



**GLOBAL<sup>TM</sup>  
DAIRY  
TRADE.**

# **ANNUAL REPORT 2021**

# Contents

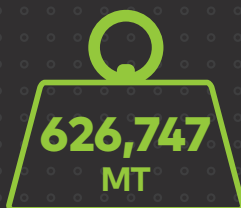
---

<b>GDT EVENTS YEAR IN REVIEW</b>	<b>01</b>
<b>DIRECTOR'S REPORT</b>	<b>02</b>
<b>OVERSIGHT BOARD CHAIRMAN'S REPORT</b>	<b>03</b>
<b>GDT EVENTS OVERSIGHT BOARD</b>	<b>04</b>
<b>– MEMBER REPRESENTATIVES</b>	<b>05</b>
<b>GDT SERVICES</b>	<b>06</b>
<b>GDT EVENTS STATISTICS</b>	<b>10</b>

# GDT Events 2021 Year in Review



Traded on GDT Events



Traded on GDT Events



SGX-NZX Dairy Futures and Options  
contracts settled to GDT Events prices



Total unique participating bidders



Total unique winning bidders



Bidders from 70 countries

## GDT Community

Covid-19 continued to affect many countries worldwide, yet amid this global uncertainty, GDT trading platforms continued to remain fully operational, enabling buyers and sellers to trade core dairy ingredients safely.

GDT alongside SGX and StoneX sponsored NZX's Virtual Global Dairy Seminar in October, and Director Eric Hansen provided an overview of Global Dairy Trade's key changes in trading activity throughout the year. Eric also spoke to major developments, including the successful launch of our refreshed Auction Website and a new initiative to increase the frequency of price discovery.

# Director's Report



Eric Hansen  
Director  
Global Dairy Trade

**2021 was a challenging year for us as we navigated business as usual during the Covid-19 pandemic. We simultaneously completed some major developments and focused on progressing new priorities for the coming years.**

Covid-19 has been a significant presence worldwide this year, and I am grateful that GDT as a digital business can remain fully operational, allowing buyers and sellers to trade with confidence amidst global uncertainty.

#### **Our Purpose and Vision**

Irrespective of the external challenges, GDT's purpose remains constant: *GDT exists to ensure buyers and sellers can trade with confidence in global and regional dairy markets.*

GDT achieves this purpose by publishing credible, market-based reference prices for core dairy products. Credible reference prices enable participants in the physical and financial dairy markets to be confident about the current market prices, making it easier to trade and conduct business.

GDT's vision is *to be the world's pre-eminent price discovery platform for core dairy products and an active*

*supporter of efficient dairy derivative trading.* We are working continuously toward this vision through medium-term strategic initiatives designed to increase the performance of GDT Events as a robust and efficient price discovery platform, with a view to increasing liquidity on GDT Events and the financial derivative trading associated with it.

In turn, these performance improvements are intended to help buyers, sellers and participants in other parts of the value chain to better manage their own risk. Improving participants' ability to manage risk enhances their ability to trade with confidence, consistent with GDT's purpose.

Some major developments took place throughout 2021.

#### **Refreshed Auction Website**

When GDT was first established in 2008, our GDT Events auction platform was a bold move for the dairy industry. It was the first time an online auction of its kind had been applied to international dairy trade, enabling buyers from around the world to participate in the auction simultaneously – a sophisticated technology at the time.

We have been planning an upgrade to the GDT Events bidding website for some time, and early consultation with bidders taught us they wanted more modern platform features and more intuitive training and support facilities. After several rounds of development and extensive testing, we launched our refreshed Auction

Website in September of this year.

By taking advantage of significant technological advances over the past decade, our refreshed Auction Website provides a better bidding experience with all information now displayed on one screen, a cleaner interface with intuitive colour coding, on-screen help, and the ability to place a mix of both manual and Auto-bids throughout a Trading Event.

#### **More frequent price discovery**

Aligned with our vision we have been investigating alternative ways of enhancing liquidity on GDT Events. This is the primary objective for our latest initiative – GDT Pulse, designed to take the pulse of current market prices on a more frequent basis, complementing the current twice-monthly Trading Events.

A trial version of GDT Pulse will launch in 2022, initially offering auctions on alternate weeks between GDT Trading Events for a period of six to twelve months. Our intention is to eventually run weekly and possibly daily auctions for a limited range of product specifications, to complement GDT Events.

We will continue to look for ways to further enhance our bidders' and sellers' customer experience and welcome your feedback.

Eric Hansen  
Director, Global Dairy Trade

# Oversight Board Chairman's Report



*Bill Shields  
Chairman GDT Events  
Oversight Board*

**The GDT Events Oversight Board is an independent oversight body established to ensure that the GDT Events trading platform is operated and developed in accordance with the Guiding Principles and to represent the interests of the parties trading on the GDT Events platform.**

The GDT Events Oversight Board monitors Global Dairy Trade's compliance with its Governance Principles, approves any proposed rule changes, and contributes to the development of Global Dairy Trade's overall business strategy.

Oversight Board meetings continued to be held online during the past year. On 20 April 2021, the Board reviewed the annual assessment of key risks. It noted that operations of GDT services had continued to perform without disruption in the face of Covid-19. The Oversight Board also discussed a future initiative, GDT Pulse, designed to increase the frequency of price discovery from GDT and supported further investigation of the merits of running weekly and eventually daily auctions for a limited range of offerings on the GDT Events platform.

The Oversight Board meeting held on 3 November 2021 endorsed the business case for more frequent price discovery including for a trial to be conducted in 2022 as well as draft rule changes to be put forward for public consultation in early 2022 to facilitate the new service. It also discussed changes to the Governance Principles to improve the clarity of what is audited and to improve the efficiency of the audit process. The Oversight Board also discussed the NZX/GDT Information Sharing Agreement, agreeing that due to the NZX/SGX business partnership it would no longer be possible for NZX to provide information to Global Dairy Trade as required, rendering the agreement void.

Membership of the Oversight Board includes three members in each of the buyer, seller, and financial markets groups.

During August, the following changes in the member representatives occurred;

- a) Liam Fenton, Global Head of StoneX Global Dairy and Food Group, replaced Robert Chesler as StoneX Financial Inc's representative on the Board
- b) Following Jarden Securities Limited purchase of OM Financial, which resulted in OM Financial's membership on the Oversight Board transferring to Jarden Securities, Nigel Brunel continued as a member of the Board as the representative for Jarden
- c) Sri Jayen Mehta, Senior General Manager Planning & Marketing, replaced Kishoresinh Jhala as Amul's representative on the Board.

My sincere thanks go to both Robert Chesler and Kishoresinh Jhala for their invaluable contributions as Board members over the past years.

I would also like to thank the entire Board for their ongoing commitment to our purpose, which ultimately seeks to maintain effectiveness and confidence in price discovery for key dairy ingredients via the GDT Events trading platform.

**Bill Shields**  
Chairman, GDT Events  
Oversight Board

# GDT Events Oversight Board Member Representatives in 2021



## Bill Shields

### CHAIRMAN

Bill Shields was appointed inaugural chair in March 2016. He has extensive financial markets and governance experience and brings a deep understanding of commodity markets from his involvement in electricity trading platforms. He is a former director of M-Co International and the Energy Market Company, which operated regulated electricity and gas markets in New Zealand, Singapore and Australia. Mr Shields also has extensive experience internationally in banking and finance and government policy advice. His career responsibilities

have included economic and financial research in Australia and overseas, the provision of analytical and strategic advice on Australian and international financial market developments, the conduct of monetary policy, as well as the oversight of regulated energy markets. Mr Shields is a former director on the Capital Markets Board of the Queensland Treasury Corporation. He served on their Funding & Markets Committee and as chair of the Accounts & Audit Committee. Mr Shields was Chief Economist and an Executive Director of Macquarie Bank Limited until 2001, and previously held positions with the Reserve Bank of Australia, the International Monetary Fund and the Australian Treasury. He was a Visiting Professor at the Macquarie Graduate School of Management of Macquarie University until 2009 and has taught at the Australian Catholic University in Australia.



## Nigel Brunel

### JARDEN SECURITIES LIMITED

Nigel is the Head of Commodities for Jarden Securities Limited. He has over 30 years' experience in financial markets – mainly in derivatives. His responsibilities include managing the Auckland & Sydney Institutional Commodity teams, and he sits on the management team. His main dealing focus day to day is on the Agriculture, Renewable and Energy markets.



## Thomas Carstensen

### ARLA

Thomas is the Senior Vice President of Milk and Trading at Arla Foods amba, where he has had overall responsibility for their global B2B activities, milk planning and sourcing of dairy raw materials since 2010. Thomas joined Arla Foods amba in 1983 and has held several management positions, including the Business Unit Director for Arla Foods Ingredients and a four-year position in the Middle East.



## Liam Fenton

### STONEX FINANCIAL INC.

Liam is the Global Head of StoneX Global Dairy and Food Group. Liam established his independent floor broking and trading business, operating profitably for 12 years. Liam opened FCStone's first office outside of the Americas in Dublin. The StoneX office became profitable within three years of operation and continues to trade successfully while developing price risk management tools for the dairy industry in Europe.



## Gilbert Chow

### INNER MONGOLIA MENGNIU DAIRY (GROUP) CO. LTD

Gilbert is the General Manager Oceania within the International Business Unit of the Mengniu Group. His team is responsible for commercial negotiation and management of third-party manufacturers in the Oceania region. His team's remit also includes identifying and driving overseas strategic partnership & investment opportunities outside of China. For the past 15 years, he has worked in procurement leadership roles for Fonterra, Jacobs Douwe Egberts & Associated British Foods across Oceania, Asia and Europe.





**Kimberly Fisk**  
**NESTRADE S.A**

Kimberly is the Global Head of Procurement for Commodities in Nestle, where she is responsible for a global team managing commodity procurement. Her previous experience started in the NZ Dairy Industry before moving to the UK and working in supply chain and procurement roles in FMCG companies. She joined Nestle in 2009 where she has focused on global sourcing strategies and risk management across commodities based in UK, Singapore and Switzerland.



**Sri Jayen Mehta**  
**AMUL**

Jayen Mehta is Senior General Manager Planning & Marketing at Gujarat Cooperative Milk Marketing Federation Ltd (Amul), India's largest food products marketing organisation. Jayen has been associated with Amul for 30 years and has extensive experience in domestic and international marketing of Amul's product range. Jayen has a broad understanding of brand building, product management, exports, advertising and media, corporate planning, sales and distribution, supply chain management and social media.



**Vince Curtin**  
**BURT LEWIS**  
**INGREDIENTS LLC**

Vince is the CEO and President of Burt Lewis Ingredients. He has over 20 years of experience in international dairy markets working and living in New Zealand and the US. During this time he has held a variety of roles within manufacturing, technical, business development, strategy, sales and operations planning and ingredient sales.



**Nick Morris**  
**NZX**

Nick leads NZX's derivatives market development, which includes global dairy commodity contracts such as WMP & SMP and NZ Milk Price futures and options. Nick has over ten years experience in financial markets, having worked at the Bank of New Zealand in various FX-related roles and at Medley Global Advisors prior to joining NZX.



**Bruce Turner**  
**FONTERRA**

Bruce Turner is Director of Central Portfolio Management (CPM) at Fonterra. The CPM team centrally manage Fonterra's physical & financial portfolios, ensuring Fonterra optimises its portfolios across markets/ channels & manages market price exposures with a focus on using exchange-traded & OTC derivative contracts. Before joining NZMP, Bruce spent 32 years in the energy sector working in Oceania, Asia, Europe & North America, primarily in electricity & gas, with a focus on energy trading & portfolio management.



# GDT Services

## GDT Events

The primary function of GDT Events is to provide credible, market-based reference prices for globally traded dairy products.

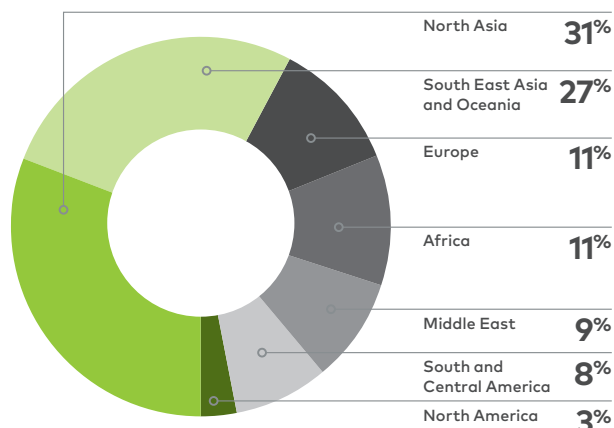
In 2021, GDT Events traded 626,747 MT of product, representing major export supply regions including the US, Europe, Oceania, and Asia.

Seven product groups were sold to 273 bidders this year. GDT Events achieved an average of 170 participating bidders per Trading Event with an average 96% clearance rate.

\*\*The clearance rate is quantity traded divided by maximum supply offered. The calculation excludes sellers who traded less than 1,000 MT on GDT Events during 2021.

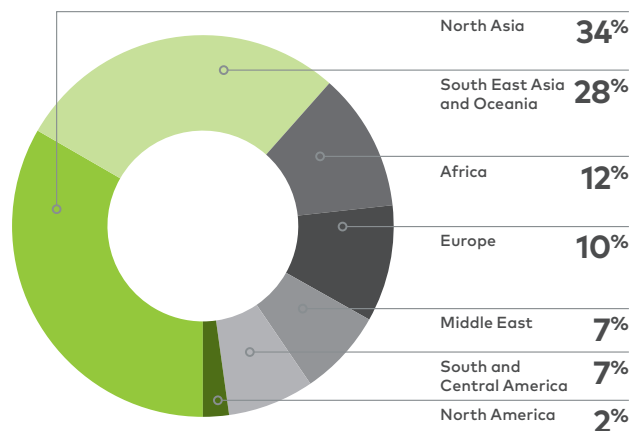
## Breakdown of GDT Events Bidders

Participating Bidders\* by Region 2021 (304 Total)



\* Total number of unique bidders that participated at least once during 2021.

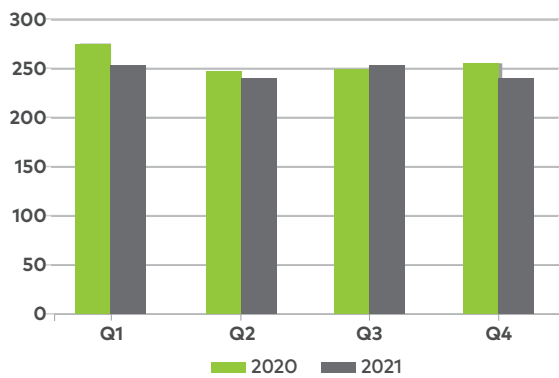
Winning Bidders\* by Region 2021 (273 Total)



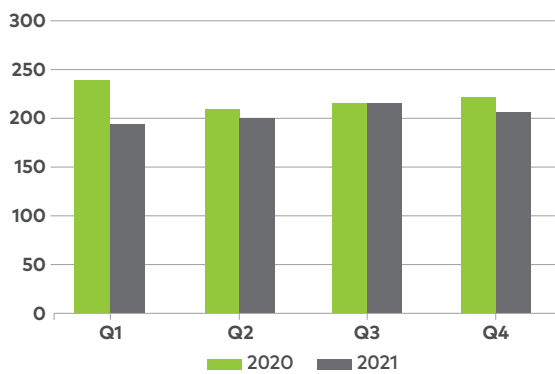
\* Total number of unique bidders that purchased at least once during 2021.



Participating Bidders Per Quarter 2021 vs 2020



Winning Bidders Per Quarter 2021 vs 2020



Annual Weighted Average Prices (USD/MT)

Product Group	2021	2020	2019
AMF	5,934	4,159	5,323
BMP	3,363	2,471	2,823
Butter	5,067	3,758	4,282
Cheddar	4,478	3,878	3,807
Lactose	1,224	1,093	869
SMP	3,337	2,745	2,600
WMP	3,850	2,986	3,121

Note: This table shows the annual weighted average price data for 2019/2020/2021. It includes product group prices across all product specifications and sellers for short-term contract periods (CP1 and CP2), weighted by traded quantity. \*Rennet Casein was only offered on GDT Events between January and May 2020, so is not included in this table.

# GDT Services

## Major developments this year

### Strengthening our security

Ensuring our Global Dairy Trade services are secure is fundamental to our customers' confidence in the information we deliver.

To further strengthen our security, we replaced our on-premises Identity Management System with a third-party software as a service (SaaS) identity provider (Okta) in July of this year.

Switching to Okta enabled us to introduce multi-factor authentication (MFA) as an added level of security when accessing Global Dairy Trade services. From July, all customers were required to enable MFA to continue accessing GDT Insight, GDT Events Seller and Bidder Portals, and later in September to access the refreshed Auction Website.

### Refresh of auction platform

To make our GDT Events platform more convenient and easier to use, we undertook a complete refresh of the bidding website, launching a refreshed Auction Website at TE291 on 21 September of this year.

The auction methodology and core software have not changed, but the new design on a modern user interface creates a better bidding

experience. Bidders can choose between manual and Auto-bid for each product specification per Contract Period and can copy bids from the previous bidding round. The refreshed platform also provides better support to inexperienced bidders with on-screen help, colour coded tiles to help identify different bid types, tooltips, and clearer messaging.

Feedback from a survey conducted with bidders several weeks after the launch indicated that a large majority feel confident in participating in the refreshed Auction Website and appreciate all information now being presented on a single screen. We will continue to engage with bidders to gain further insights on enhancements that may add more value in the future.

### GDT Marketplace

We made the decision to discontinue the GDT Marketplace service from 30 April 2021 in order to concentrate resources on initiatives that enhance liquidity for our core price discovery service, GDT Events.

### GDT Insight

GDT Insight is our data subscription service with three tailored offerings – the Market Pack, Analyst Pack and Trader Pack, each providing valuable data

not available publicly, and analysis targeted to a range of subscribers.

One example of the data provided within all GDT Insight packs is a regional breakdown of the total quantities traded for each product group at each Trading Event, including the number of buyers per region.

Round-by-round information during the auction is provided in the Analyst and Trader packs, including the average announced price per product group and contract period in each bidding round, as well as the ratio of demand relative to supply by product group in each bidding round.

Please visit

<https://www.globaldairytrade.info/en/gdt-insight/> for more information on GDT Insight.

## Looking ahead

### Auction Website enhancements

As many of our bidders operate their businesses in a highly agile manner and often via their mobile phone, we have planned two further enhancements during 2022 to the refreshed Auction Website;

- Multiple devices: Bidders will be able to actively participate in the auction from their mobile devices and move seamlessly between devices such as from laptop to mobile phones at any time as the auction progresses
- Multiple users: Companies that wish to involve more than one employee in the bidding process will be able to have multiple users accessing and monitoring the Trading Event at the same time and the ability to pass the bidding role between their users.

### More frequent price discovery

Since its formation in 2008, Global Dairy Trade has sought to enhance liquidity in the globally traded physical and financial dairy markets. We have been working on an exciting new development to provide price discovery on a more frequent basis, called GDT Pulse.

GDT Pulse aims to enhance liquidity in globally traded physical and financial dairy markets by providing more data points for market participants to trade on.

A trial version of GDT Pulse will launch in 2022, with sufficient features to meet the needs of early customers, and further development will be informed by their feedback.

Initially, GDT Pulse will offer weekly auctions between GDT Trading Events for a trial period of six to twelve months. The auctions will have one bidding option: Fonterra Whole Milk Powder Regular Contract Period 2 to ensure a short total duration of between 15 – 30 minutes, providing a convenient option for bidders.

The governance of GDT Pulse will fall under the GDT Events Oversight Board and GDT Trading Event Rules. During the trial, prices will be published on our GDT information website [www.globaldairytrade.info](http://www.globaldairytrade.info).

This trial will provide us with valuable bidder feedback and insight into the needs of bidders and financial market participants.

After the trial period, we will assess the merit of GDT Pulse and the future potential for more frequent price discovery from Global Dairy Trade.

# GDT Events Statistics

---

**The following pages  
present statistics for  
GDT Events to  
31 December 2021.**

Further information is  
available through GDT Insight  
[www.globaldairytrade.info/en/gdt-insight/](http://www.globaldairytrade.info/en/gdt-insight/)

For any queries please contact  
[help@globaldairytrade.info](mailto:help@globaldairytrade.info)

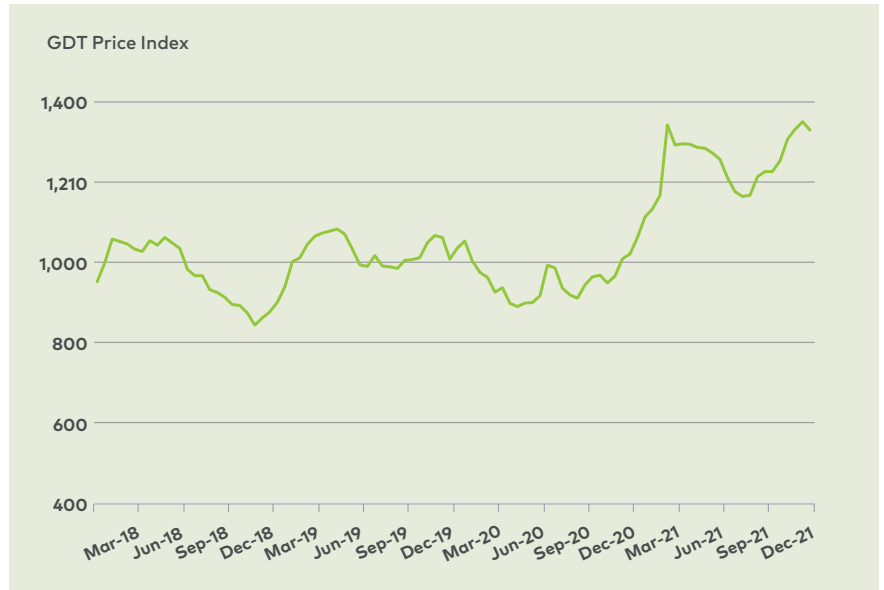
# GDT Price Index

**The average GDT Price Index increased 30% in 2021, reaching a 7-year high in December.**

This chart includes GDT Price Index data from January 2018 to December 2021.

The GDT Price Index uses a weighted-average of the percentage changes in prices. GDT Price Indices are used to avoid the bias of a simple weighted average price, and to give a more accurate reflection of the price movements between Trading Events.

Further information on the GDT Price Index is available at [www.globaldairytrade.info/en/gdt-events/how-gdt-events-work/reference-material/](http://www.globaldairytrade.info/en/gdt-events/how-gdt-events-work/reference-material/)

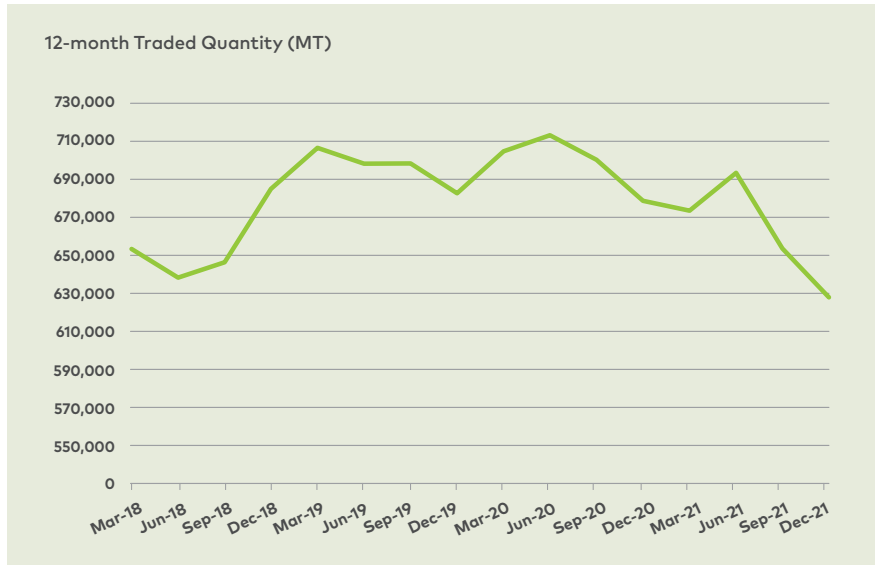


Date	GDT Price Index	Date	GDT Price Index
Jan-20	1,039	Jan-21	1,065
Jan-20	1,056	Jan-21	1,116
Feb-20	1,007	Feb-21	1,136
Feb-20	978	Feb-21	1,170
Mar-20	966	Mar-21	1,346
Mar-20	929	Mar-21	1,295
Apr-20	940	Apr-21	1,299
Apr-20	901	Apr-21	1,298
May-20	893	May-21	1,290
May-20	902	May-21	1,287
Jun-20	903	Jun-21	1,276
Jun-20	919	Jun-21	1,259
Jul-20	996	Jul-21	1,214
Jul-20	989	Jul-21	1,179
Aug-20	939	Aug-21	1,167
Aug-20	922	Aug-21	1,170
Sep-20	913	Sep-21	1,217
Sep-20	947	Sep-21	1,229
Oct-20	967	Oct-21	1,229
Oct-20	971	Oct-21	1,256
Nov-20	952	Nov-21	1,310
Nov-20	970	Nov-21	1,335
Dec-20	1,012	Dec-21	1,354
Dec-20	1,024	Dec-21	1,333

## 12-month Quantity Traded

**12-month quantity traded fell 7.6% to 626,747 MT in 2021.**

This chart includes quantity traded (MT) data from March 2018 to December 2021.



Date	12-month Quantity Traded (MT)	Date	12-month Quantity Traded (MT)
Mar-18	652,499	Mar-20	704,412
Jun-18	637,253	Jun-20	712,904
Sep-18	645,389	Sep-20	699,937
Dec-18	684,445	Dec-20	678,076
Mar-19	706,199	Mar-21	672,824
Jun-19	697,850	Jun-21	692,965
Sep-19	697,930	Sep-21	652,687
Dec-19	682,078	Dec-21	626,747

# Clearance Rate

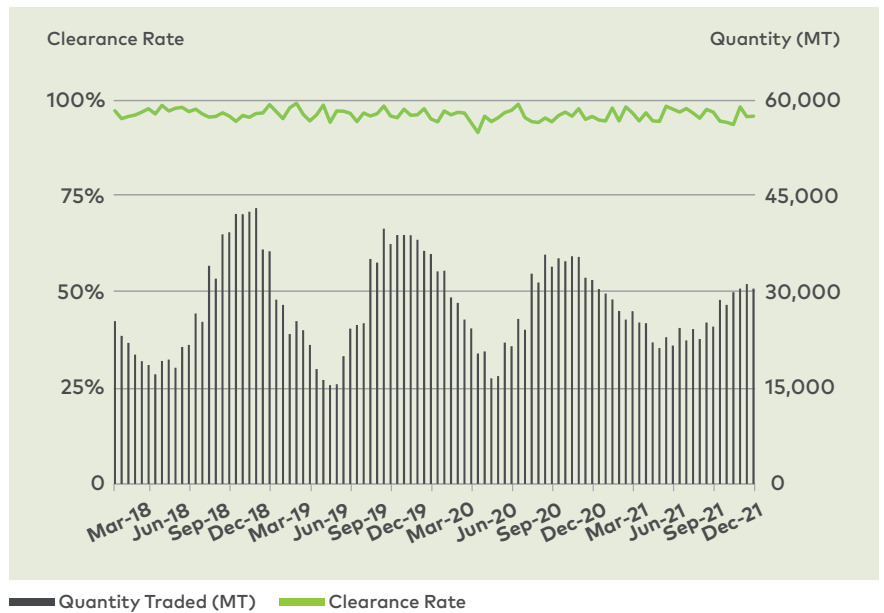
## Over 2021, GDT Trading Events average clearance rate was 96%.

This chart includes clearance rate data from January 2018 to December 2021.

The clearance rate is robust during peaks and troughs in traded quantity.

The clearance rate is quantity traded divided by maximum supply offered. The calculation excludes sellers who traded less than 1,000 MT on GDT Events during 2021.

Maximum supply has been adjusted for the Cream Group to avoid double counting the available quantity.



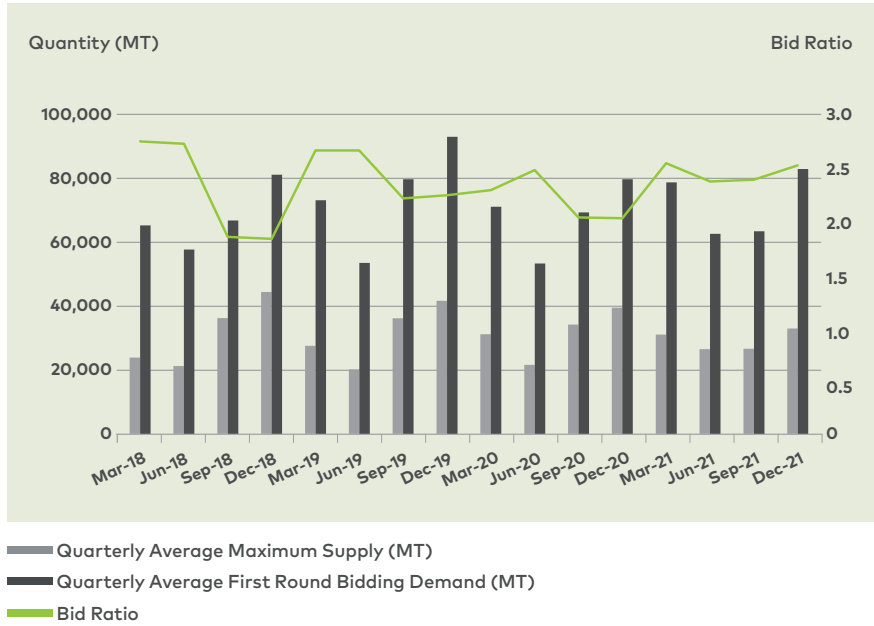
Date	Quantity Traded (MT)	Clearance Rate	Date	Quantity Traded (MT)	Clearance Rate
Jan-20	33,050	94%	Jan-21	30,313	94%
Jan-20	33,165	97%	Jan-21	29,606	94%
Feb-20	29,006	96%	Feb-21	28,707	97%
Feb-20	28,181	96%	Feb-21	26,883	94%
Mar-20	25,551	96%	Mar-21	25,554	98%
Mar-20	24,209	94%	Mar-21	26,872	96%
Apr-20	20,302	91%	Apr-21	25,104	94%
Apr-20	20,601	95%	Apr-21	25,008	96%
May-20	16,442	94%	May-21	22,020	94%
May-20	16,787	95%	May-21	21,140	94%
Jun-20	21,968	96%	Jun-21	22,825	98%
Jun-20	21,410	97%	Jun-21	21,522	97%
Jul-20	25,688	98%	Jul-21	24,278	96%
Jul-20	23,995	95%	Jul-21	22,330	97%
Aug-20	32,696	94%	Aug-21	24,084	96%
Aug-20	31,331	94%	Aug-21	22,543	95%
Sep-20	35,656	95%	Sep-21	25,093	97%
Sep-20	33,791	94%	Sep-21	24,476	96%
Oct-20	35,090	95%	Oct-21	28,623	94%
Oct-20	34,648	96%	Oct-21	27,836	94%
Nov-20	35,393	95%	Nov-21	29,815	93%
Nov-20	35,303	97%	Nov-21	30,397	98%
Dec-20	32,062	94%	Dec-21	31,092	95%
Dec-20	31,701	95%	Dec-21	30,375	95%

# Quarterly Average Supply and Demand

2021 bid ratios recovered in Q1 from below average over the previous two quarters, and remained firm throughout the year. The bid ratio averaged 2.5 for the full year.

The bid ratio is calculated by dividing first round bidding demand by maximum supply.

Maximum supply has been adjusted for the Cream Group to avoid double counting the available quantity.



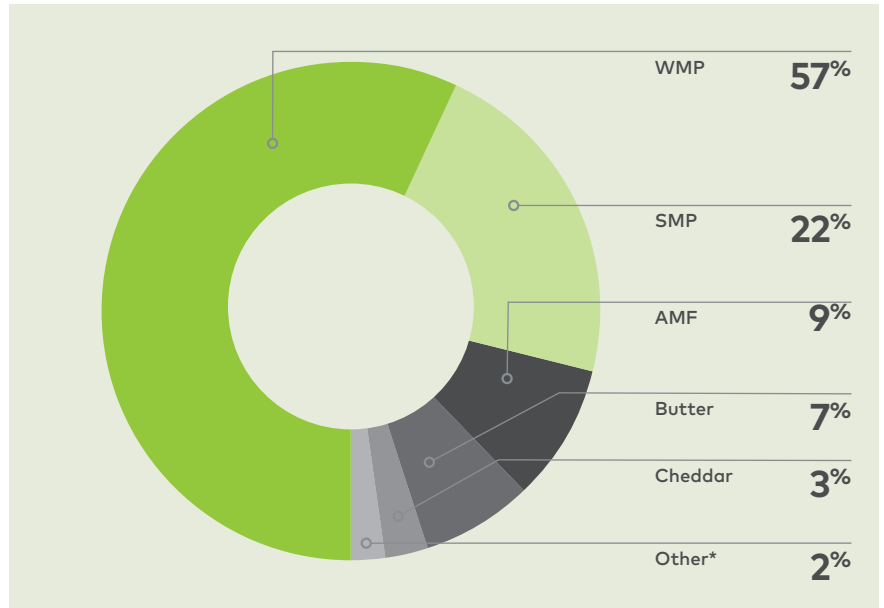
Date	Quarterly Average Maximum Supply (MT)	Quarterly Average First Round Bidding Demand (MT)	Bid Ratio
Mar-18	23,768	65,088	2.7
Jun-18	21,171	57,540	2.7
Sep-18	36,091	66,582	1.8
Dec-18	44,297	80,919	1.8
Mar-19	27,484	72,941	2.7
Jun-19	20,095	53,340	2.7
Sep-19	36,028	79,473	2.2
Dec-19	41,499	92,733	2.2
Mar-20	31,082	70,930	2.3
Jun-20	21,517	53,170	2.5
Sep-20	34,111	69,124	2.0
Dec-20	39,378	79,519	2.0
Mar-21	30,965	78,486	2.5
Jun-21	26,431	62,462	2.4
Sep-21	26,553	63,209	2.4
Dec-21	32,883	82,677	2.5



# Quantity Traded by Product Group, 2021

The main milk powders, WMP and SMP, accounted for 79% of quantity traded.

AMF, Butter and Cheddar represented a further 19% of sales.

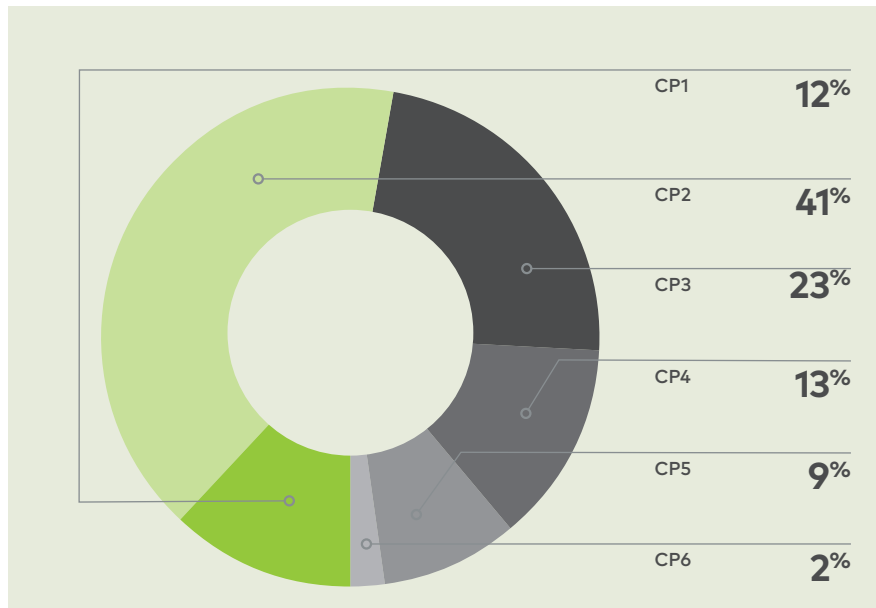


Product Group	Quantity Traded (% of Total)
WMP	57%
SMP	22%
AMF	9%
Butter	7%
Cheddar	3%
Other*	2%

\*Other includes BMP, Lactose and RenCas.

## Quantity Traded by Contract Period, 2021

In line with previous years, the most active contract period was CP2, which is the contract period used as settlement for SGX-NZX Dairy Derivatives.



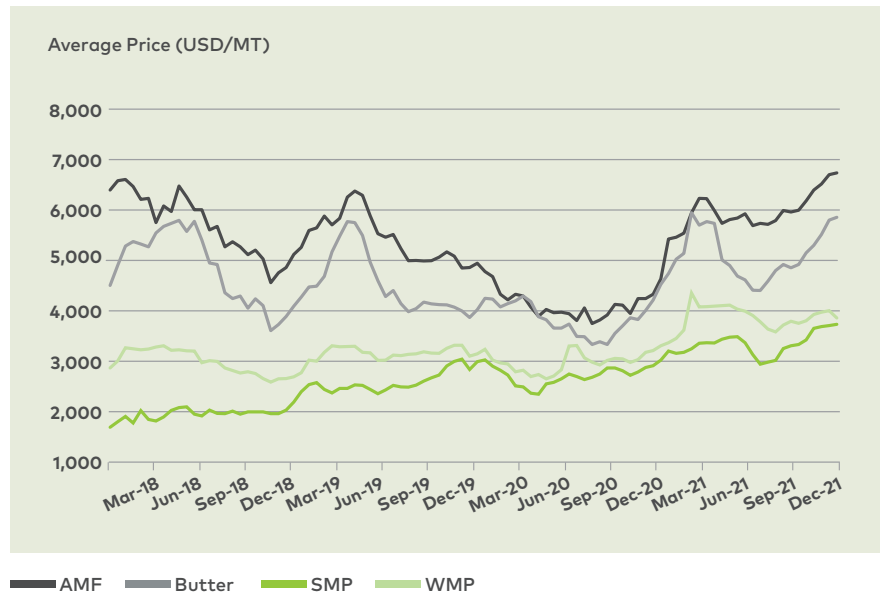
Contract Period*	Quantity Traded (% of Total)
CP1	12%
CP2	41%
CP3	23%
CP4	13%
CP5	9%
CP6	2%

\* Contract Period (CP), refers to the month when product is shipped. Product traded in CP1 is shipped in the month after the Trading Event when it was purchased, CP2 is shipped two months after, etc.

## Average Price: AMF, Butter, SMP and WMP

The 12-month average prices for all dairy ingredients increased over 2021. AMF, Butter, SMP and WMP gained 43%, 35%, 22% and 29% respectively. WMP reached a 7-year high of \$4,347 USD/MT in March 2021.

This chart shows average price data from January 2018 to December 2021 for AMF, Butter, SMP and WMP prices across all product specifications and sellers for short-term contract periods (CP1 and CP2), weighted by quantity traded.

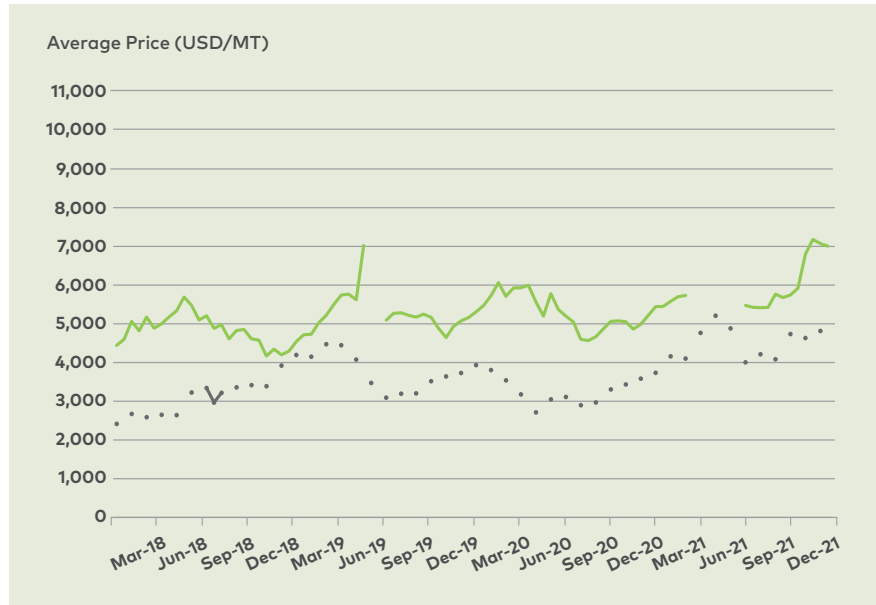


Date	AMF (USD/MT)	Butter (USD/MT)	SMP (USD/MT)	WMP (USD/MT)	Date	AMF (USD/MT)	Butter (USD/MT)	SMP (USD/MT)	WMP (USD/MT)
Jan-21	4,630	4,520	3,015	3,301	Jul-21	5,691	4,406	3,127	3,901
Jan-21	5,423	4,735	3,194	3,362	Jul-21	5,733	4,399	2,933	3,779
Feb-21	5,460	5,020	3,148	3,448	Aug-21	5,714	4,585	2,973	3,633
Feb-21	5,538	5,139	3,170	3,613	Aug-21	5,788	4,795	3,009	3,578
Mar-21	5,942	5,945	3,240	4,347	Sep-21	5,991	4,917	3,248	3,715
Mar-21	6,231	5,700	3,353	4,072	Sep-21	5,959	4,850	3,299	3,787
Apr-21	6,224	5,771	3,359	4,080	Oct-21	5,996	4,918	3,325	3,747
Apr-21	5,990	5,736	3,355	4,088	Oct-21	6,178	5,146	3,418	3,798
May-21	5,735	5,005	3,430	4,101	Nov-21	6,398	5,297	3,648	3,923
May-21	5,808	4,896	3,472	4,108	Nov-21	6,519	5,515	3,680	3,970
Jun-21	5,841	4,686	3,482	4,029	Dec-21	6,701	5,798	3,704	3,999
Jun-21	5,926	4,610	3,362	3,989	Dec-21	6,735	5,854	3,730	3,854

## Average Price: BMP and Cheddar

The 12-month average prices for BMP and Cheddar increased 36% and 15% respectively compared to the previous year. Cheddar reached an all time high of \$5,368 USD/MT in November 2021, the highest price since launched on GDT in 2011.

This chart shows average price data from January 2018 to December 2021 for BMP and Cheddar prices across all product specifications and sellers for short-term contract periods (CP1 and CP2), weighted by quantity traded. Cheddar was only sold during CP3 and CP6 from April 2021 to June 2021, therefore average prices for Cheddar are not showing in the table and chart during April and June 2021.



— BMP — Cheddar

Date	BMP (USD/MT)	Cheddar (USD/MT)	Date	BMP (USD/MT)	Cheddar (USD/MT)
Jan-21	2,797	4,072	Jul-21	3,001	4,095
Jan-21	-	4,077	Jul-21	-	4,060
Feb-21	3,117	4,175	Aug-21	3,157	4,053
Feb-21	-	4,263	Aug-21	-	4,056
Mar-21	3,073	4,288	Sep-21	3,061	4,315
Mar-21	-	-	Sep-21	-	4,247
Apr-21	3,568	-	Oct-21	3,545	4,298
Apr-21	-	-	Oct-21	-	4,425
May-21	3,899	-	Nov-21	3,469	5,085
May-21	-	-	Nov-21	-	5,368
Jun-21	3,654	-	Dec-21	3,605	5,289
Jun-21	-	-	Dec-21	-	5,238

Note: "-" means that no price was published.

# Average Price: Lactose

The 12-month average price of Lactose during 2021 was 12% higher than 2020, reaching an all time high of \$1,392 USD/MT in March 2021, the highest since the launch of European Lactose on GDT in 2015.

This chart shows average price data from January 2018 to December 2021 for Lactose prices across all product specifications and sellers for short-term contract periods (CP1 and CP2), weighted by traded quantity.



Lactose

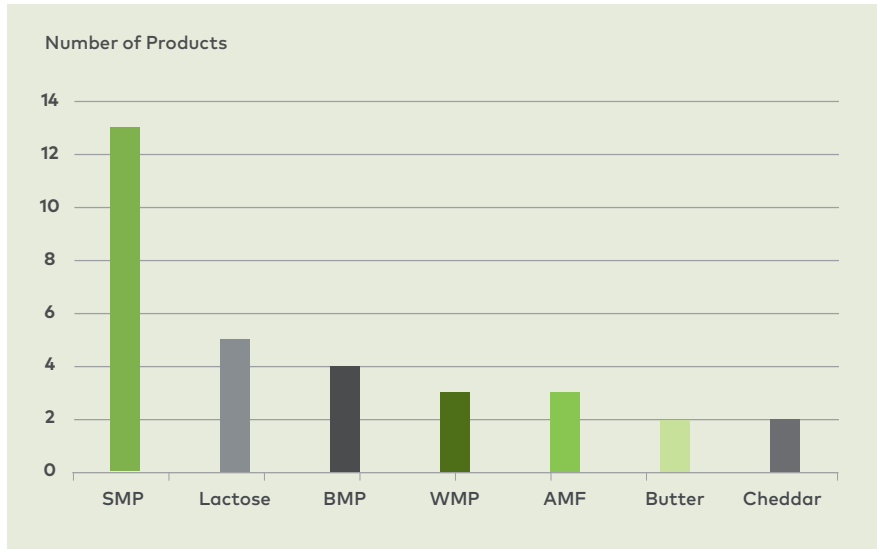
Date	Lactose (USD/MT)	Date	Lactose (USD/MT)	Date	Lactose (USD/MT)	Date	Lactose (USD/MT)
Jan-20	798	Jul-20	1,309	Jan-21	1,099	Jul-21	1,238
Jan-20	806	Jul-20	1,279	Jan-21	1,173	Jul-21	1,127
Feb-20	830	Aug-20	1,349	Feb-21	1,217	Aug-21	1,094
Feb-20	822	Aug-20	1,303	Feb-21	1,232	Aug-21	1,097
Mar-20	871	Sep-20	1,314	Mar-21	1,278	Sep-21	1,167
Mar-20	914	Sep-20	1,277	Mar-21	1,392	Sep-21	1,183
Apr-20	959	Oct-20	1,182	Apr-21	1,307	Oct-21	1,188
Apr-20	1,078	Oct-20	1,087	Apr-21	1,260	Oct-21	1,258
May-20	1,153	Nov-20	-	May-21	1,236	Nov-21	1,272
May-20	1,341	Nov-20	887	May-21	1,251	Nov-21	1,299
Jun-20	1,279	Dec-20	1,004	Jun-21	1,236	Dec-21	1,339
Jun-20	1,290	Dec-20	1,024	Jun-21	1,240	Dec-21	1,390

Note: "-" means that no price was published.

## Products Offered, 2021

Products offered decreased slightly over 2021. The largest offering is in the SMP product group due to the large number of supply regions.

This chart shows the number of products offered per product group.



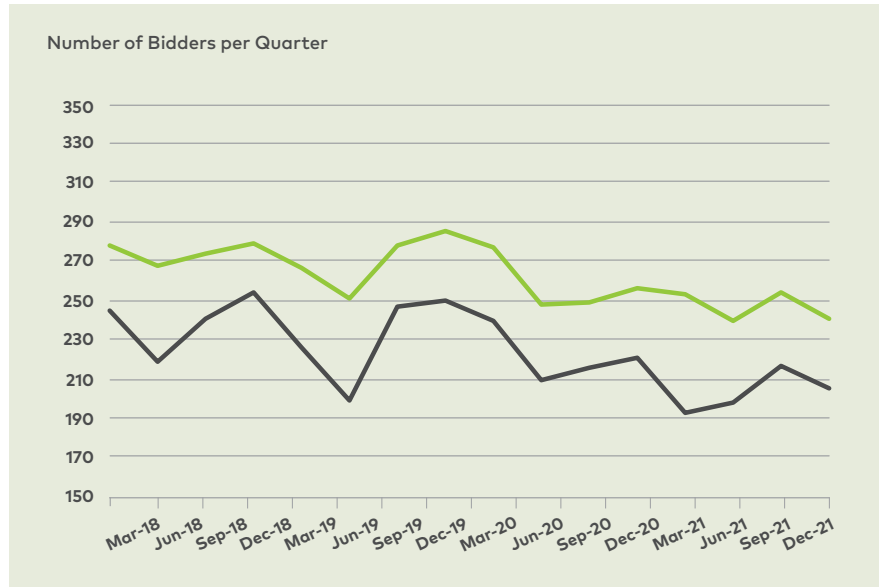
Note: SWP has been excluded as it was not sold in the last 12 months.

Product Group	Products	Number of Sellers
SMP	13	5
Lactose	5	2
BMP	4	2
WMP	3	1
AMF	3	1
Butter	2	1
Cheddar	2	1

# Participating and Winning Bidders

**Quarterly participating bidders averaged 245 during 2021, down 4% compared to the previous year. Quarterly winning bidders averaged 204 during 2021.**

This chart includes data from January 2018 to December 2021, indicating quarterly participating bidders and winning bidders. Participating bidders are unique bidders who placed a bid in round 1 of a Trading Event. Winning bidders are participating bidders who won product.



— Participating Bidders  
— Winning Bidders

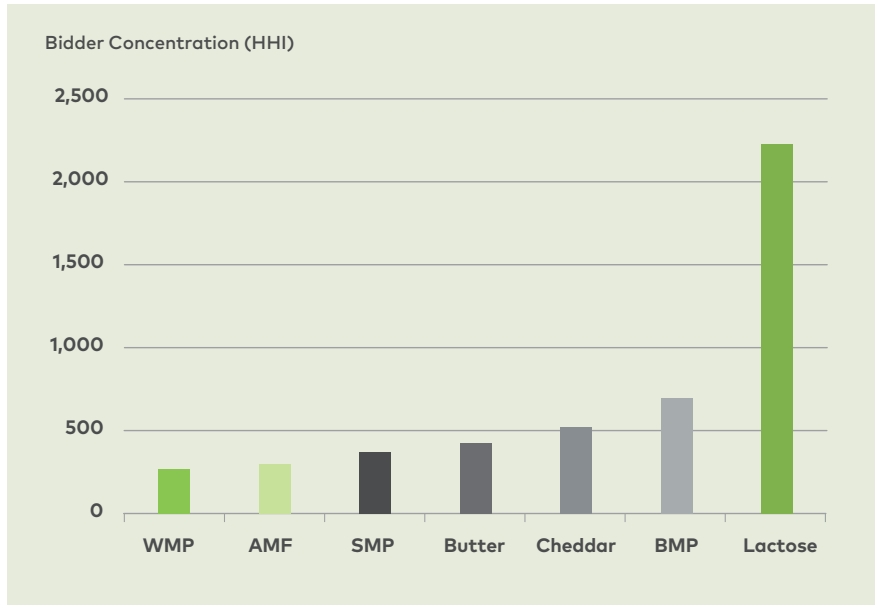
Date	Participating Bidders	Winning Bidders	Date	Participating Bidders	Winning Bidders
Mar-18	276	244	Mar-20	275	239
Jun-18	266	219	Jun-20	247	210
Sep-18	272	240	Sep-20	248	216
Dec-18	277	253	Dec-20	255	221
Mar-19	265	226	Mar-21	252	194
Jun-19	250	200	Jun-21	239	199
Sep-19	276	246	Sep-21	253	217
Dec-19	283	249	Dec-21	240	206

## Bidder Concentration

**Most product groups meet generally accepted thresholds for unconcentrated markets. The HHI value for Lactose indicates moderately concentrated bidding.**

GDT calculates bidder concentration using the Herfindahl-Hirschman Index (HHI). The HHI is calculated as the sum of squares of each bidder's proportional annual purchase (x100), within each product group.

The Horizontal Merger Guidelines (2010) published by the US Department of Justice and US Federal Trade Commission indicated that an HHI below 1,500 is regarded as 'unconcentrated', whereas values between 1500 – 2500 are considered as indicating a 'moderately concentrated' market and above 2500 as 'highly concentrated'.



Product Group	Bidder Concentration (HHI)
WMP	248
AMF	274
SMP	343
Butter	409
Cheddar	495
BMP	681
Lactose	2243

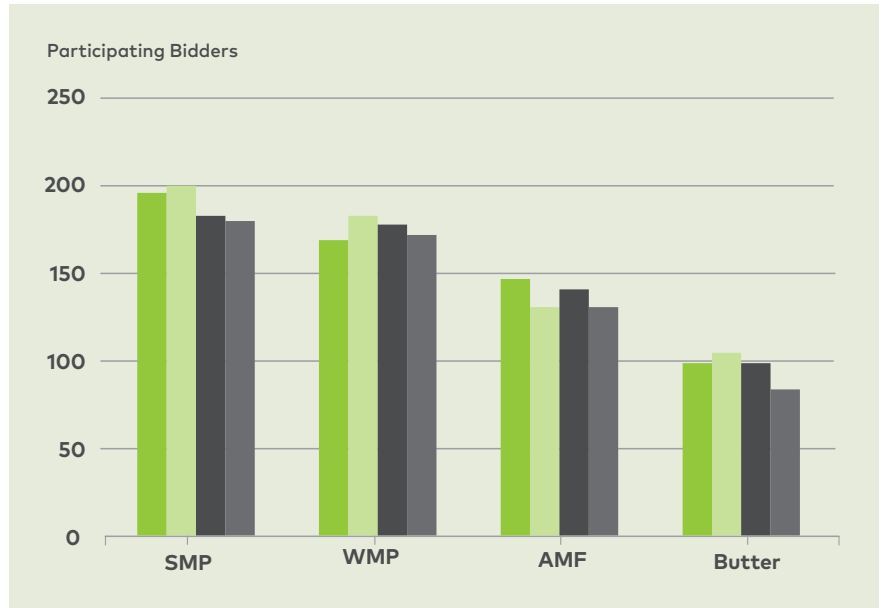
Note: SWP has been excluded as it was not sold in the last 12 months. RenCas has been excluded because it was not offered for the full year.



# Participating Bidders: SMP, WMP, AMF and Butter

**SMP remains the most active product group for bidders, followed closely by WMP and AMF.**

This chart shows the number of bidders who actively bid on each product group in at least one Trading Event over the calendar years 2018-2021.



2018 2019 2020 2021

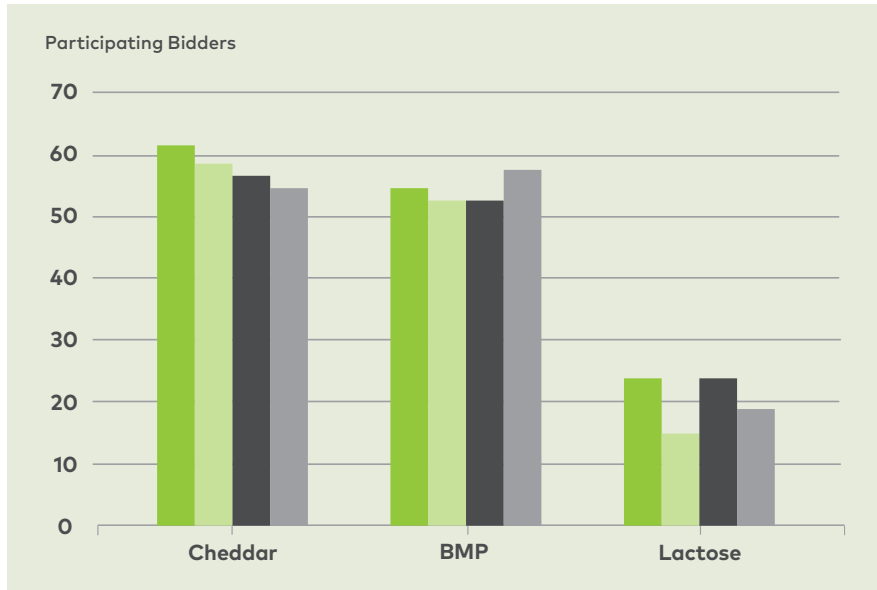
Note: SWP has been excluded as no bids were submitted in the last 12 months.

	2018	2019	2020	2021
SMP	195	199	182	179
WMP	168	182	177	171
AMF	146	130	140	130
Butter	98	104	98	83

# Participating Bidders: Cheddar, BMP, and Lactose

**Participation in BMP increased during 2021 while Cheddar and Lactose experienced declines.**

This chart shows the number of bidders who actively bid on each product group in at least one Trading Event over the calendar years 2018- 2021.



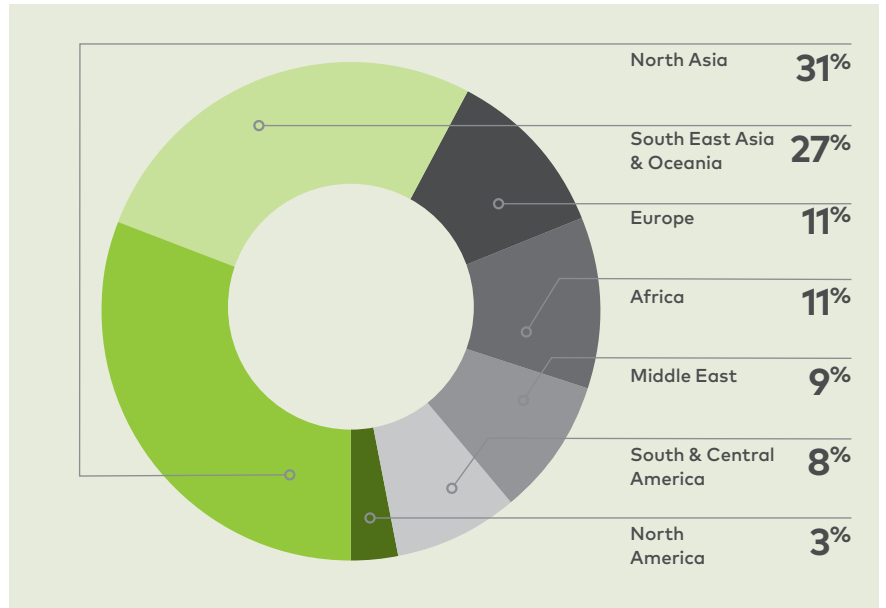
2018 2019 2020 2021

	2018	2019	2020	2021
Cheddar	62	59	57	55
BMP	55	53	53	58
Lactose	24	15	24	19

# Participating Bidders by Region, 2021

Consistent with previous years, North Asia and South East Asia & Oceania were the most active regions, comprising over 50% of total participating bidders.

Except for North America, the remaining regions are of similar size between 8-11% each.

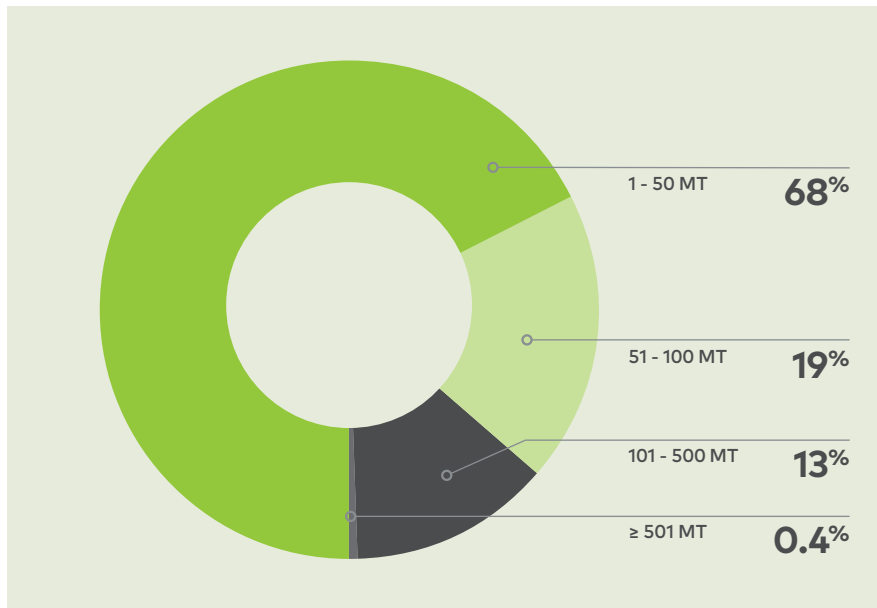


Region	Participating Bidders (% of Total)
North Asia	31%
South East Asia & Oceania	27%
Africa	11%
Europe	11%
Middle East	9%
South & Central America	8%
North America	3%

## Distribution of Quantity Traded by Size, 2021

Over two-thirds of purchases occurred in the 1-50 MT category, indicating a wide variety of purchases across product groups and contract periods.

This chart shows the number of purchases by parcel size as a share of the total number of purchases during 2021.

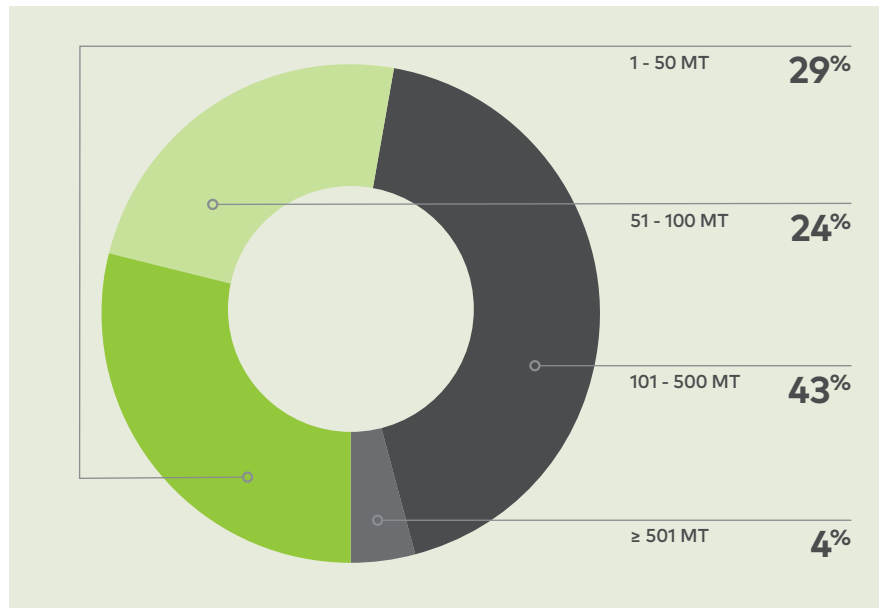


Parcel Size	Distribution of Quantity Traded
1 - 50 MT	68%
51 - 100 MT	19%
101 - 500 MT	13%
≥ 501 MT	0.4%

# Distribution of Purchases Traded by Size, 2021

Over half of the total quantity traded occurred in parcel sizes of 100MT or less.

This chart shows the quantity traded by parcel size as a share of total quantity traded during 2021.

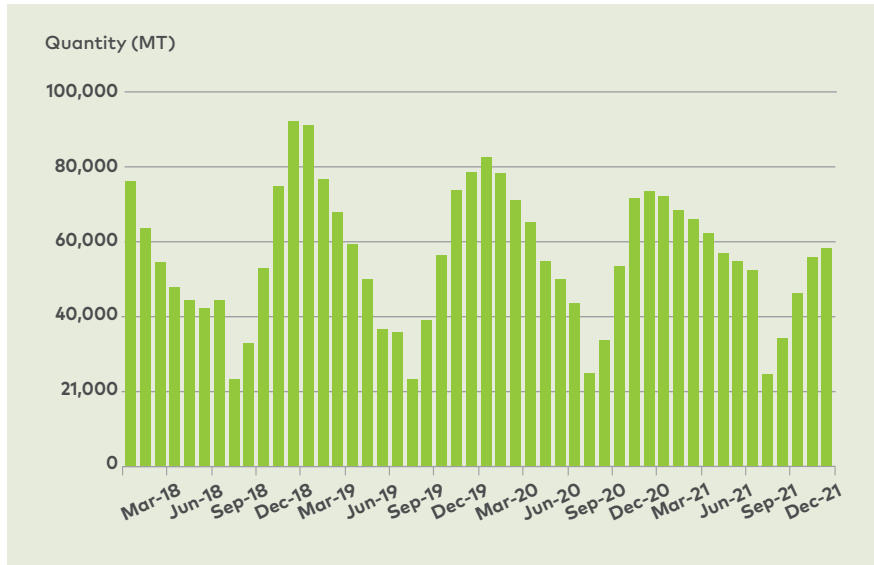


Parcel Size	Distribution of Purchases
1 - 50 MT	29%
51 - 100 MT	24%
101 - 500 MT	43%
≥ 501 MT	4%

## Shipment Profile

The seasonal pattern shows peak shipment quantities around November, December, January and February of each calendar year.

This chart shows the seasonal profile of shipments for all products traded on GDT Events from 2018 to 2021.



Month	Quantity Shipped During Month (MT)	Month	Quantity Shipped During Month (MT)
Jan-18	76,249	Jan-20	82,644
Feb-18	63,635	Feb-20	78,391
Mar-18	54,376	Mar-20	71,138
Apr-18	47,836	Apr-20	65,177
May-18	44,309	May-20	54,726
Jun-18	42,073	Jun-20	49,782
Jul-18	44,247	Jul-20	43,515
Aug-18	23,166	Aug-20	24,639
Sep-18	32,647	Sep-20	33,531
Oct-18	52,814	Oct-20	53,363
Nov-18	74,710	Nov-20	71,576
Dec-18	92,167	Dec-20	73,374
Jan-19	91,121	Jan-21	72,123
Feb-19	76,840	Feb-21	68,493
Mar-19	67,923	Mar-21	65,791
Apr-19	59,301	Apr-21	62,225
May-19	49,794	May-21	56,949
Jun-19	36,540	Jun-21	54,609
Jul-19	35,727	Jul-21	52,299
Aug-19	25,330	Aug-21	24,598
Sep-19	38,909	Sep-21	34,055
Oct-19	56,272	Oct-21	46,193
Nov-19	73,701	Nov-21	55,884
Dec-19	78,628	Dec-21	58,161

## Disclaimer

---

The data contained in this document are provided subject to the Terms of Use ('Terms') published on [www.globaldairytrade.info](http://www.globaldairytrade.info) as applicable to information materials provided or published on that site. By accessing, viewing, or downloading these data, you acknowledge the application of the terms.

Use of this information: All information published in this publication may be reproduced provided the user acknowledges Global Dairy Trade as the source.

## Abbreviations

---

AMF	Anhydrous Milk Fat
BMP	Butter Milk Powder
CP	Contract Period
GDT	Global Dairy Trade
MT	Metric Tonne
RenCas	Rennet Casein
SMP	Skim Milk Powder
SWP	Sweet Whey Powder
WMP	Whole Milk Powder

## Directory

---

### Contact Us

Global Dairy Trade  
PO Box 106561  
Auckland 1143  
New Zealand

Global Dairy Trade  
Level 12, 23 Customs Street East  
Auckland 1010  
New Zealand

[help@globaldairytrade.info](mailto:help@globaldairytrade.info)

[www.globaldairytrade.info](http://www.globaldairytrade.info)

### Global Dairy Trade Management Team

Eric Hansen – Director

Yasmine Bendjafer – General Manager Service Delivery and Operations

Jared McConachie – General Manager Market Design and Performance

Jen O'Hara – General Manager Innovation and Marketing

Shaun McCauley – Chief Technology Officer



