dairying."



Net zero carbon missions dairy farm

Fonterra and Nestlé have announced a new partnership designed to help reduce New Zealand's on-farm emissions, including a New Zealand first – a drive to develop a commercially viable net zero carbon emissions dairy farm.

Over the five-year project the farm, run with co-partner Dairy Trust Taranaki, will examine all aspects of farm operations to reduce carbon with the aim of cutting emissions by 30% by mid-2027, and a 10-year ambition of reaching net zero carbon emissions.

The demonstration farm at the centre of the project is a 290-hectare property surrounding Fonterra's Whareroa site.

Dairy Trust Taranaki will work with Fonterra and industry partners to reduce total emissions on the farm, including methane, with successful solutions also being good for the farmer, good for the cow and good for the milk.

Lessons learned and activities will be shared through open days with farmers, who can then adopt the techniques and technologies most appropriate for their own farms. The practices must be economically viable and practical for farmers to adopt.

Fonterra CEO Miles Hurrell says the collaboration will help both Fonterra and Nestlé accelerate progress towards their greenhouse gas emission goals.

“New Zealand already provides some of the most sustainable nutrition in the world through its pasture-based dairy system. This new partnership will look at ways to further reduce emissions, increasing the country's low-emissions advantage over the rest of the world.”

“Part of our strategy is to lead in sustainability, and we aspire to be net zero by 2050. We know we will make bigger gains, for both the Co-op and country, by partnering with others. Working with partners such as Nestlé is our best opportunity to create innovative solutions to local and global industry challenges.

“As well as our own goals, it's important we help our customers achieve theirs. Nestlé has ambitious plans and we look forward to working together to discover systems that could help our farmer owners to continue to build on the already good base they have.”

Nestlé New Zealand CEO Jennifer Chappell said the Taranaki farm would build on Nestlé's work around the world to help transform the dairy industry.

“Dairy is our single biggest



ingredient, and our vision is that the future for dairy can be net zero,” Ms Chappell said.

“To reduce our Scope 3 emissions, it's critical we work with dairy farmers and their communities. For this reason, we have over 100 pilot projects with partners around the world, including in New Zealand, and 20 farms already striving towards the ambition of net zero emissions,” Ms Chappell said.

“Working towards a net zero farm means looking at all aspects of the farm, from cow nutrition to sequestering carbon. We will share what we learn on the journey across the dairy industry, with the goal of ultimately mainstreaming on-farm practices that will reduce the climate impact of the dairy industry.”

“This will contribute to Nestlé meeting our goal to achieve net zero emissions by 2050, including reducing our emissions by 20% by 2025 and 50% by 2030,” Ms Chappell said.

The partnership between Fonterra and Nestlé also encompasses the launch of a greenhouse gas farmer support pilot programme. This multi-year project will see enrolled Fonterra supplying farms get additional support to implement changes aimed at lowering their on-farm emissions, which could include solutions such as improved management of feed and pasture and enhanced milk production efficiency.

The opt-in pilot will start with around 50 farms and then be scaled up over the next three years.



Fonterra partners with Government and industry to tackle on farm emissions

Fonterra will contribute up to \$50 million over the next four years in a public private partnership that's working to find a solution to biogenic methane.

Formally launched at National Fielddays the Joint Venture (JV) includes the Government and partners from across the food and fibre sector – ANZCO, Fonterra, Rabobank, Ravensdown, Silver Fern Farms and Synlait.

Together the partners will contribute around \$35 million a year until 2025 with the Government matching this contribution, resulting in at least \$170 million invested over this time.

Speaking at the launch, Fonterra CEO Miles Hurrell said New Zealand's low carbon position means the country has a good base to build on, but we need to do more.

"We must find a solution to biogenic methane if New Zealand is to maintain its competitive advantage on a global scale, and we all know we can achieve more by working together.

"Finding a solution means we will have an opportunity to continue to provide some of the most emissions efficient dairy in the world, along with a solution that could benefit the planet – that is a great position for us to aim for."

Fonterra already has some work underway with its research and development centre having, in partnership with others, 18 different projects and 30 trials underway.

Mr Hurrell says the JV will enable the Co-op to accelerate some of these projects where it makes sense and look across the industry to see what else we can do.

We must find a solution to biogenic methane if New Zealand is to maintain its competitive advantage on a global scale, and we all know we can achieve more by working together.

By doing this we will provide the tools our farmers need to ensure the enduring future of their businesses and that we meet our net zero ambitions.

"That's what sustainability is about, creating long term resilience, and farmers across the country are looking to us to help with this."



Supplementary Information

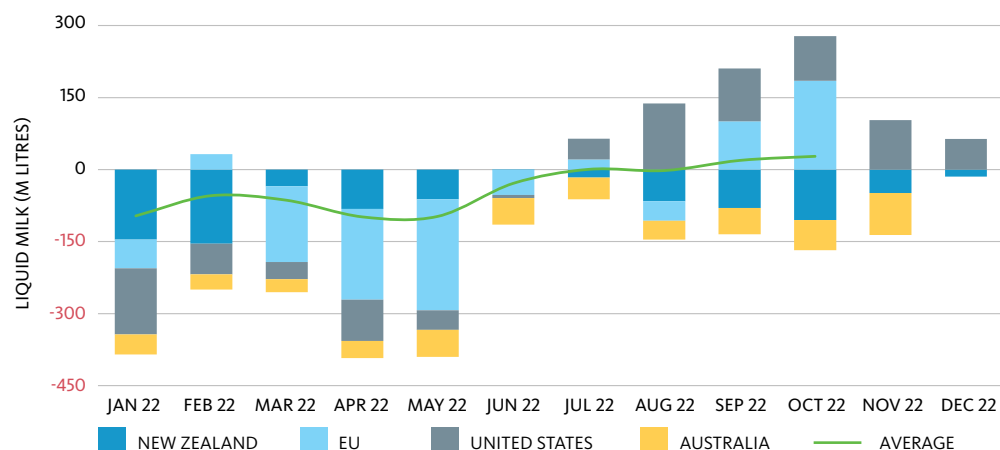
Global Dairy Market

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.

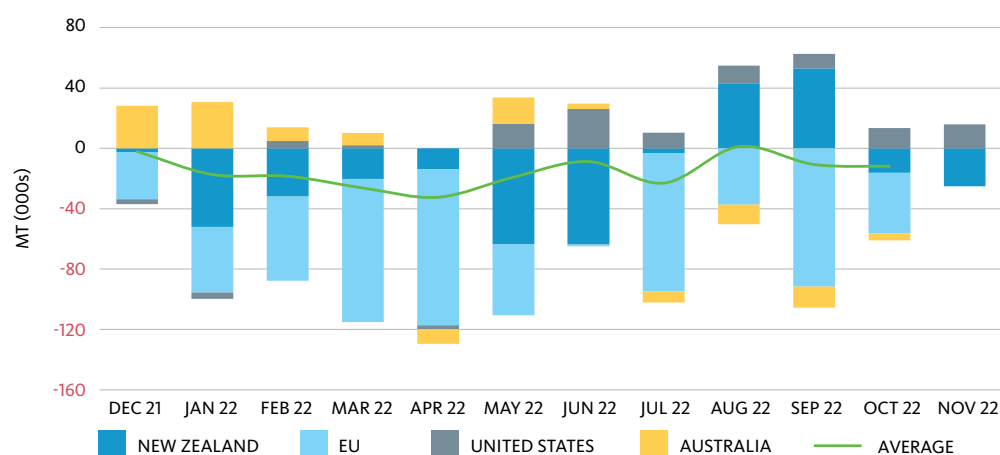
Averages are shown where data is complete for the regions presented.

PRODUCTION



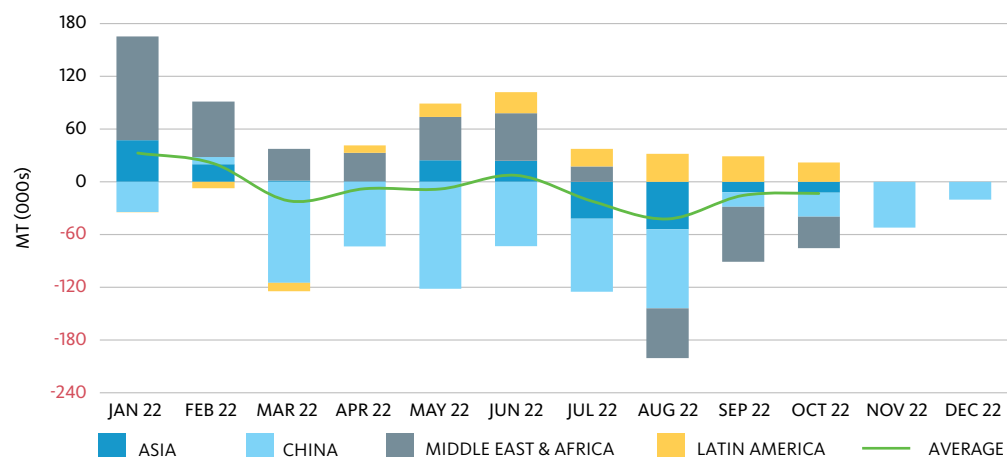
NOTE: Data for EU to October; Australia to November; and New Zealand and US to December.

EXPORTS



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

IMPORTS



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

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.

MILK COLLECTION (MILLION KGMS)	DECEMBER 2022	DECEMBER 2021	MONTHLY CHANGE	SEASON-TO-DATE 2022/23	SEASON-TO-DATE 2021/22	SEASON-TO-DATE CHANGE
Total Fonterra New Zealand	174.0	173.4	0.3%	854.8	874.6	(2.3%)
North Island	98.1	98.3	(0.2%)	520.8	543.1	(4.1%)
South Island	75.9	75.1	1.0%	334.0	331.4	0.8%
Australia	11.0	11.3	(3.2%)	56.7	58.3	(2.8%)

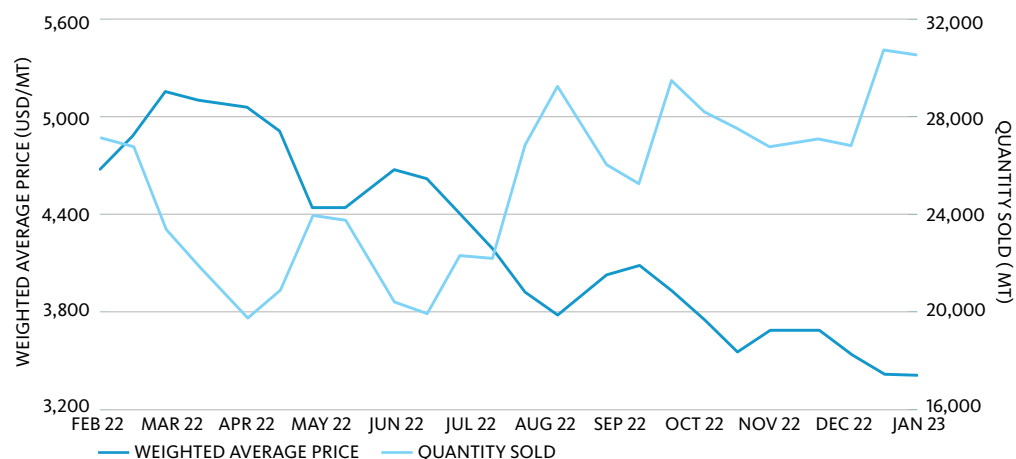
Fonterra GDT results

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

	LAST TRADING EVENT (17 JANUARY 2023)	YEAR-TO-DATE (FROM 1 AUGUST 2022)
Quantity Sold on GDT (Winning MT)	30,541	334,533
Change in Quantity Sold on GDT over same period last year	1.8%	2.6%
Weighted Average Product Price (USD/MT)	3,412	3,725
Change in Weighted Average Product Price over same period last year	(23.7%)	(10.5%)
Change in Weighted Average Product Price from previous event	(0.2%)	-

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.

Cultured Products

Fermented milks that are prepared by using starter cultures and controlled fermentation including yoghurt, yoghurt drinks, sour cream, crème fraîche.

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 New Zealand 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.

WPI

Whey Protein Isolate.