

# Dairy Market Insights

Fourth Quarter 2022

# 1. Summary

## Outlook increasingly complex

- Short-term global fundamentals have slightly weakened in our outlook, with a little more dairy product availability in the short-term, while market demand has weakened.
- Australian cheese and butterfat prices have become more disconnected from global fundamentals in the 2022/23 season due to the acute shortages of milk supply, and retailer practices for pricing and sourcing of cheese for private label lines which has kept a floor under cheese and butterfat prices while global benchmarks from NZ and the US have weakened.
- Wholesale pricing of commodities has otherwise reverted to an “import parity” basis, ensuring the **expected Australian commodity value of milk (ACMV) over the current season remains near \$9kgMS based on domestic wholesale rather than NZ export prices.**
- In the background, the global market is in an odd hiatus with relatively limited growth in milk supply, while the biggest export market is in a major pause. While demand for all commodities has softened in response to high product prices, a burst of ideal European weather lifted EU milk availability to enable a reloading of SMP and butter stocks and correction of prices ... and given buyers an excuse to pause.
- It is extremely tough to sustain any meaningful growth in milk output from the top 5 major producers, and the pressure on supply could easily return in Q2-2023 as northern hemisphere producers face tighter cashflows and (in the EU) possibly weak spring pasture growth.
- Feed grain prices also remain a lottery with uncertainty as to how the Ukraine war will develop and whether food and energy supplies will be used as leverage, as Russia becomes more frustrated with its military failure.
- China’s demand revival seems to be the major factor the world market is betting on – futures markets are pricing in a return of Chinese buyers to tighten WMP, SMP and butterfat markets. While the timing and strength of improved trade is highly uncertain, the EU consumer (and their yearning for cheese) is meanwhile also critical given their impact on underlying fundamentals.

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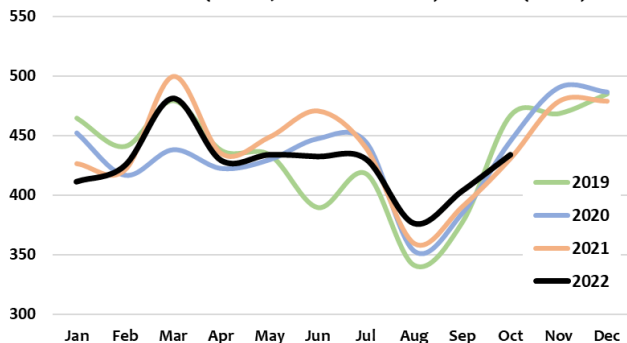
## What it means for Australian dairy farmers

- The spot commodity milk value\* (CMV) stood at \$7.21kgMS at the end of December, down 17% from the September update, this compares to the weighted average announced southern region price of around \$9.60kgMS.
- Spot Oceania cheddar prices have fallen US\$350/t since the end of September, while butter prices are down by US\$750/t. SMP and WMP spot prices have also fallen, by US\$490/t and US\$430/t respectively. As noted, Australian wholesale prices are significantly disconnected from Oceania spot prices due to critical local supply shortages and the sourcing strategies of major retailers.
- The Australian dollar has strengthened over the December quarter increasing to US\$0.69 compared to US\$0.65 at the end of September, further weakening returns to local exporters. Inflation continues to be a key concern for the Australian economy, undermining consumer confidence and prompting aggressive interest rate rises from the Reserve Bank.
- While energy prices continue to ease, additional supply chain costs remain an issue, with labour shortages and disruptions reducing productivity and adding to processor costs. However, aggressive competition for a dwindling milk pool is likely to limit any reduction in farmgate prices in 2023/24. To date domestic wholesale prices for cheese and butter remain significantly higher than global benchmarks, with most product committed, and price rises passed to consumers.
- With the **losses of raw milk and prevailing high milk costs, pressure on processor margins is acute and eventual casualties are assured.** This is unlikely to alter the product mix in the short-term with a small decline in cheese output while milk powder and ingredient (and butter) production may suffer.
- **To learn more about current season regional farmgate pricing, and track CMV movements visit the Milk Value Portal at [milkvalue.com.au](https://milkvalue.com.au)**

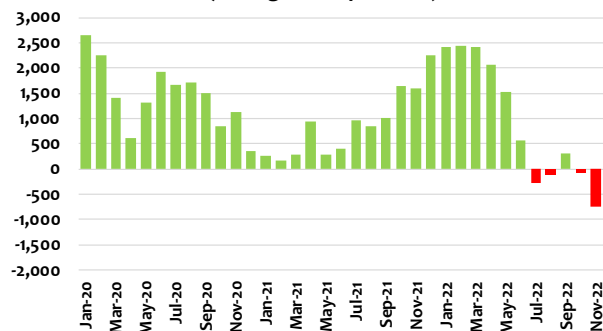
# 2. Some key global dairy market indicators

Improving milk production is being met with slowing dairy demand in major markets leading to product surpluses.

Global trade (all major commodities) in MSE ('000t)

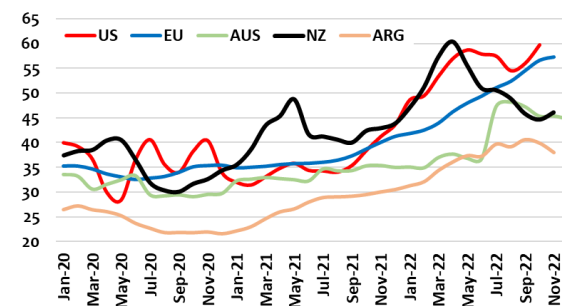


12-mth rolling total of global net demand (mill kg milk equivalent)



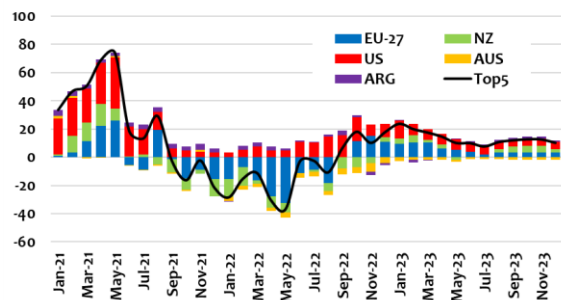
Milk prices in US\$/kg milksolids are easing in some regions as commodity prices fall, with the EU the stickiest in Q4 and NZ falling heaviest to have the cheapest milk due to a weaker currency.

Monthly farmgate prices (€ 100/kg)



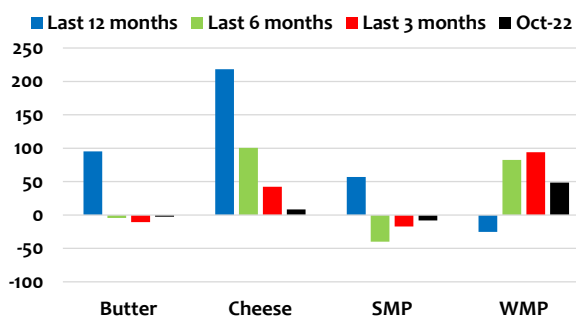
Milk output in the top 5 exporters will remain in decline until late Q1-2023, while trade volumes have been limited with domestic demand remaining steady.

YOY growth in kgMS production ('000t)



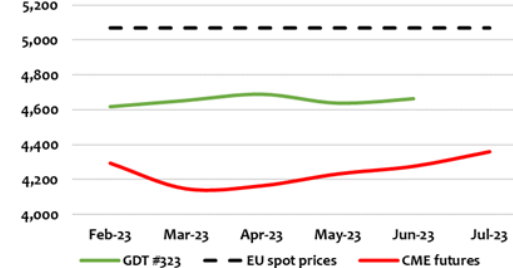
Product mix in major producers is being adjusted to respond to changes in domestic cheese demand

Growth in Top 3 production ('000t)



The US maintains an advantage in commodity cheddar export prices while tighter EU markets keep prices elevated for now.

Cheddar forward price comparison US\$/t



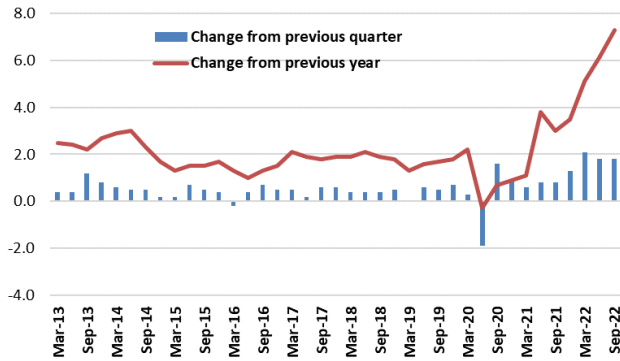
### 3. Major issues in the global market outlook

	Bullish (for prices)	Bearish	Uncertain
Demand	<ul style="list-style-type: none"> <li>• Expected rebound in Chinese demand in mid-2023</li> <li>• Improving Chinese demand for dry whey with improving pork production margins</li> <li>• US foodservice demand remains robust, which is shifting more production from cheddar to mozzarella</li> <li>• Eventual recovery in China’s activity and the continued increase in travel will be important in some closely integrated SE Asian economies.</li> <li>• Oil-producing economies continue to benefit from firm oil and gas markets as Ukraine conflict drags on and China’s industrial and consumer activity recovers</li> </ul>	<ul style="list-style-type: none"> <li>• Weakening Chinese demand for SMP as consumers avoid COVID risks</li> <li>• Weaker short-term demand for SMP from developing Asia and other regions</li> <li>• EU inflation threatening consumer demand</li> <li>• Evidence that there is trading down in US foodservice activity</li> <li>• Economic headwinds for SE Asia with heavy exposures to major developed economies</li> </ul>	<ul style="list-style-type: none"> <li>• Escalation in Russia’s war on Ukraine continue to put feed supplies at risk</li> <li>• Impact of easing COVID restrictions and rising cases on economic recovery and dairy demand into 2023</li> <li>• Impact of a mild US recession on overall US dairy demand, while inflation appears to have peaked</li> <li>• Strategic buying on GDT platform as buyers wait for Chinese “return”</li> </ul>
Supply	<ul style="list-style-type: none"> <li>• Potential limits on EU milk output in spring 2023</li> <li>• Risks to milk production in the western regions of the US due to weakening farm margins</li> <li>• Weaker Latin American exports with lower milk production</li> </ul>	<ul style="list-style-type: none"> <li>• Faster milk growth in cheese-rich US regions leading to increased export availability</li> </ul>	<ul style="list-style-type: none"> <li>• Impact of poorer feed quality on European milk production and raw milk components into 2023</li> <li>• Extent of NZ production recovery and product mix response limiting WMP production</li> </ul>

# 4. Some key domestic market indicators

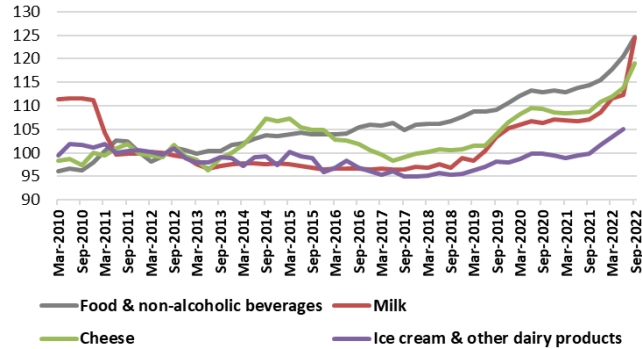
Strong increases in prices for new dwelling construction, automotive fuel and food contributed to a 7.3% increase in the CPI in the September quarter, the highest since 1990. High freight costs, supply constraints and prolonged elevated demand for goods contributed over three quarters of the rise. In the 12 months to the September quarter dairy product prices rose 12.1%, second only to fruit and vegetable prices.

All groups CPI, quarterly & annual movement (%)



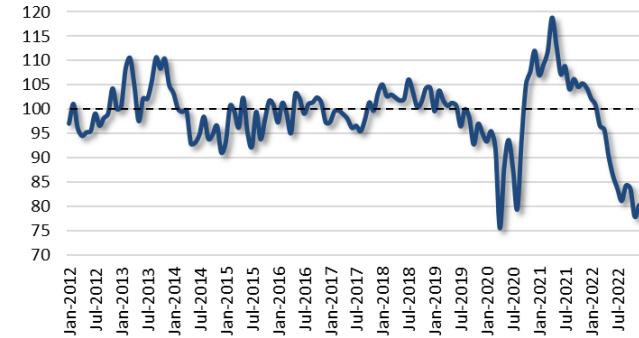
Source: ABS 6401.0 Consumer Price Index

Retail price indices (2011/12 = 100)



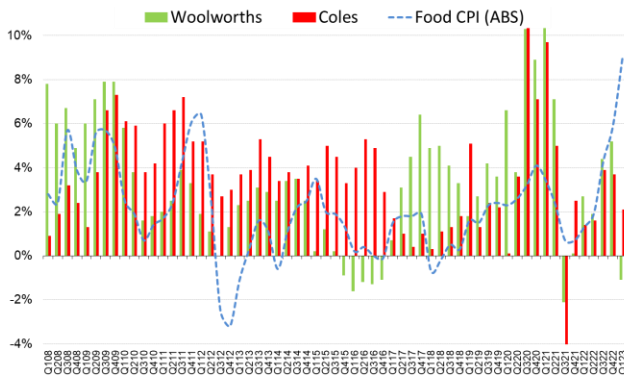
The Westpac-Melbourne Institute Index of Consumer Sentiment rose by 3% in December but is still near recession lows. Inflation and the state of the economy remain the key concerns.

Westpac consumer sentiment index



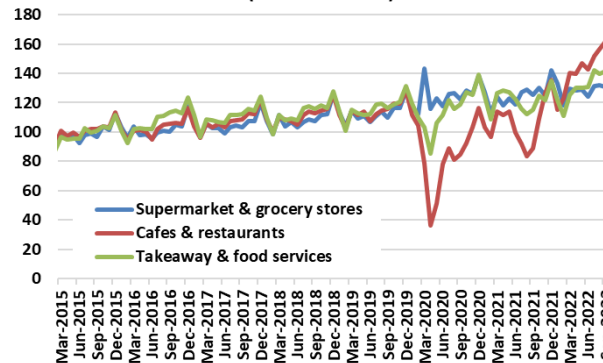
Major supermarket same store sales were weaker in the September quarter against COVID-influenced prior-year volumes, even as food prices soar.

Retailer "same store" sales v food inflation



Cafes, restaurants and takeaway foodservice expenditure fell 0.4% in October in seasonally adjusted terms, while overall food retailing rose 0.4%.

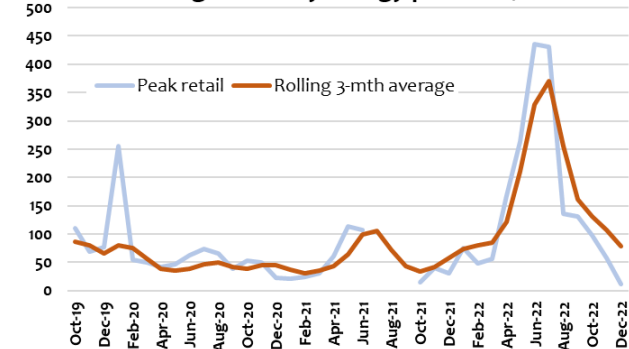
Retail turnover indices (Jan 2015 = 100)



Source: ABS 8501.0 Retail Trade

Wholesale spot electricity prices continue to ease in recent months. The Australian government has moved to cap gas prices

Vic average monthly energy price in \$/mwh



# 5. Australian outlook

## Critical issues

Milk production

- Floods in the southeast of the country cut deeper into milk output in November, with southern regions down in line with the national collections, almost 10%. Northern fresh region production declines of 12% will add to the demand on southern regions to meet fresh milk demand and reduce manufacturing output.
- The climate pattern is trending towards a “neutral” pattern by the end of Q1-2023, and thereafter into a weak El Niño pattern by the end of Q2-2023.
- Grain prices remain well above average, although falling with downgrades due to wet weather. Hay prices recently spiked largely due to water damage. With elevated feed costs, poor quality of feed and expected drier conditions, this will further pressure per cow yields.
- The flood impacts will continue to deplete milk production, worsening the outlook for the remainder of the season.

Milk prices

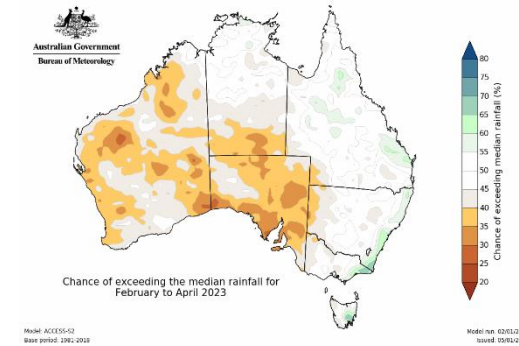
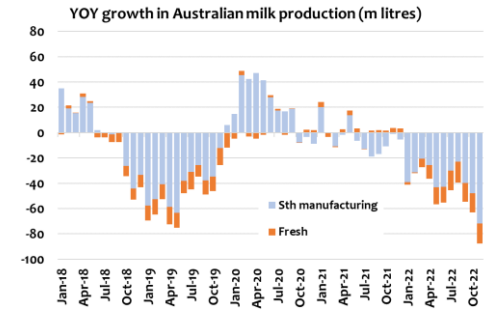
- Milk values have weakened in line with global markets. The spot CMV (based on NZ commodity prices) has slumped to near \$7kgMS, but the Australian market is no longer valuing milk in line with Oceania fundamentals due to the steep decline in milk production, and the shortages in butterfat supplies.
- In addition, the direct-sourcing of milk for cheese by major retailers has stabilised cheese wholesale prices for retail well above NZ cheddar prices.
- Using domestic wholesale prices, the Australian commodity milk value (ACMV) was near \$8.70kgMS at the end of December – compared to farmgate milk prices that average round \$10/kgMS in southern regions and the CMV of \$7.21 that is based on NZ export quotes.
- Current indicative regional farmgate milk prices can be monitored at the [Milk Value Portal](#).

## Outlook assumptions

- We expect larger declines in milk collections in coming months, with the full season is expected to be 6% weaker than the 2021/22 season.

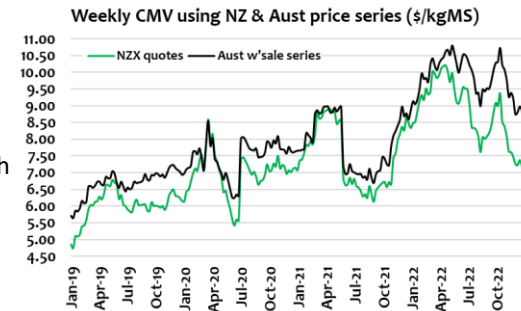
AUS milk and product output ('000t)					
	Milk	Fats	Cheese	SMP	WMP
2022	8,091	55	393	217	24
2023	7,816	60	396	177	31
YOY % changes					
2022	-6.8%	-1.4%	1.7%	-0.2%	-37.9%
1H-22	-6.3%	-20.2%	9.8%	2.5%	-46.8%
2H-22	-7.2%	16.0%	-4.4%	-2.0%	-29.4%
2023	-3.4%	8.6%	0.7%	-18.4%	25.5%
1H-23	-3.9%	25.7%	-1.6%	-10.0%	11.3%
2H-23	-3.0%	-2.4%	2.7%	-24.3%	35.8%

- The projected full-season FY2023 milk value is expected to average \$9kgMS. The A\$ value is critical in this outlook – at present expected to remain in the high US\$0.60s.
- There is limited scope for changes to milk prices despite weaker cheese and SMP commodity prices. Competition for milk will remain strong and there will be pressure for limited changes in prices for the FY2024 season.
- In the following season, the ACMV drops to near A\$8.30kgMS with the weaker outlook for commodity prices, with the A\$ improving to US69c. In this outlook, we assume only a small decline in average cheese prices (which will represent a higher share of product mix in that season) with some influence from weaker NZ and US prices.



Model: ACCESS-S2  
Run period: 2062-2082

Model: no. 02/01/2023  
Issued: 05/01/2023



# 5. Australian outlook

## Critical issues

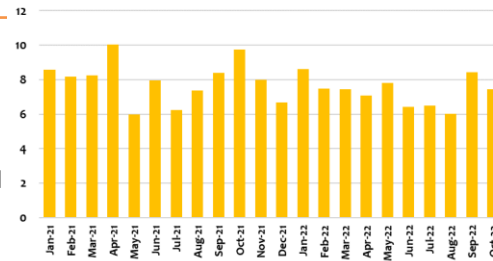
- Inflation continues to be a key concern for the Australian economy, undermining consumer confidence and prompting aggressive interest rate rises from the Reserve Bank.
- Retail sales of food remain positive, but volumes are weaker than the prior year taking account of inflation. Dining out slowed from September 2022 with a Christmas rally unlikely to be sustained due to sharp hikes in interest rates.
- There is anecdotal evidence that cheese retail markets are weaker but the overall effect, taking account of higher foodservice trade in 2022, is not yet apparent. US cheese has taken a larger share of imports in H2-2022 with the fall in local output.
- Manufacturing output for Q3-2022 showed a 4% fall in natural cheese production. We revised our mass balance workings for this, reflected in the projected mix change on the right.
- While butterfat commodity values are falling, this is not (yet) translating to fresh cream values held up due to shortages of milk and butterfat, but may come under the influence of weaker AMF prices in H2-2023.

## Outlook factors

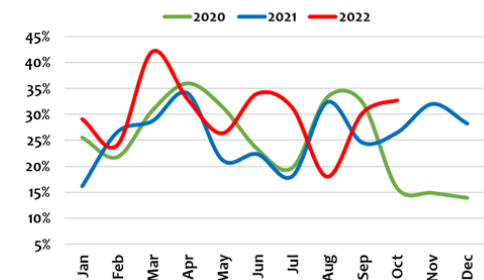
- With the losses of raw milk and prevailing high milk costs, pressure on processor margins is acute and eventual casualties are assured.
- This is unlikely to alter the product mix in the short-term with a small decline in cheese output while milk powder and ingredient (and butter) production may suffer.
- While there is now more evidence that dairy retail prices have increased, there continue to be pressures on processor margins from labour issues, energy, transport and packaging costs. At the same time, competition for rapidly falling farm milk supplies remains acute.

Markets

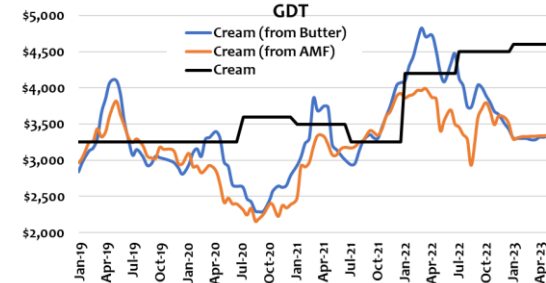
Monthly shipments of cheese to Australia ('000t)



US cheese market share



Aust domestic cream prices v implied fat values on GDT



# Glossary and explanation of key terms

Acronym		Explanation
ACMV	Australian Wholesale Commodity Milk Value	The ACMV is calculated from Australian wholesale dairy product prices as distinct from spot export quotes used in the CMV
AMF	Anhydrous Milk Fat	Removal of water from cream or butter yielding 99.8% milk fat product used in preparing reconstituted product and in food processing
CME	Chicago Mercantile Exchange	US-based derivatives marketplace offering a range of futures and options products for risk management for agricultural commodities.
CMV	Commodity Milk Value	The CMV calculation utilises actual or forecast spot prices for major commodities (SMP, WMP, cheese and butter) converted to local currency and the average industry product mix to generate revenue estimate. Direct conversion, overhead costs and allowance for profit retention to generate an estimate of returns available to the relevant milk pool. The CMV is used as a useful forward indicator of how the global market might affect the farmgate and is tracked weekly <a href="#">here</a> .
EU-27	European Union	European trading bloc including 27 member states
FMP	Farmgate Milk Price	The average FMP that is paid by processors in the southern exporting region of Australia (including southern NSW, Victoria, Tasmania and South Australia) is made up of the underlying commodity value of milk (CMV) and a value-add or premium that depends on the product and market mix of each processor. This includes fresh and other retail dairy products as well as higher value specialised dairy ingredients.
FOB	Free on Board	A shipment term used to indicate whether the buyer or seller is liable for goods that are damaged or destroyed during shipping
LatAm	Latin America	Mainly focused on major dairy producing and importing countries Argentina, Uruguay and Brazil.
MENA	Middle East and North Africa	
MS	Milk Solids	The protein and fat content of milk which is the basis of payments from processors to farm suppliers. According to Australia in 2019/20 the average Australian litre of milk comprised 4.15gms of fat (4.15%) and 3.45gms of protein (3.45%) and therefore was 7.60gms of milk solids (7.6%).
NDSPR		National Dairy Products Sales Report produced by the United States Department of Agriculture (USDA)
NFDM	Non-Fat Dry Milk	Shelf-stable milk powder derived from the evaporation and spray drying of skimmed milk. NFDM is defined by the US Code of Federal Regulations and is similar in composition to the more widely produced and traded skimmed milk powder at 34% protein.
NZ	New Zealand	



# Glossary and explanation of key terms

Acronym		Explanation
OPEC	Organisation of the Petroleum Exporting Countries	OPEC is a permanent intergovernmental organization of 13 oil-exporting developing nations that coordinates and unifies the petroleum policies of its Member Countries.
PFV	Projected Fundamental Value	Freshagenda's forecast for the future value of commodities based on the expected market fundamentals of supply and demand
SGX	Singapore Exchange Ltd	Singaporean investment holding company that provides different services related to securities and derivatives trading and others. SGX and NZX formed a strategic partnership in 2022, agreeing to the listing of NZX's Global Dairy Derivatives contracts on SGX's trading and clearing platform
SMP	Skimmed Milk Powder	Shelf-stable milk powder derived from the evaporation and spray drying of skimmed milk. SMP is defined by the globally recognized Codex Alimentarius as comprising 34% protein and 1.5% milkfat.
US	United States of America	
WMP	Whole Milk Powder	Shelf-stable milk powder derived from the evaporation and spray drying of whole milk. SMP is defined by the globally recognized Codex Alimentarius as comprising 34% protein and a minimum 26% and less than 42% milkfat.