

The background features a blue-tinted image of hands interacting with a laptop. Overlaid on this are several semi-transparent digital interface elements, including a profile card, a payment screen, and a play button, suggesting a focus on technology and digital commerce.

Daymon

INTERNATIONAL DEVELOPMENT CENTER

INTERNATIONAL COMMODITY REPORT

December 2024

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Commodity Profile

A blue-tinted photograph of a meeting table. In the center, a person's hands are visible, one holding a pen over a laptop and the other holding a document. The table is covered with various documents, including a large grid-like chart or spreadsheet. There are also coffee cups and a small plant on the table. The overall scene suggests a professional meeting or collaborative work environment.

MONTHLY SUMMARY

MONTHLY SUMMARY

Dairy – Global wholesale prices for dairy products varied in November. Some EU prices have shown signs of easing, US prices showed declines for most products, while Oceania experienced mostly positive price movements. Butter prices increased for the 14th consecutive month, reaching a new record high due to strong demand amid tight inventories.

Grains – World maize prices remained stable in November due to opposing factors. Downward pressure on prices stemmed from generally favourable weather in South America with the continuing sowing, weaker demand for Ukrainian supplies, and seasonal pressure from the ongoing harvest in the United States of America, while strong domestic demand in Brazil and Mexico’s demand for US supplies provided upward support.

Oils – International palm oil prices increased for the sixth consecutive month, maintaining a premium over alternative oils due to lingering concerns about lower-than-expected global production amid excessive rainfall in Southeast Asia. Meanwhile, world soy oil prices rose, mainly due to robust global import demand. Similarly, prices of rapeseed and sunflower oils increased, reflecting prospects of tightening global supplies in their respective markets.

Coffee – Brazilian Coffee news continues to focus on surging prices and heightened market uncertainty. Despite initial expectations for a recovery in Brazil’s 24/25 coffee crop, persistent drought conditions and reduced production forecasts have sparked significant volatility. Market participants report that while downbeat forecasts for Brazil’s upcoming season are well known, no one has a clear sense of where the market’s ceiling might be or how long elevated prices will endure.

Cocoa – While cocoa farmers in West Africa expect better harvests this year, the damage from disastrous drops recently in crop production remains. Even a projected 11% boost in production this year won't be enough to rebuild critically low inventories.



MONTHLY SUMMARY

Nuts – Market insiders confirm that cashew prices rise due to strong underlying demand, supply chain adjustments, and strategic buying. Even as prices escalate, consumers appear to maintain their appetite for cashews. Early pre-buying—partly due to potential logistical issues, port strikes, and geopolitical uncertainties—supported these price hikes. Now, as prices remain elevated, buyers and sellers are adapting. Some buyers secured ample supply at lower prices, while others cautiously waited for more favourable market conditions.

Livestock – International pig meat prices fell for the fifth consecutive month, principally driven by weaker quotations in the European Union, reflecting abundant supplies and persistently subdued global and domestic demand. World poultry meat prices fell marginally, pressured by ample export supplies from major producing regions.



Seafood – Norway exported seafood worth NOK 17.3 billion in November. This is an increase of NOK 1 billion, or 6 per cent, compared with last year's month. For several months, solid growth in seafood exports continued in November. This was the best November ever in terms of value, thanks to price growth for salmon, mackerel, cod, haddock and herring.

Fruits and Vegetables – The European Commission's new monthly tomato price overviews from Spain, Italy, the Netherlands, and France, by way of AI analysis, show that cultivation has declined by 700,000 tons over the past decade. Imports only increased by 400,000 tons. Dutch tomato cultivation is "back to normal." Winter cultivation is also ongoing in Belgium. In Italy, tomatoes fetch high prices due to shortages, with a delayed start caused by excessive heat and drought in Sicily.

Groceries/Ingredients – The garlic supply chain faces a few challenges with lower and slower stock movement from major producers like China and Spain. This deficit has increased prices, with importers emphasizing quality as a key market differentiator. South American supply comes from Peru, Argentina and Chile. Prices are high in Europe, with variable demand from countries in the union, ranging from high to below average in Germany.

MONTHLY SUMMARY

Energy – The decision by OPEC+ to delay the unwinding of its additional voluntary production cuts by another three months and extend the ramp-up period by nine months through September 2026 has materially reduced the potential supply overhang that was set to emerge next year. Even so, persistent overproduction from some OPEC+ members, robust supply growth from non-OPEC+ countries and relatively modest global oil demand growth leave the market looking comfortably supplied in 2025.

While the market is closely assessing ongoing geopolitical tensions and evolving OPEC+ supply dynamics, global oil demand remains the bigger question for 2025. The abrupt halt to Chinese oil demand growth this year and sharply lower increases in other notable emerging and developing economies such as Nigeria, Pakistan, Indonesia, South Africa and Argentina has tilted consensus towards a softer outlook.

The European gas market faces several risks heading into 2025, although our balance suggests prices should trend lower next year. Meanwhile, the US gas market is set to tighten, supporting prices.

Metals — Aluminium prices have risen lately, driven by record-high alumina prices. Alumina prices jumped to a record this year, squeezing profitability for smelters. Prices for the raw material doubled this year, driven by a series of supply chain disruptions from Australia to Jamaica amid a steady increase in demand driven by record aluminium production in China. A surge in output in Indonesia has dragged nickel lower over recent years, and demand from the stainless steel and electric vehicle batteries sectors continues to disappoint. Nickel prices recently hit their lowest point since 2020.



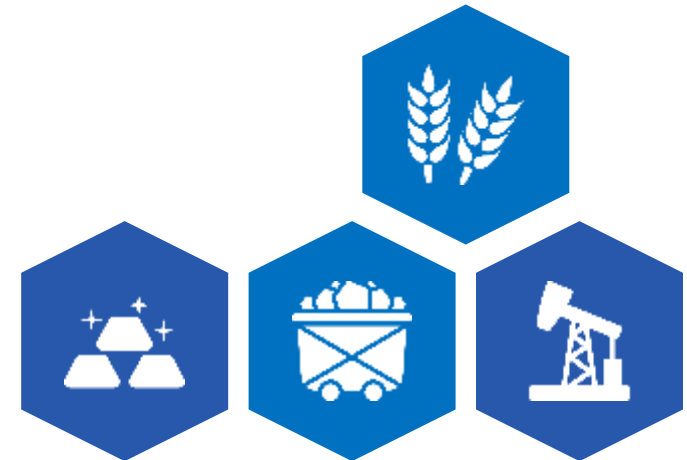
MONTHLY SUMMARY

Plastics - A look back at the year as a whole reveals some remarkable developments. In the first quarter, prices for polypropylene rose sharply – not least due to the delay in imports caused by the attacks by the Houthi rebels – and the difference to the C3 price widened. Since then, the gap between monomer and polymer has shrunk, but it is still there. Processors will have this in mind during their annual negotiations and are thus expected to demand further reductions.

Paper – The European pulp market remains a buyer’s market. As the year draws to a close, the downward price pressure continues, resulting in further price cuts for November deliveries. EUWID respondents reported falling prices for both hardwood and softwood pulp grades. While the talks for bleached eucalyptus kraft (BEK) pulp were concluded rather quickly, no final price agreement on November deliveries had been reached by early December in many instances for northern bleached softwood kraft (NBSK) pulp. According to the latest data released by FAO, global trade in wood and paper products dropped steeply from record levels in 2021 and 2022, with the paper trade continuing to decline under pressure from digital media.

Textiles – Global cotton production in cotton year (CY) 2024-25 is projected to rise by more than 1.2 million bales to 117.4 million bales on the back of higher production in India and Argentina, according to a report by the Foreign Agricultural Service (FAS) of the US department of agriculture (USDA).

Shipping – While freight rates spike due to Trump’s reelection and imminent tariffs have not materialised as swiftly as some predicted, the shipping landscape remains dynamic. Factors like ongoing trade negotiations, shifting sourcing strategies, and seasonal demands influence ocean freight costs. Should importers eventually opt to front-load orders to avoid tariffs, freight rates could still surge if geopolitical tensions escalate.





COMMODITY PRICE UPDATE

| COMMODITY PRICE UPDATE

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DAIRY & EGGS

PRICE UPDATE

| Dairy & Eggs

Commodity lookup

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Butter - Europe	KG	5.53	7.60	8.04	▶ 5.79%	▶ 45.39%
Butter - France	KG	5.63	7.79	8.22	▶ 5.52%	▶ 46.00%
Butter - Germany	KG	5.78	8.36	8.65	▶ 3.47%	▶ 49.65%
Butter - Netherlands	KG	5.54	7.56	8.02	▶ 6.08%	▶ 44.77%
Butter - New Zealand	KG	4.69	5.89	6.76	▶ 14.77%	▶ 44.14%
Butter - UK	KG	5.26	7.78	7.95	▶ 2.14%	▶ 51.13%
Butter Oil - Western Europe	100 KG	579.70	893.40	916.61	▶ 2.60%	▶ 58.12%
Cheese Cheddar - Europe	100 KG	395.50	520.00	511.25	▶ -1.68%	▶ 29.27%
Cheese Edam - Germany	100 KG	406.25	467.00	495.62	▶ 6.13%	▶ 22.00%
Cheese Emmmental - Europe	100 KG	606.40	610.00	610.75	▶ 0.12%	▶ 0.72%
Cheese Gouda - Germany	100 KG	415.00	474.50	451.12	▶ -4.93%	▶ 8.70%
Cheese Mozzarella - Germany	100 KG	375.00	445.00	412.00	▶ -7.42%	▶ 9.87%
Cream Fresh (Natas) - Poland	100 KG	329.08	335.86	343.77	▶ 2.36%	▶ 4.46%
Eggs - Brazil	KG	1.01	0.76	0.77	▶ 0.86%	▶ -23.95%
Eggs - Europe	KG	2.25	2.20	2.39	▶ 8.64%	▶ 6.22%
Eggs - Netherlands	KG	2.09	2.00	2.44	▶ 22.00%	▶ 16.75%
Eggs - Poland	KG	2.56	2.16	2.78	▶ 28.70%	▶ 8.59%
Eggs - Portugal	KG	2.35	2.28	2.49	▶ 9.21%	▶ 5.96%
Eggs - USA	KG	2.57	3.69	5.99	▶ 62.33%	▶ 133.07%
Lactose - USA	100 KG	56.19	75.53	78.91	▶ 4.48%	▶ 40.43%
Milk - Belgium	100 KG	40.57	51.65	56.23	▶ 8.87%	▶ 38.60%
Milk - Brazil	KG	35.90	43.18	42.87	▶ -0.72%	▶ 19.42%
Milk - France	100 KG	47.38	48.81	50.62	▶ 3.71%	▶ 6.84%
Milk - Germany	100 KG	44.47	52.70	52.70	▶ 0.00%	▶ 18.51%
Milk - Netherlands	100 KG	42.25	53.50	55.50	▶ 3.74%	▶ 31.36%
Milk - New Zealand	100 KG	30.59	40.30	40.30	▶ 0.00%	▶ 31.74%
Milk - Poland	100 KG	47.74	51.69	52.39	▶ 1.35%	▶ 9.74%
Milk - Portugal	100 KG	44.70	44.50	44.50	▶ 0.00%	▶ -0.45%
Milk - Romania	100 KG	44.77	49.28	49.44	▶ 0.32%	▶ 10.43%
Milk - Spain	100 KG	50.68	47.18	47.18	▶ 0.00%	▶ -6.91%
Milk - USA (Class1)	100 KG	39.92	47.05	47.10	▶ 0.11%	▶ 17.99%
Milk Powder - Portugal	100 KG	241.92	248.99	250.78	▶ 0.72%	▶ 3.66%
SMP (Skimmed Milk Powder) - Europe	100 KG	262.00	259.96	259.97	▶ 0.00%	▶ -0.77%
SMP (Skimmed Milk Powder) - Netherlands	100 KG	257.00	245.00	256.25	▶ 4.59%	▶ -0.29%
Soya Lecithin - China	100 KG	399.45	401.11	418.94	▶ 4.45%	▶ 4.88%
WMP (Whole Milk Powder) - Europe	100 KG	366.00	421.50	430.00	▶ 2.02%	▶ 17.49%
WMP (Whole Milk Powder) - Netherlands	100 KG	366.80	417.50	428.12	▶ 2.54%	▶ 16.72%

| Dairy & Eggs

Commodity lookup

The **FAO Dairy Price Index** stood at 139.9 points in November, up 0.9 points (0.6%) from October and 23.4 points (20.1%) above its level a year ago. International quotations for milk powders, particularly whole milk powder, registered the largest increases, driven by a rebound in global demand and the seasonal decline in milk production in Western Europe, which offset rising seasonal milk production in Oceania. World butter prices increased for the fourteenth consecutive month, reaching a new record high due to strong internal and international demand amid tight inventories, particularly in Western Europe. Cheese prices also rose, reflecting limited availability to meet growing import demand for spot supplies.

Source: FAO

Dairy Prices - 12th December 2024

Average global wholesale prices for dairy products varied in November. Some EU prices have shown signs of easing, US prices showed declines to most products, while Oceania experienced mostly positive price movements.

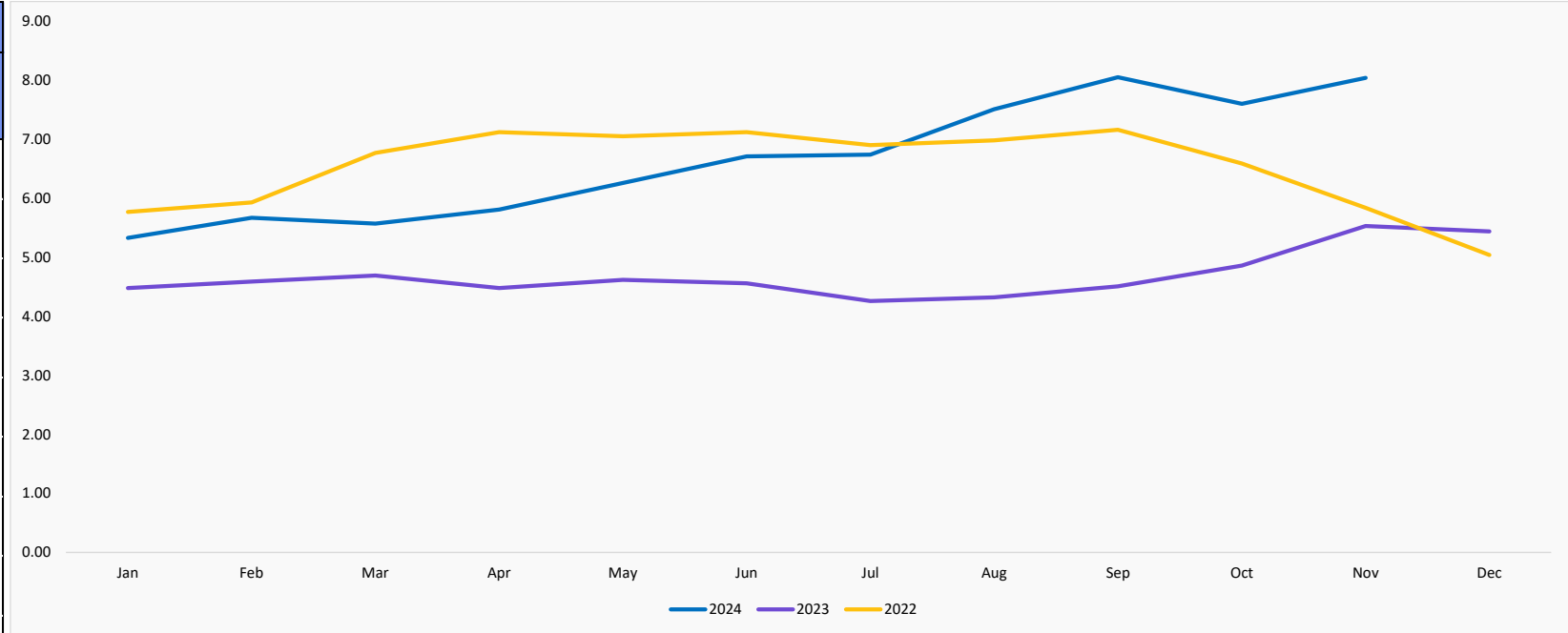
- **EU** - According to the USDA source, EU dairy wholesale prices experienced a decline in dollar terms since October. Butter prices fell by 3.1% month-on-month but remain strong due to tight inventories. The USDA source recorded a decrease in price for SMP and WMP of 0.6% and 1.6%, respectively. This runs contrary to reports from the EU that saw a 2.4% and 2.2% rise in Euro terms but may be accounted for by a difference between reporting weeks for the month of November. SMP and WMP inventories were also low, and industry sources reported increased demand.
- **Oceania** - Milk deliveries in Oceania have seen a seasonal uplift. Annual estimates are above 2023 volumes, although lack of rainfall threatens Australian production. Butter prices rose by 4.8%, with reports suggesting strong retail and export demand, though domestic foodservice demand has struggled. The recent commentary describes softening demand and increased availability. Cheddar cheese prices decreased by 2.4% in November following a large price hike in October. Demand for cheese has been mixed with lighter foodservice demand. Export interest has steadied while production has increased. As industry sources reported strong domestic and export demand, SMP and WMP prices increased by 2.4% and 5.3%, respectively. Processors have been using more milk for powder production.
- **US** - Average US dairy prices declined in all products except SMP. Cheese prices fell by 14.3%, as both foodservice and retail demand were subdued. Production levels and milk availability varied across the US. Milk has been available for powder production, but output remained steady. SMP rose by 2.6% as supplies are limited, though demand has been quiet. Meanwhile, WMP decreased by 1.5% with reports of lacklustre demand and low export activity. The US butter price experienced a 0.7% decrease in price month on month. Domestic demand for butter has been mixed but generally steady. Sufficient cream has been available for manufacturing.

Source: AHDB

| Butter - Europe

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	18.97%	5.33	4.48	5.77
February	23.53%	5.67	4.59	5.93
March	18.76%	5.57	4.69	6.77
April	29.69%	5.81	4.48	7.12
May	35.50%	6.26	4.62	7.05
June	47.15%	6.71	4.56	7.12
July	58.22%	6.74	4.26	6.90
August	73.84%	7.51	4.32	6.98
September	78.49%	8.05	4.51	7.16
October	56.38%	7.60	4.86	6.59
November	45.39%	8.04	5.53	5.84
December			5.44	5.04
Year Average		6.66	4.70	6.52



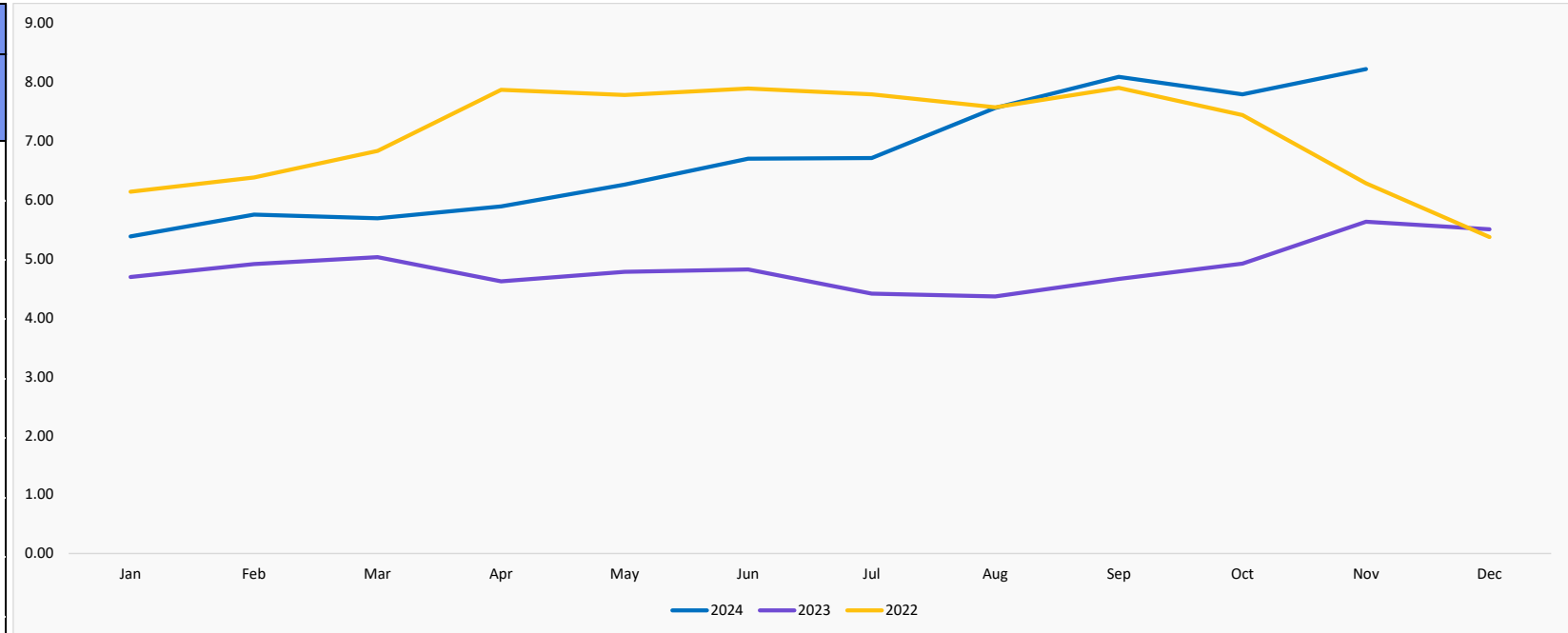
Monthly Price Variation

5.79%

NOTE: For prices in USD, please check the excel sent with the presentation

| Butter - France

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	14.71%	5.38	4.69	6.14
February	17.11%	5.75	4.91	6.38
March	13.12%	5.69	5.03	6.83
April	27.49%	5.89	4.62	7.87
May	30.96%	6.26	4.78	7.78
June	39.00%	6.70	4.82	7.89
July	52.15%	6.71	4.41	7.79
August	73.39%	7.56	4.36	7.57
September	73.61%	8.09	4.66	7.90
October	58.33%	7.79	4.92	7.44
November	46.00%	8.22	5.63	6.28
December			5.50	5.37
Year Average		6.73	4.86	7.10



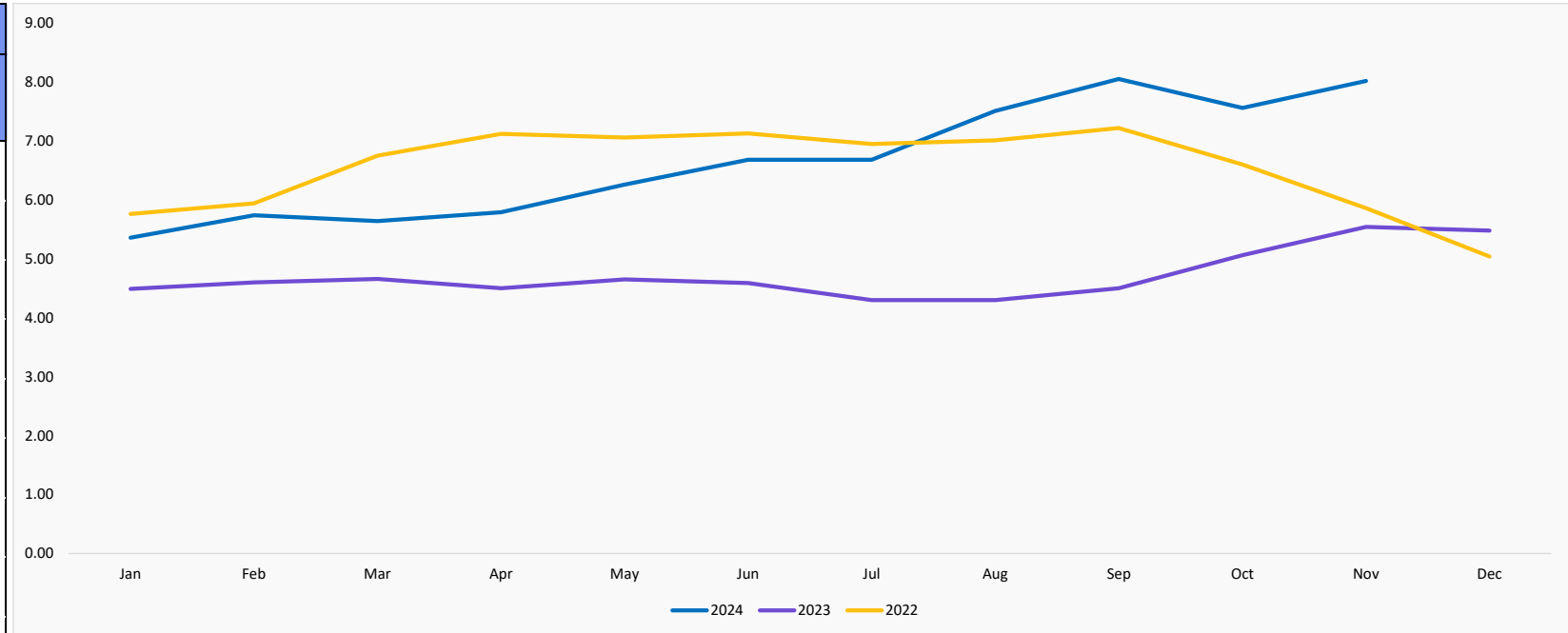
Monthly Price Variation

5.52%

NOTE: For prices in USD, please check the excel sent with the presentation

| Butter - Netherlands

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	19.38%	5.36	4.49	5.76
February	24.78%	5.74	4.60	5.94
March	21.03%	5.64	4.66	6.75
April	28.67%	5.79	4.50	7.12
May	34.62%	6.26	4.65	7.06
June	45.53%	6.68	4.59	7.13
July	55.35%	6.68	4.30	6.95
August	74.65%	7.51	4.30	7.01
September	78.89%	8.05	4.50	7.22
October	49.41%	7.56	5.06	6.60
November	44.77%	8.02	5.54	5.86
December			5.48	5.04
Year Average		6.66	4.72	6.54



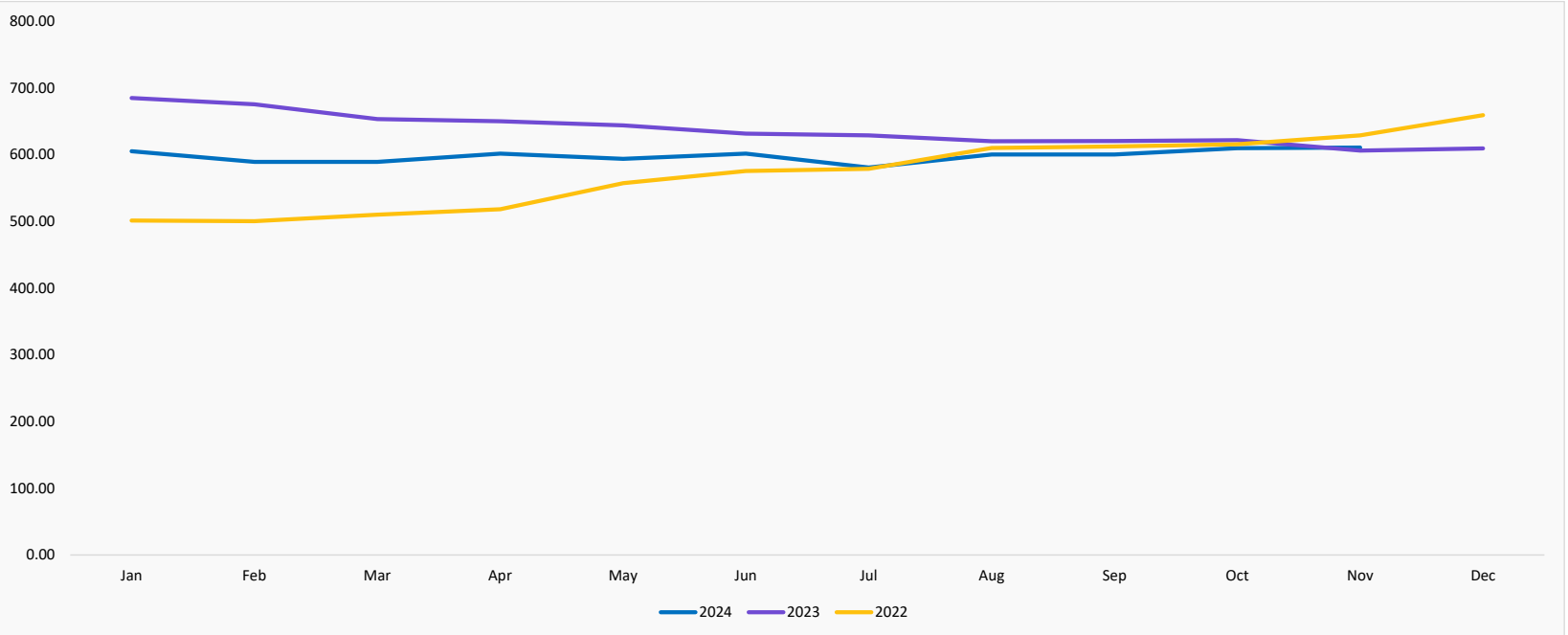
Monthly Price Variation

6.08%

NOTE: For prices in USD, please check the excel sent with the presentation

| Cheese Emmental - Europe

Euro/100 KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-11.65%	605.20	685.00	501.50
February	-12.77%	589.25	675.50	500.50
March	-9.85%	589.25	653.60	510.20
April	-7.46%	601.75	650.25	518.25
May	-7.76%	594.00	644.00	557.50
June	-4.75%	601.75	631.75	575.60
July	-7.66%	580.80	629.00	579.00
August	-3.25%	600.25	620.40	610.20
September	-3.26%	600.25	620.50	612.50
October	-1.89%	610.00	621.75	615.75
November	0.72%	610.75	606.40	629.20
December			609.50	659.25
Year Average		598.48	637.30	572.45



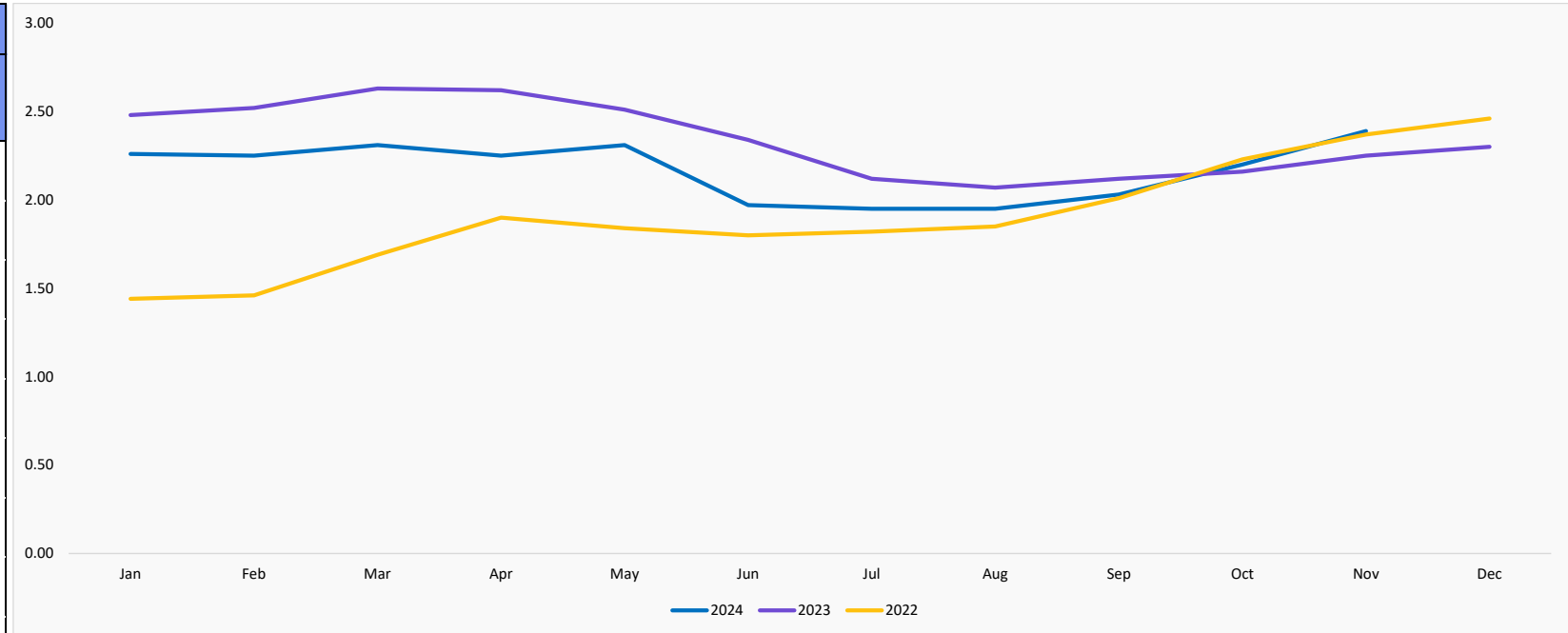
Monthly Price Variation

0.12%

NOTE: For prices in USD, please check the excel sent with the presentation

Eggs - Europe

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-8.87%	2.26	2.48	1.44
February	-10.71%	2.25	2.52	1.46
March	-12.17%	2.31	2.63	1.69
April	-14.12%	2.25	2.62	1.90
May	-7.97%	2.31	2.51	1.84
June	-15.81%	1.97	2.34	1.80
July	-8.02%	1.95	2.12	1.82
August	-5.80%	1.95	2.07	1.85
September	-4.25%	2.03	2.12	2.01
October	1.85%	2.20	2.16	2.23
November	6.22%	2.39	2.25	2.37
December			2.30	2.46
Year Average		2.17	2.34	1.91



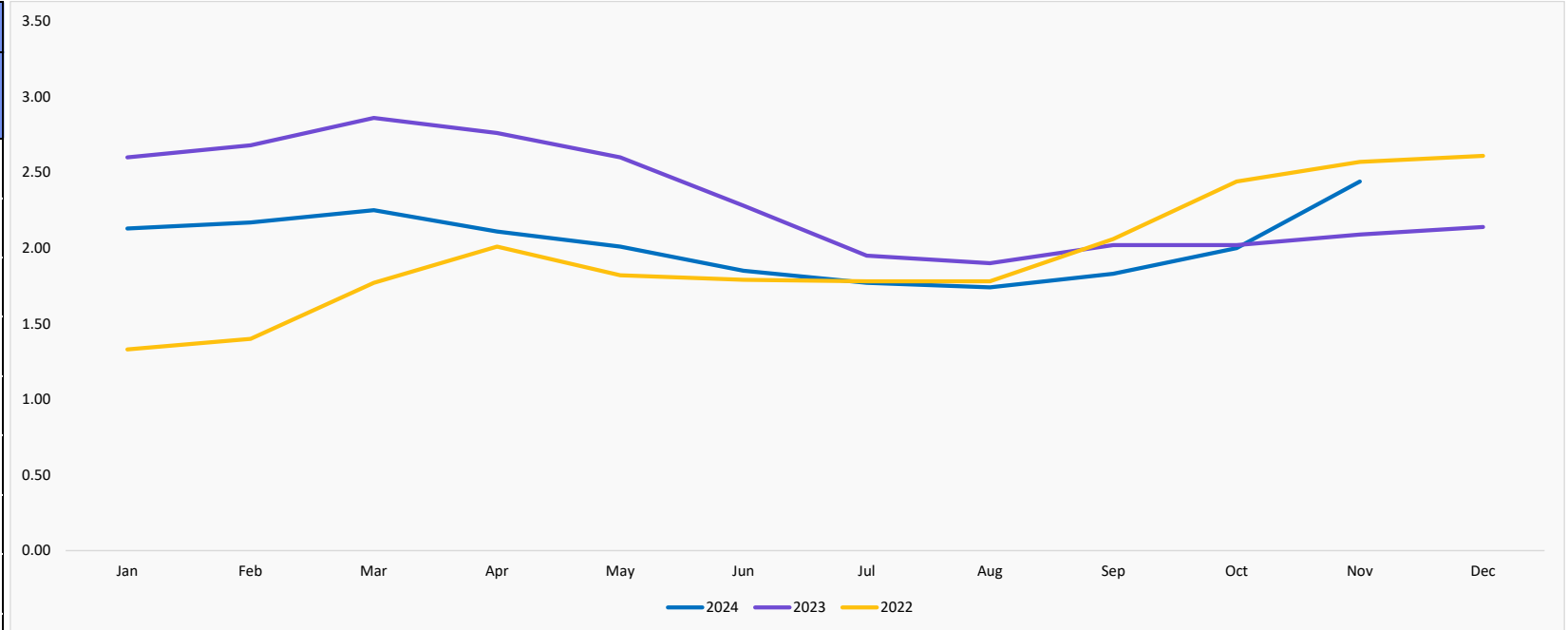
Monthly Price Variation

8.64%

NOTE: For prices in USD, please check the excel sent with the presentation

Eggs - Netherlands

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-18.08%	2.13	2.60	1.33
February	-19.03%	2.17	2.68	1.40
March	-21.33%	2.25	2.86	1.77
April	-23.55%	2.11	2.76	2.01
May	-22.69%	2.01	2.60	1.82
June	-18.86%	1.85	2.28	1.79
July	-9.23%	1.77	1.95	1.78
August	-8.42%	1.74	1.90	1.78
September	-9.41%	1.83	2.02	2.06
October	-0.99%	2.00	2.02	2.44
November	16.75%	2.44	2.09	2.57
December			2.14	2.61
Year Average		2.03	2.33	1.95



Monthly Price Variation

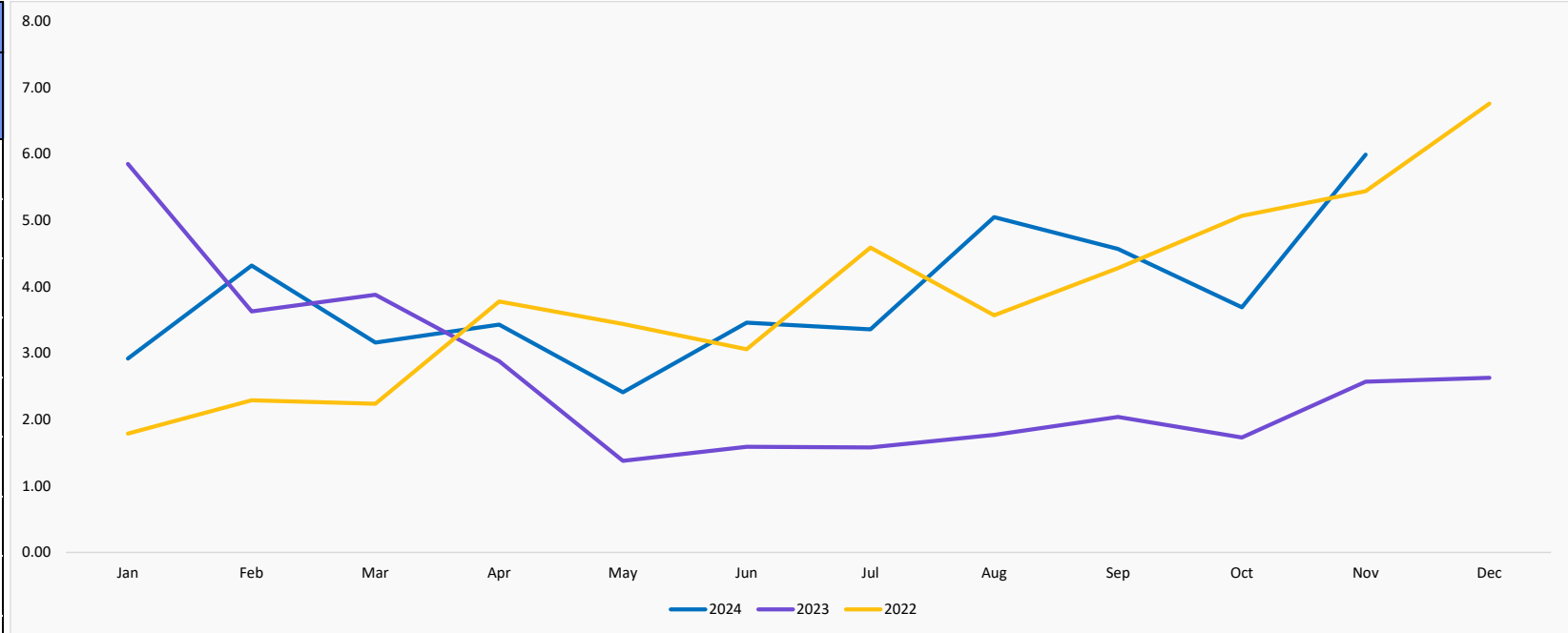
22.00%

NOTE: For prices in USD, please check the excel sent with the presentation

Eggs - USA

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-50.09%	2.92	5.85	1.79
February	19.01%	4.32	3.63	2.29
March	-18.56%	3.16	3.88	2.24
April	19.10%	3.43	2.88	3.78
May	74.64%	2.41	1.38	3.44
June	117.61%	3.46	1.59	3.06
July	112.66%	3.36	1.58	4.59
August	185.31%	5.05	1.77	3.57
September	124.02%	4.57	2.04	4.28
October	113.29%	3.69	1.73	5.07
November	133.07%	5.99	2.57	5.44
December			2.63	6.76
Year Average		3.85	2.63	3.86



Monthly Price Variation

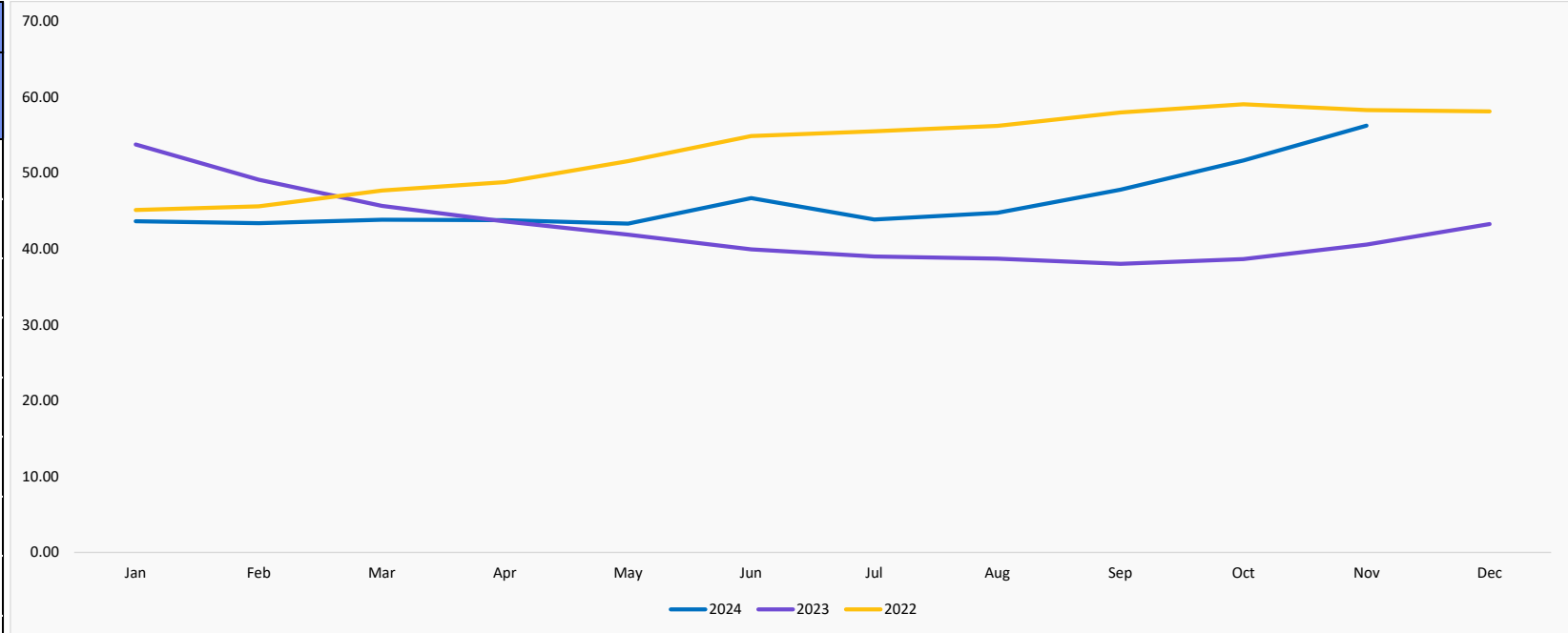
62.33%

NOTE: For prices in USD, please check the excel sent with the presentation

Milk - Belgium

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-18.86%	43.63	53.77	45.13
February	-11.64%	43.40	49.12	45.61
March	-3.99%	43.85	45.67	47.68
April	0.41%	43.79	43.61	48.81
May	3.46%	43.34	41.89	51.56
June	16.85%	46.68	39.95	54.86
July	12.49%	43.86	38.99	55.50
August	15.66%	44.76	38.70	56.22
September	25.63%	47.79	38.04	57.98
October	33.60%	51.65	38.66	59.06
November	38.60%	56.23	40.57	58.29
December			43.28	58.13
Year Average		46.27	42.69	53.24



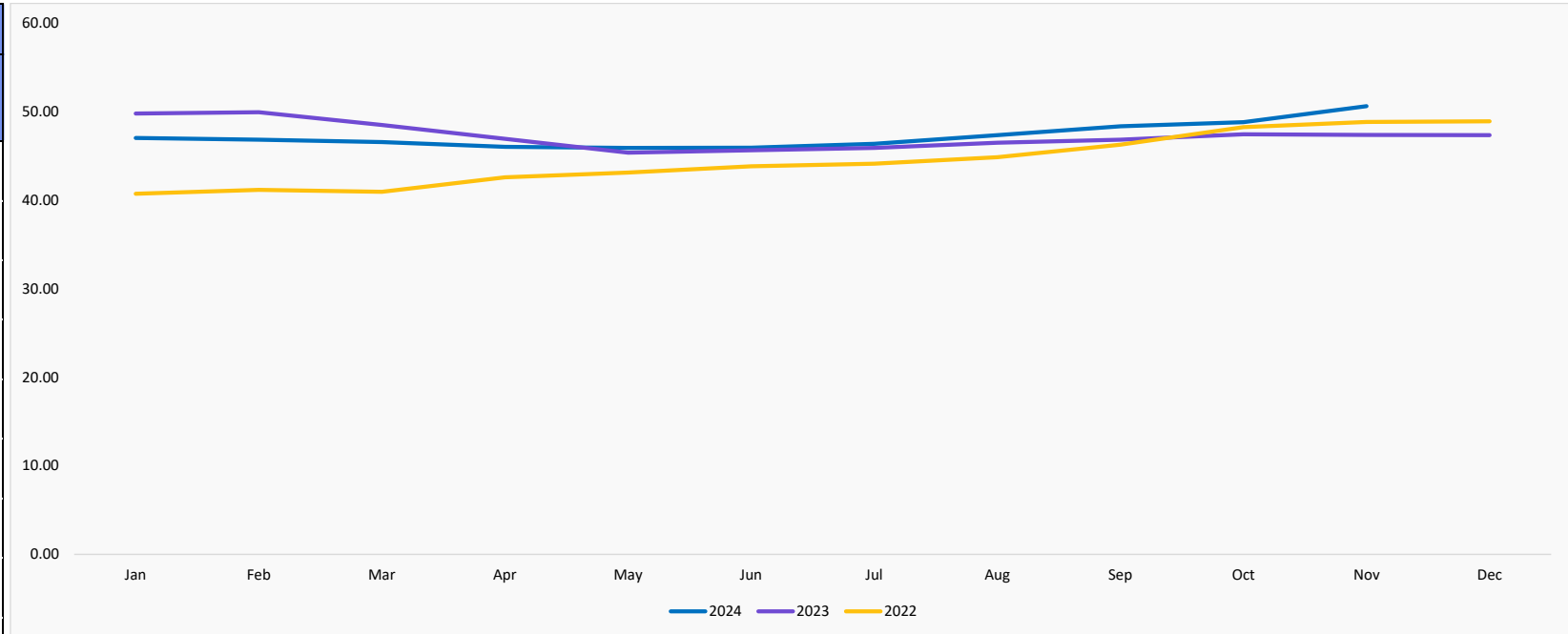
Monthly Price Variation

8.87%

NOTE: For prices in USD, please check the excel sent with the presentation

Milk - France

Euro/100 KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-5.54%	47.04	49.80	40.73
February	-6.23%	46.84	49.95	41.18
March	-4.00%	46.57	48.51	40.94
April	-1.90%	46.04	46.93	42.58
May	1.21%	45.92	45.37	43.12
June	0.68%	45.94	45.63	43.84
July	1.05%	46.38	45.90	44.12
August	1.83%	47.34	46.49	44.85
September	3.27%	48.36	46.83	46.28
October	2.87%	48.81	47.45	48.26
November	6.84%	50.62	47.38	48.85
December			47.34	48.92
Year Average		47.26	47.30	44.47



Monthly Price Variation

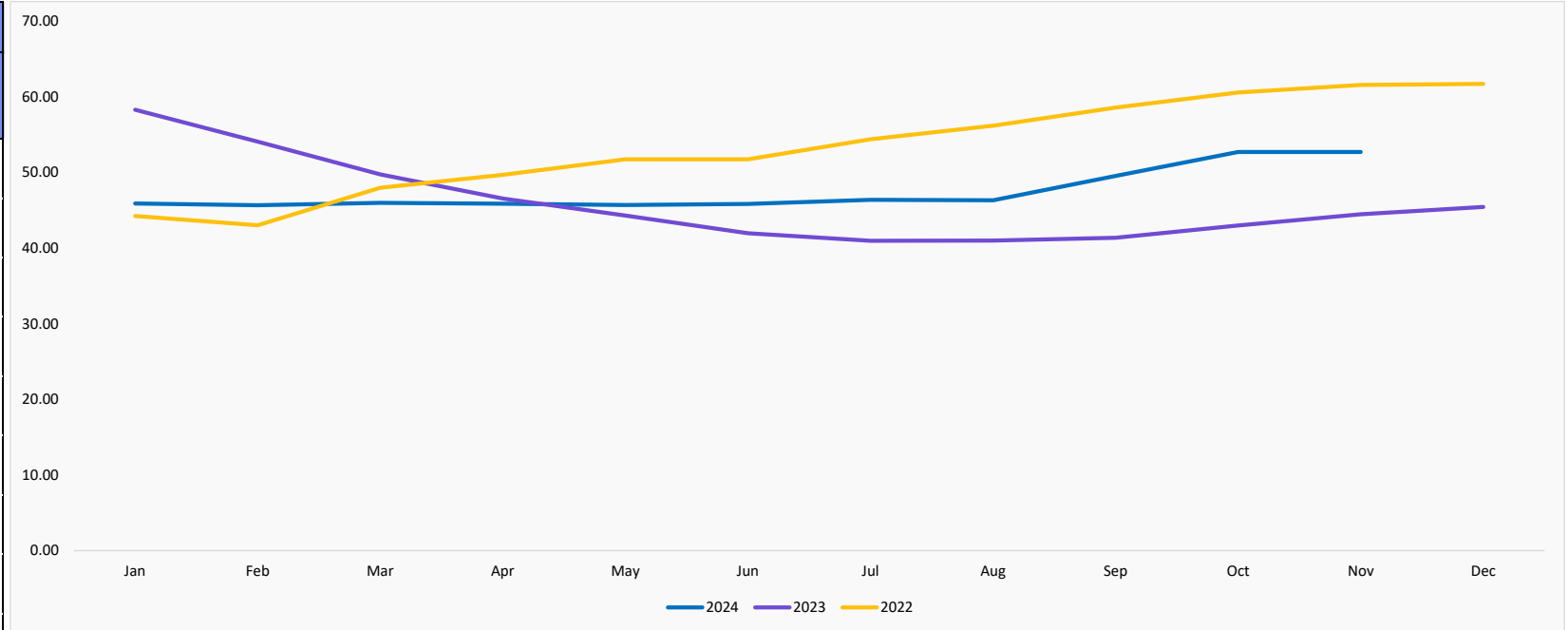
3.71%

NOTE: For prices in USD, please check the excel sent with the presentation

Milk - Germany

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-21.27%	45.89	58.29	44.25
February	-15.57%	45.66	54.08	43.03
March	-7.54%	45.99	49.74	47.98
April	-1.42%	45.88	46.54	49.69
May	3.16%	45.70	44.30	51.73
June	9.24%	45.85	41.97	51.73
July	13.18%	46.37	40.97	54.40
August	13.06%	46.33	40.98	56.19
September	19.81%	49.54	41.35	58.59
October	22.59%	52.70	42.99	60.56
November	18.51%	52.70	44.47	61.58
December			45.45	61.72
Year Average		47.51	45.93	53.45



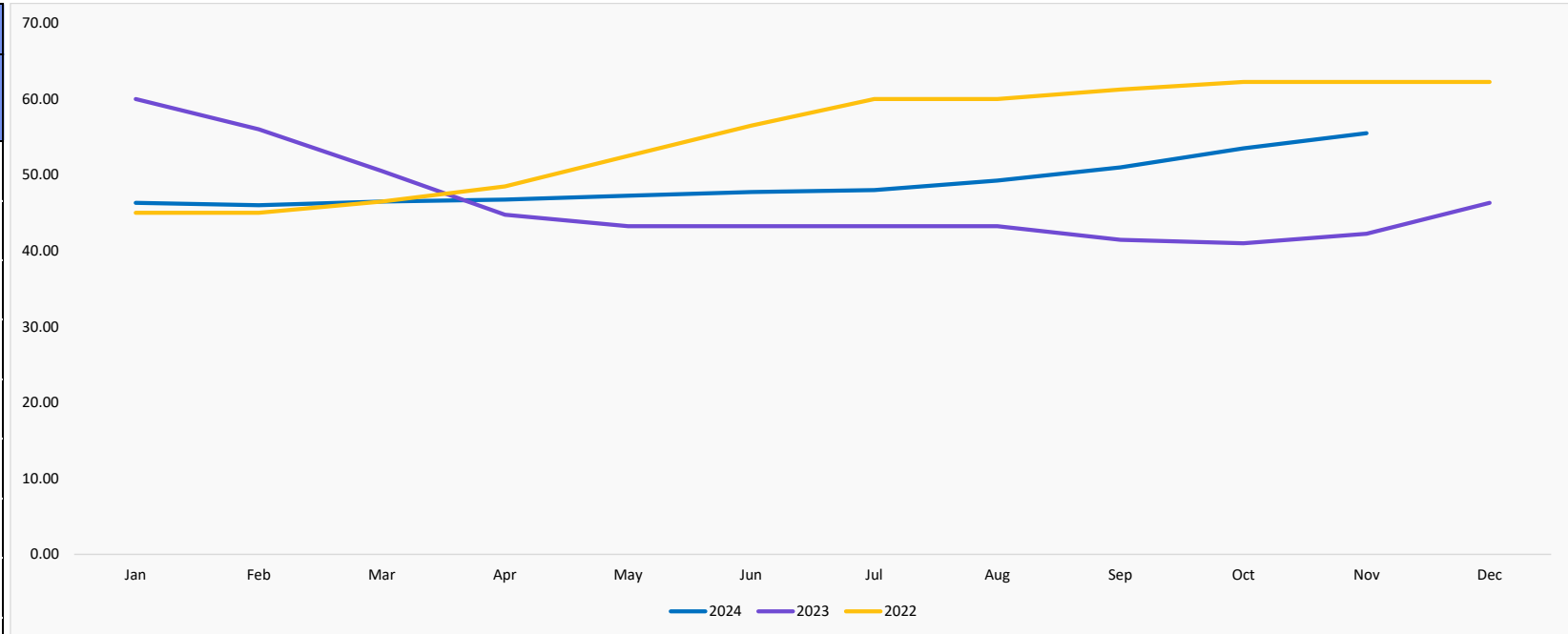
Monthly Price Variation

0.00%

NOTE: For prices in USD, please check the excel sent with the presentation

Milk - Netherlands

Euro/100 KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-22.82%	46.31	60.00	45.00
February	-17.86%	46.00	56.00	45.00
March	-7.92%	46.50	50.50	46.50
April	4.47%	46.75	44.75	48.50
May	9.25%	47.25	43.25	52.50
June	10.40%	47.75	43.25	56.50
July	10.98%	48.00	43.25	60.00
August	13.87%	49.25	43.25	60.00
September	23.04%	51.00	41.45	61.25
October	30.49%	53.50	41.00	62.25
November	31.36%	55.50	42.25	62.25
December			46.31	62.25
Year Average		48.89	46.27	55.17



Monthly Price Variation

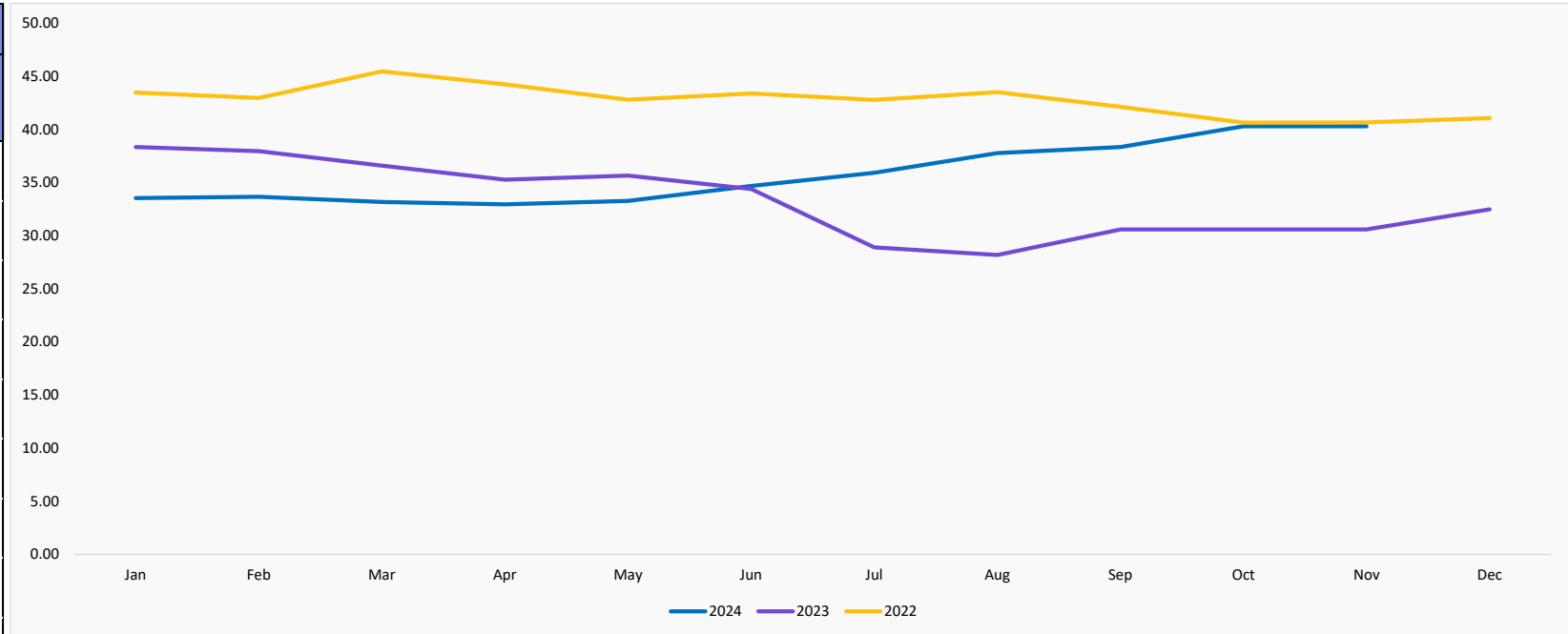
3.74%

NOTE: For prices in USD, please check the excel sent with the presentation

Milk – New Zealand

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-12.52%	33.54	38.34	43.46
February	-11.35%	33.65	37.96	42.96
March	-9.35%	33.17	36.59	45.46
April	-6.55%	32.95	35.26	44.24
May	-6.70%	33.27	35.66	42.80
June	0.84%	34.67	34.38	43.39
July	24.33%	35.92	28.89	42.77
August	33.98%	37.77	28.19	43.50
September	25.30%	38.33	30.59	42.12
October	31.74%	40.30	30.59	40.64
November	31.74%	40.30	30.59	40.65
December			32.47	41.06
Year Average		35.81	33.29	42.75



Monthly Price Variation

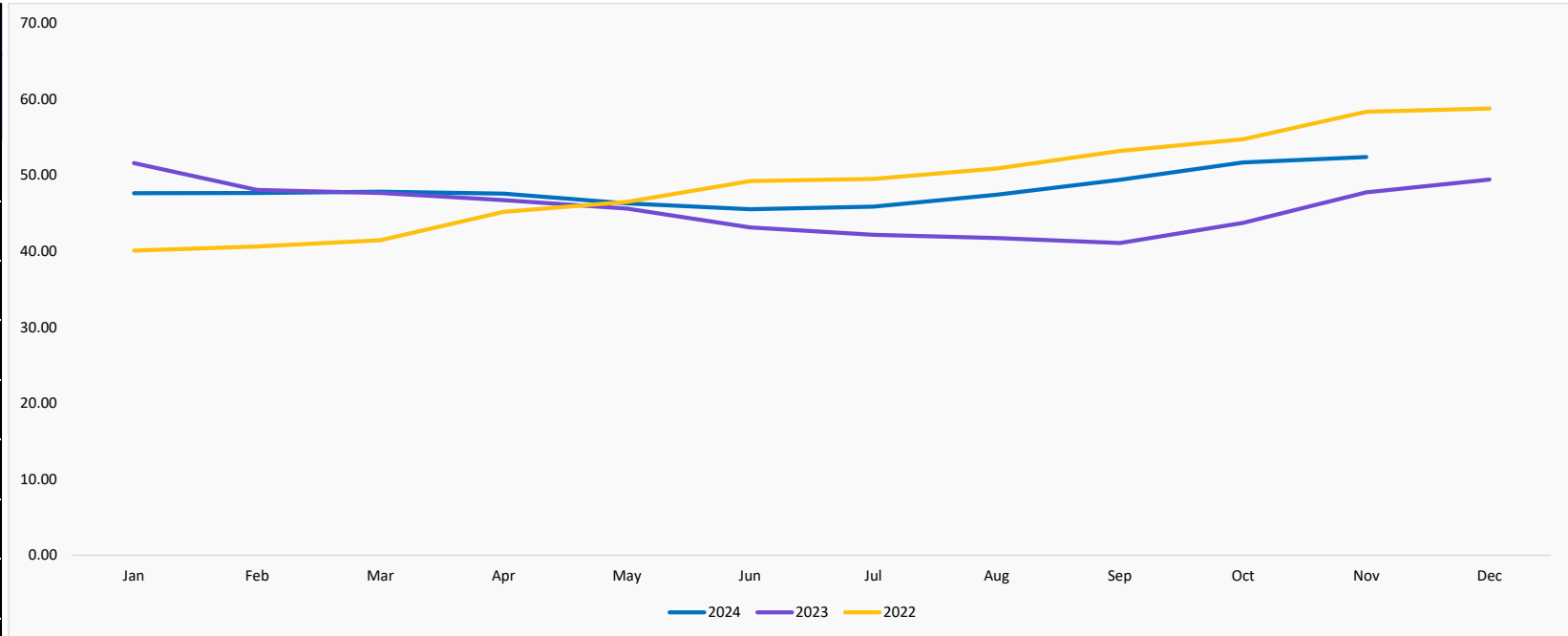
0.00%

NOTE: For prices in USD, please check the excel sent with the presentation

Milk - Poland

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-7.66%	47.64	51.59	40.09
February	-0.85%	47.65	48.06	40.62
March	0.36%	47.83	47.66	41.44
April	1.84%	47.58	46.72	45.17
May	1.45%	46.28	45.62	46.49
June	5.57%	45.52	43.12	49.24
July	8.78%	45.86	42.16	49.50
August	13.66%	47.42	41.72	50.88
September	20.25%	49.41	41.09	53.18
October	18.18%	51.69	43.74	54.73
November	9.74%	52.39	47.74	58.36
December			49.44	58.77
Year Average		48.12	45.72	49.04



Monthly Price Variation

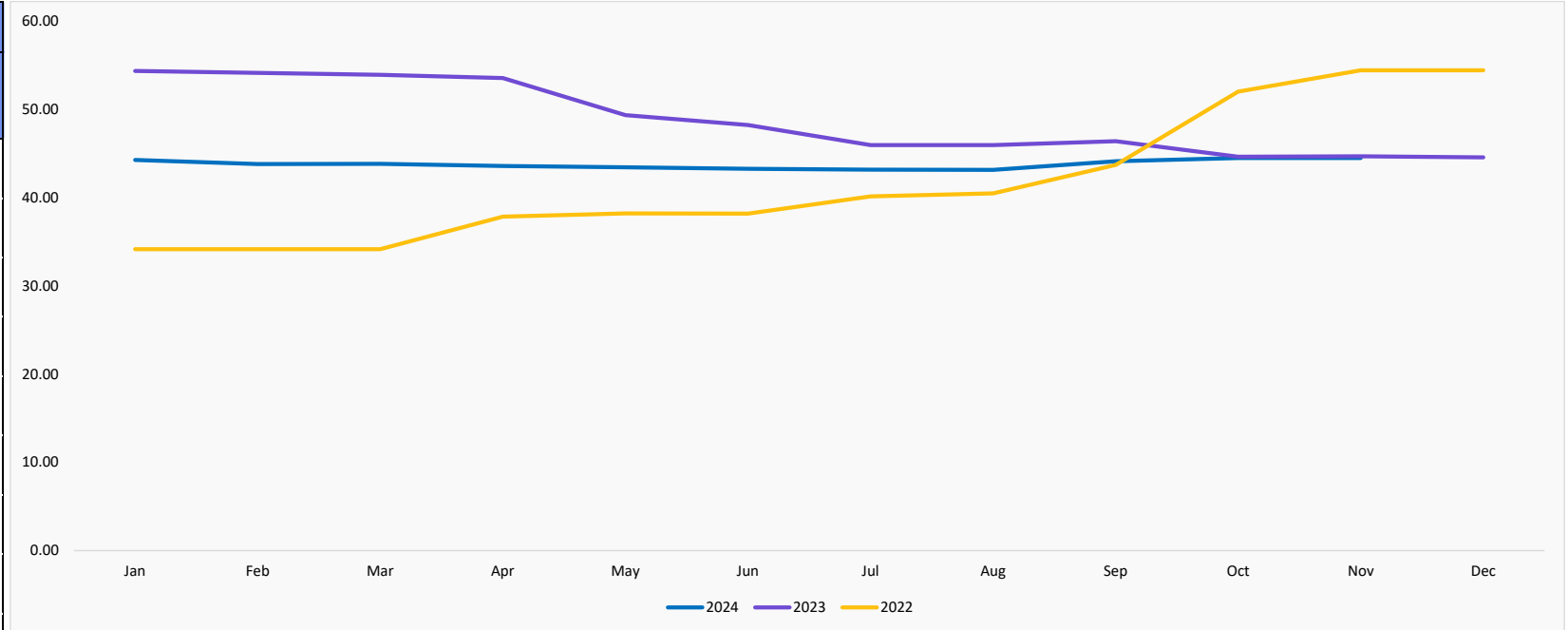
1.35%

NOTE: For prices in USD, please check the excel sent with the presentation

Milk - Portugal

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-18.58%	44.27	54.37	34.17
February	-19.08%	43.80	54.13	34.15
March	-18.71%	43.83	53.92	34.16
April	-18.60%	43.60	53.56	37.85
May	-11.98%	43.44	49.35	38.22
June	-10.29%	43.26	48.22	38.19
July	-6.07%	43.17	45.96	40.14
August	-6.12%	43.14	45.95	40.49
September	-4.87%	44.13	46.39	43.72
October	-0.31%	44.50	44.64	52.01
November	-0.45%	44.50	44.70	54.44
December			44.56	54.44
Year Average		43.79	48.81	41.83



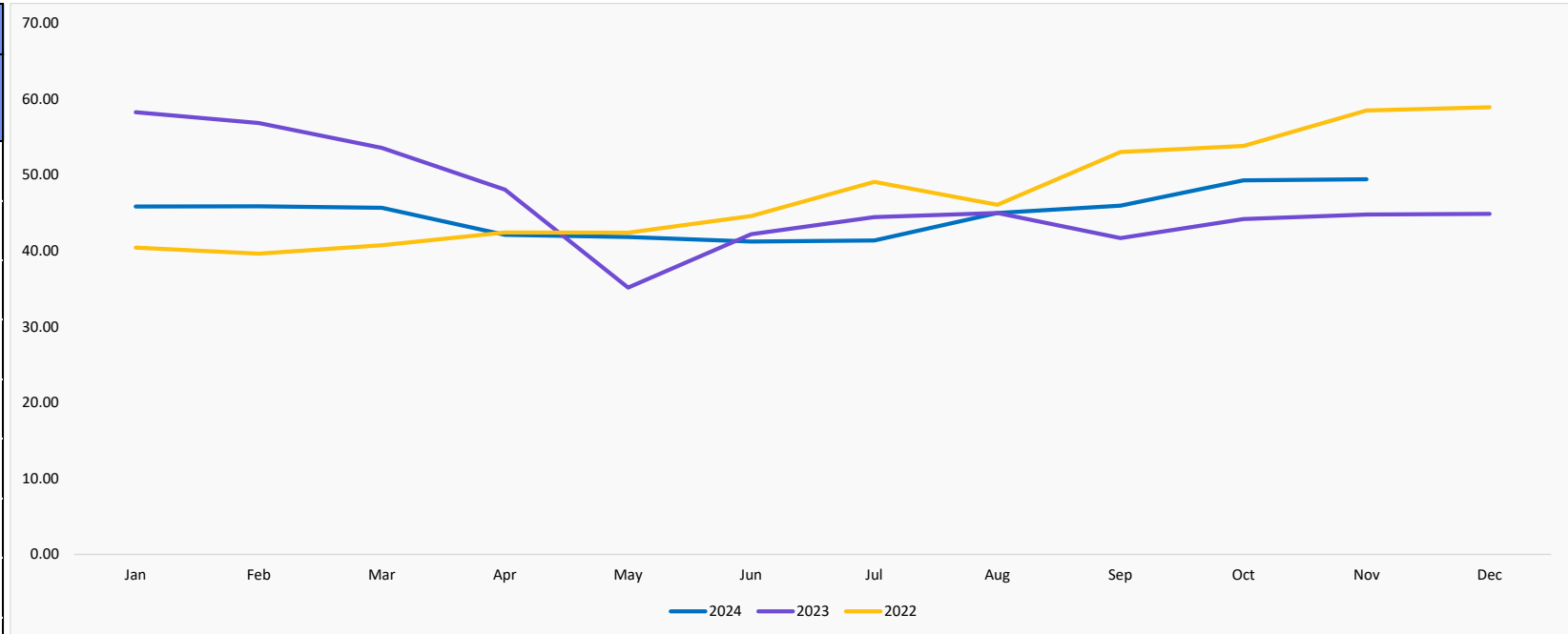
Monthly Price Variation

0.00%

NOTE: For prices in USD, please check the excel sent with the presentation

Milk - Romania

Euro/100 KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-21.35%	45.83	58.27	40.41
February	-19.31%	45.87	56.85	39.63
March	-14.73%	45.67	53.56	40.74
April	-12.36%	42.11	48.05	42.41
May	18.98%	41.81	35.14	42.40
June	-2.25%	41.23	42.18	44.58
July	-6.91%	41.36	44.43	49.10
August	-0.02%	44.97	44.98	46.07
September	10.24%	45.95	41.68	53.02
October	11.54%	49.28	44.18	53.82
November	10.43%	49.44	44.77	58.48
December			44.86	58.93
Year Average		44.87	46.58	47.47



Monthly Price Variation

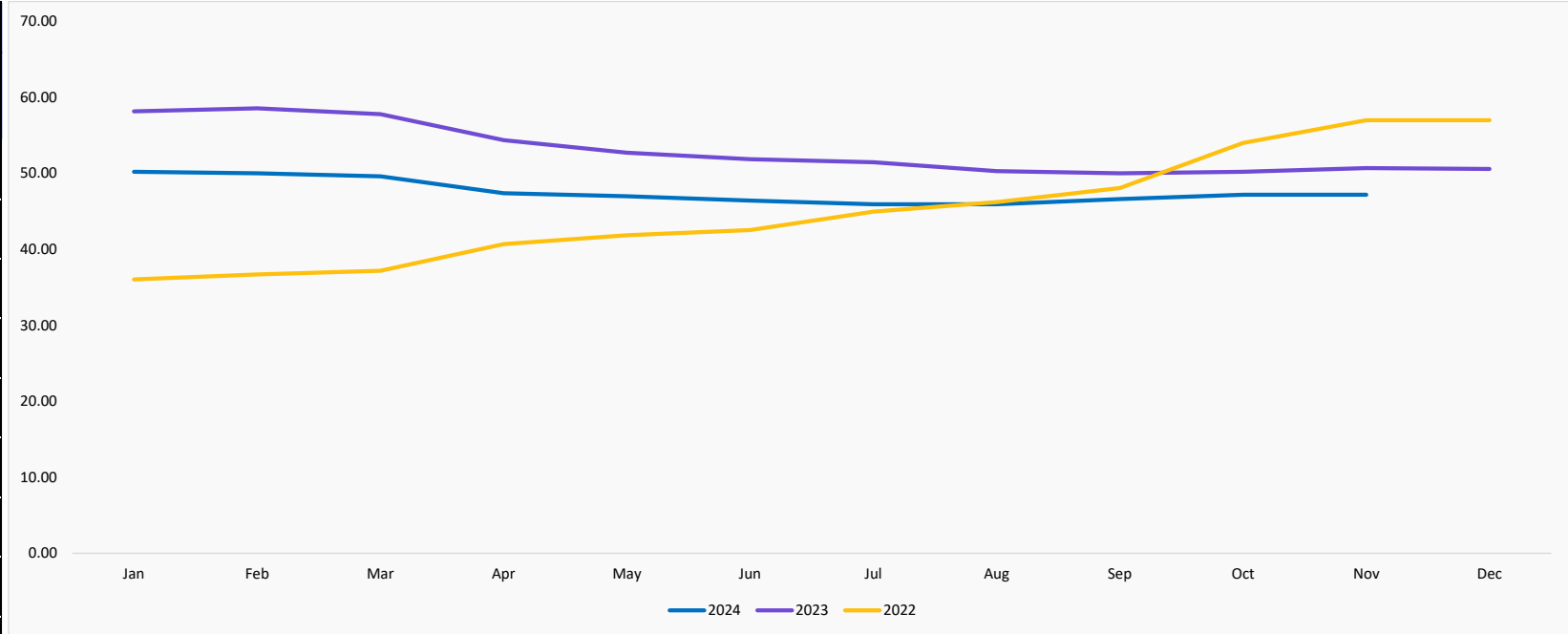
0.32%

NOTE: For prices in USD, please check the excel sent with the presentation

Milk - Spain

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-13.70%	50.19	58.16	36.02
February	-14.59%	50.00	58.54	36.70
March	-14.12%	49.61	57.77	37.18
April	-12.86%	47.38	54.37	40.68
May	-10.87%	46.99	52.72	41.84
June	-10.47%	46.41	51.84	42.52
July	-10.77%	45.92	51.46	44.95
August	-8.69%	45.92	50.29	46.21
September	-6.80%	46.60	50.00	48.06
October	-6.00%	47.18	50.19	53.98
November	-6.91%	47.18	50.68	56.99
December			50.58	56.99
Year Average		47.58	53.05	45.18



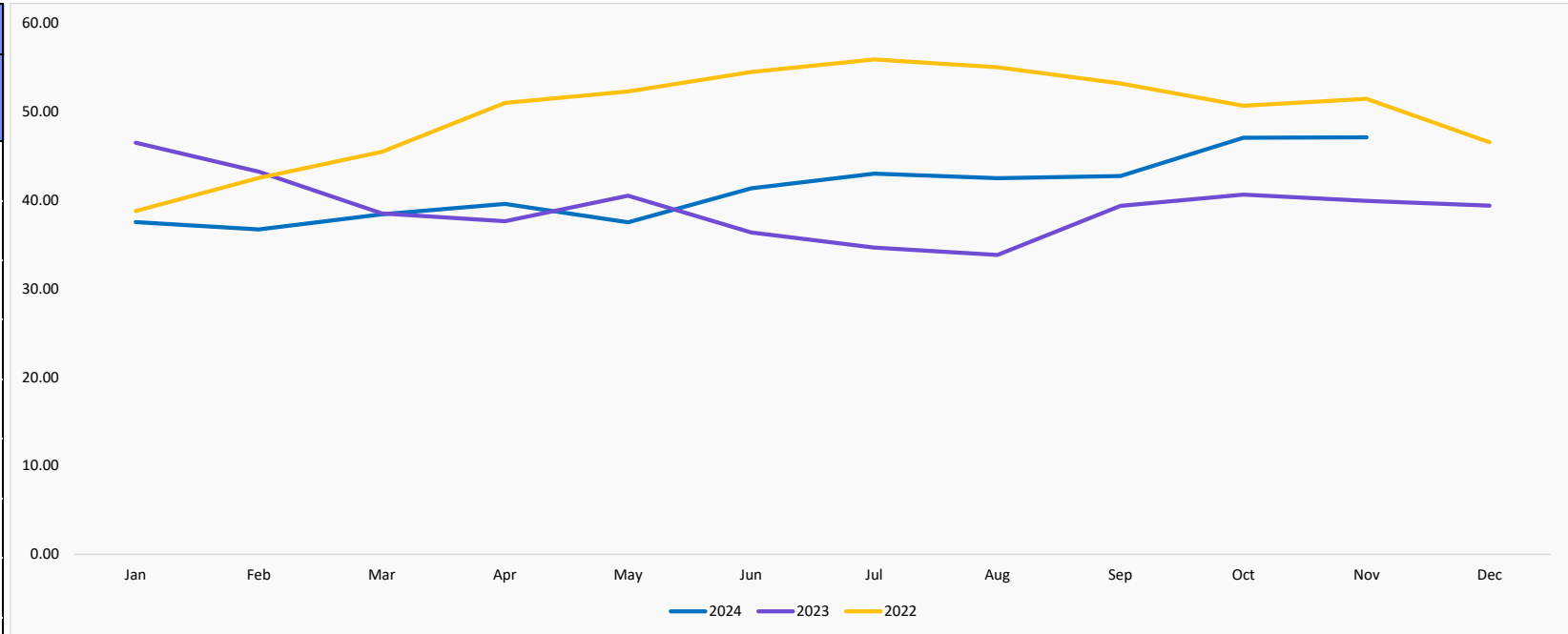
Monthly Price Variation

0.00%

NOTE: For prices in USD, please check the excel sent with the presentation

Milk - USA (Class1)

Euro/100 KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-19.29%	37.53	46.50	38.77
February	-15.07%	36.70	43.21	42.51
March	-0.23%	38.42	38.51	45.46
April	5.15%	39.58	37.64	50.98
May	-7.38%	37.51	40.50	52.28
June	13.64%	41.33	36.37	54.49
July	24.10%	43.00	34.65	55.91
August	25.67%	42.49	33.81	55.03
September	8.56%	42.74	39.37	53.20
October	15.80%	47.05	40.63	50.68
November	17.99%	47.10	39.92	51.46
December			39.39	46.55
Year Average		41.22	39.21	49.78



Monthly Price Variation

0.11%

NOTE: For prices in USD, please check the excel sent with the presentation

GRAIN & CEREAL

PRICE UPDATE

| Grain/Cereal

Commodity lookup

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Barley - Canada	MT	233.26	153.32	156.31	▶ 1.95%	▶ -32.99%
Barley Malt - Germany	MT	271.75	191.57	190.23	▶ -0.70%	▶ -30.00%
Corn (Maize) - Brazil	MT	197.44	190.01	206.53	▶ 8.69%	▶ 4.60%
Corn (Maize) - Euronext	MT	204.34	211.59	207.99	▶ -1.70%	▶ 1.79%
Corn (Maize) - Germany	MT	202.60	208.50	208.75	▶ 0.12%	▶ 3.04%
Corn (Maize) - South Africa	MT	186.22	235.04	255.27	▶ 8.61%	▶ 37.08%
Corn (Maize) - USA	MT	168.52	133.33	148.35	▶ 11.27%	▶ -11.97%
Flour - Mandioca Brazil	50 KG	28.74	22.36	23.74	▶ 6.17%	▶ -17.39%
Flour (Maize) - Italy	MT	564.90	570.90	572.50	▶ 0.28%	▶ 1.35%
Flour (Wheat Bran) - France	MT	206.20	170.40	168.95	▶ -0.85%	▶ -18.06%
Flour (Wheat) - Czechia	MT	488.66	423.45	424.68	▶ 0.29%	▶ -13.09%
Flour (Wheat) - USA	MT	421.05	426.81	439.41	▶ 2.95%	▶ 4.36%
Meat and Bone Meal - USA	100 KG	33.36	23.95	25.17	▶ 5.09%	▶ -24.55%
Oats - Australia	100 KG	28.92	27.43	27.71	▶ 1.02%	▶ -4.18%
Oats - USA (CBOT)	100 KG	22.66	24.37	23.41	▶ -3.94%	▶ 3.31%
Rice Basmati - India	MT	686.84	697.18	595.06	▶ -14.65%	▶ -13.36%
Rice Basmati 1121 - India	MT	948.04	855.05	875.36	▶ 2.37%	▶ -7.67%
Rice Jasmine - Thailand	MT	691.14	906.98	930.37	▶ 2.58%	▶ 34.61%
Rice Paddy - CBOT US	MT	345.46	304.26	308.38	▶ 1.35%	▶ -10.73%
Rice Thai Hom Mali - Thailand	MT	507.76	526.17	486.35	▶ -7.57%	▶ -4.22%
Rice White - Brazil	50 KG	21.51	19.45	18.11	▶ -6.92%	▶ -15.83%
Rice White - Thailand	MT	593.07	573.62	588.42	▶ 2.58%	▶ -0.78%
Rice White (California) - USA	MT	958.68	626.75	648.10	▶ 3.41%	▶ -32.40%
Rye - Germany	100 KG	18.11	16.12	16.42	▶ 1.86%	▶ -9.33%
Semolina - Italy	MT	621.50	517.00	517.00	▶ 0.00%	▶ -16.81%
Sorghum - USA	100 KG	17.77	14.40	14.82	▶ 2.92%	▶ -16.60%
Soyabean - Brazil	MT	446.63	366.76	367.30	▶ 0.15%	▶ -17.76%
Soyabean - CBOT US	MT	457.17	337.91	343.91	▶ 1.77%	▶ -24.77%
Sweet Corn - Thailand	100 KG	27.86	25.85	26.71	▶ 3.33%	▶ -4.13%
Wheat Durum - France	MT	369.00	300.00	300.00	▶ 0.00%	▶ -18.70%
Wheat Euronext - Europe	MT	226.97	225.77	215.23	▶ -4.67%	▶ -5.17%
Wheat Milling - Romania	MT	212.53	211.38	215.72	▶ 2.05%	▶ 1.50%
Wheat Milling - Russia	MT	225.19	221.05	222.59	▶ 0.70%	▶ -1.15%
Wheat Milling Hard/Soft - USA (CBOT)	MT	189.55	198.00	192.29	▶ -2.88%	▶ 1.45%
Wheat Soft Red - USA	MT	233.76	238.70	234.35	▶ -1.82%	▶ 0.25%

| Grain/Cereal

Commodity lookup

The **FAO Cereal Price Index** averaged 111.4 points in November, down 3.0 points (2.7%) from October and 9.6 points (8.0%) below its November 2023 value. Global wheat prices declined month-on-month due to increased supplies from the ongoing harvests in the Southern Hemisphere and improved crop conditions for the 2025 harvests in some major Northern Hemisphere exporting countries. Weaker international demand also contributed to the softer price tone. World maize prices remained stable in November as a result of opposing factors. Downward pressure on prices stemmed from generally favourable weather in South America with the continuing sowing, weaker demand for Ukrainian supplies, and seasonal pressure from the ongoing harvest in the United States of America, while strong domestic demand in Brazil and Mexico's demand for US supplies provided upward support. Among other coarse grains, world prices of barley and sorghum declined slightly in November. The FAO All Rice Price Index declined by 4.0%, driven by price falls across major market segments resulting from increased market competition, harvest pressure, and currency depreciations against the United States dollar.

Source: FAO

Arable Market Report – 09 December 2024

Wheat export prices for France, US and Argentina, slightly increased last week and are a supportive factor for the near term. In the US, the wheat and maize export pace is still at a strong level, which supports Chicago futures. However, US winter wheat crop conditions (good and excellent) were at the highest levels in recent years at the end of November. Managed money also increased their net short position in Chicago wheat futures (SRW) as of 03 December, which may have limited gains. Russia will increase its wheat export duty by almost 32% due to high inflation in the country and the potential risk to winter crops (LSEG). The Crop Monitor for AMIS, published last Thursday, shows Russia's winter wheat crop in mixed conditions, with the total sown area expected to decrease compared to last year. Despite rising export duty, Russian wheat export prices are favourable compared to other origins, pressuring grain markets.

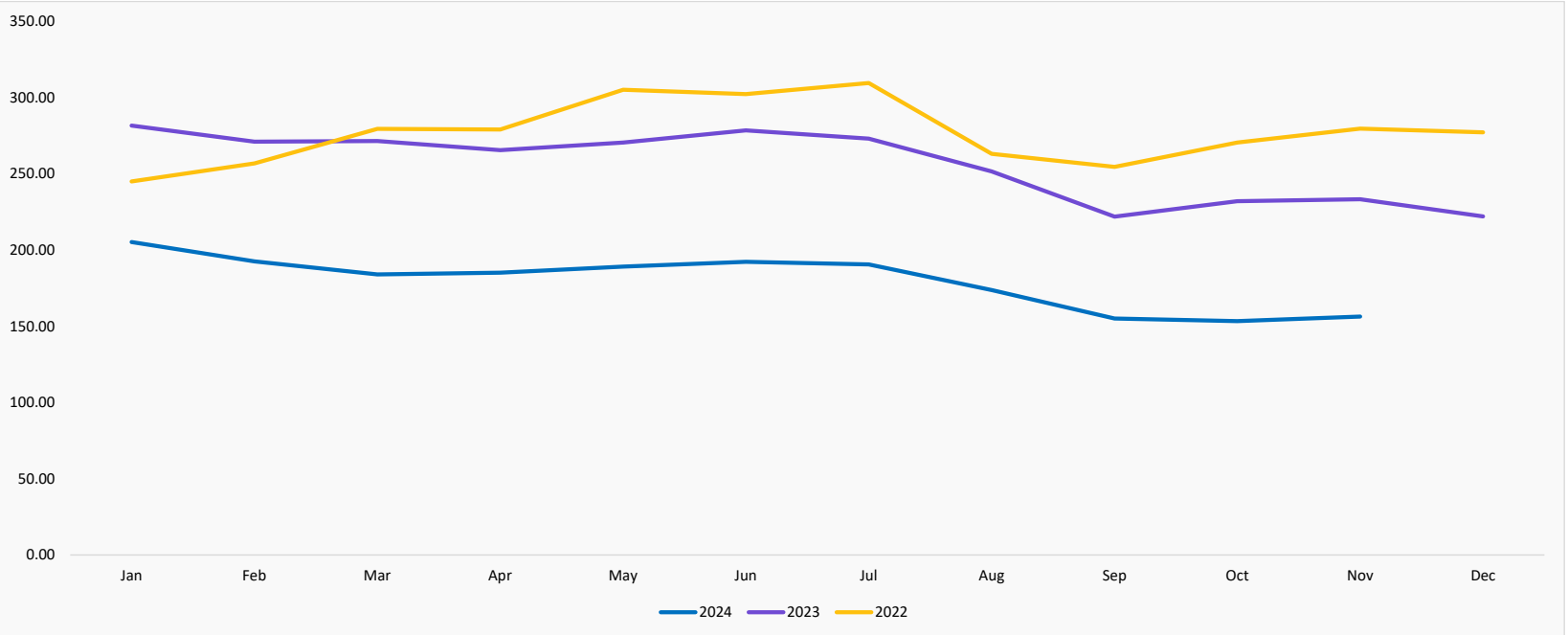
In the Southern Hemisphere the wheat harvest continues under mixed conditions. In Australia, rains could result in lower quality of wheat. In the current marketing year Australian wheat export could be high, with the government holding its production estimate almost unchanged. For wheat demand, very important news has come from Egypt, where there could be change in grain purchases. Traditional GASC tenders could switch to Mostakbal Misr direct purchasing agreements in combinations with tenders. Global barley trade still isn't as active due to a lack of demand from major importers (e.g. China). In Canada, Statscan showed production of the 2024 barley crop up 0.5 Mt from its August forecast to 8.1 Mt, though still down 8.6% from 8.9 Mt in 2023. The Australian barley harvest is in its final stages, also adding competition to the market.

Source: AHDB

Barley - Canada

Euro/MT*

MONTH	YoY GROWTH	2024	2023	2022
January	-27.12%	205.23	281.60	245.03
February	-28.99%	192.53	271.13	256.76
March	-32.21%	184.03	271.46	279.51
April	-30.28%	185.09	265.47	279.07
May	-30.05%	189.17	270.46	305.18
June	-30.95%	192.28	278.45	302.26
July	-30.23%	190.53	273.08	309.53
August	-30.91%	173.83	251.58	263.16
September	-30.08%	155.16	221.92	254.56
October	-33.91%	153.32	231.98	270.45
November	-32.99%	156.31	233.26	279.62
December			222.08	277.17
Year Average		179.77	256.04	276.86



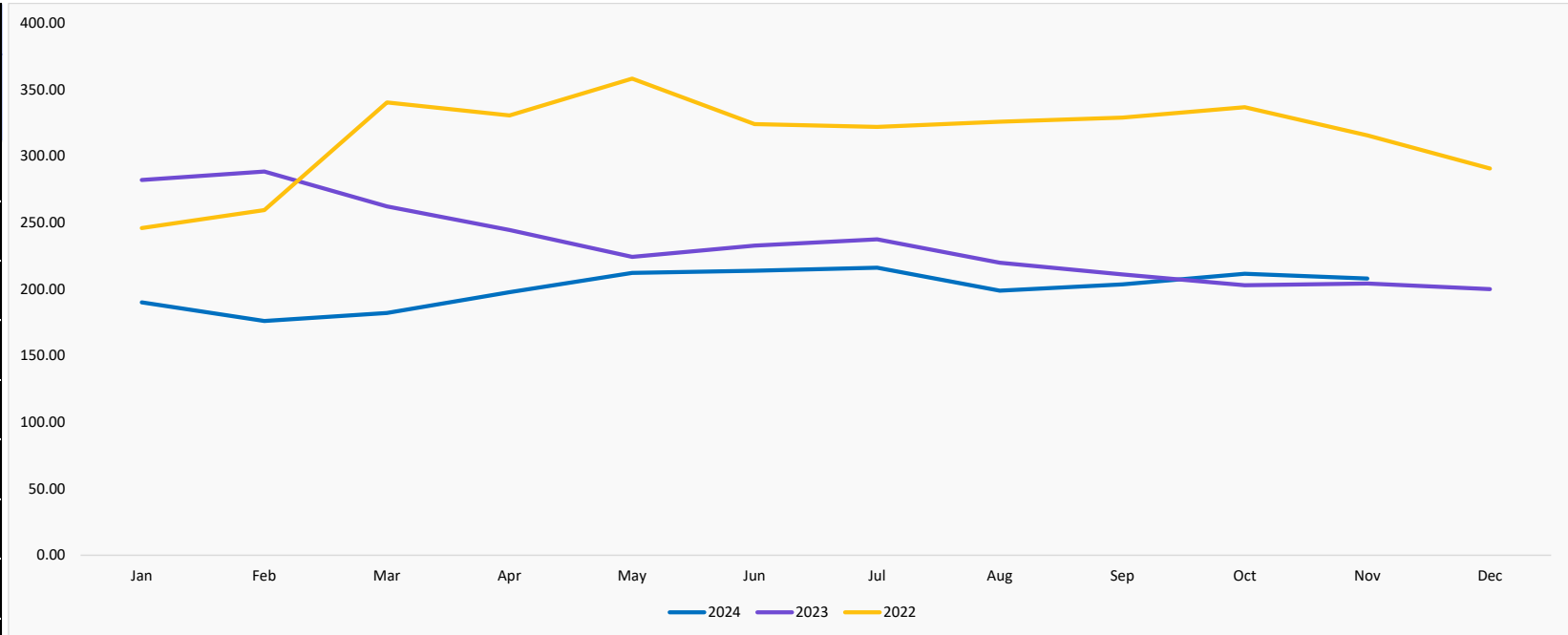
Monthly Price Variation

1.95%

NOTE: For prices in USD, please check the excel sent with the presentation

Corn (Maize) - Euronext

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-32.63%	190.11	282.18	245.92
February	-38.95%	176.08	288.41	259.45
March	-30.54%	182.18	262.28	340.50
April	-19.10%	197.80	244.49	330.62
May	-5.37%	212.26	224.30	358.38
June	-8.11%	213.92	232.81	324.18
July	-9.00%	216.12	237.50	322.10
August	-9.56%	198.85	219.88	325.95
September	-3.57%	203.57	211.11	329.05
October	4.22%	211.59	203.02	336.77
November	1.79%	207.99	204.34	315.74
December			200.08	290.68
Year Average		200.95	234.20	314.95



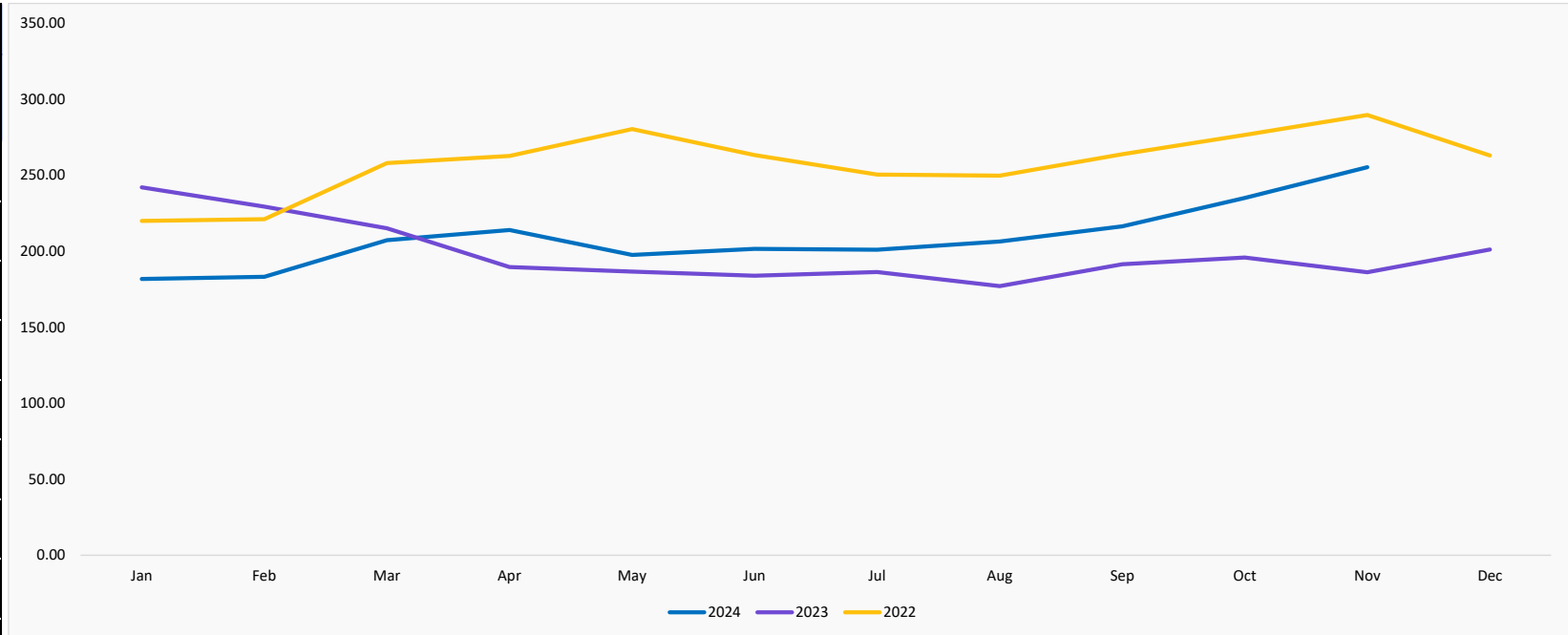
Monthly Price Variation

-1.70%

NOTE: For prices in USD, please check the excel sent with the presentation

Corn (Maize) - South Africa

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-24.92%	181.75	242.06	219.87
February	-20.16%	183.13	229.36	221.03
March	-3.69%	207.20	215.13	258.04
April	12.79%	213.88	189.62	262.72
May	5.90%	197.53	186.52	280.41
June	9.62%	201.57	183.88	263.20
July	7.83%	200.91	186.32	250.40
August	16.58%	206.35	177.01	249.64
September	13.02%	216.36	191.43	263.84
October	19.98%	235.04	195.90	276.50
November	37.08%	255.27	186.22	289.66
December			201.15	263.00
Year Average		209.00	198.72	258.19



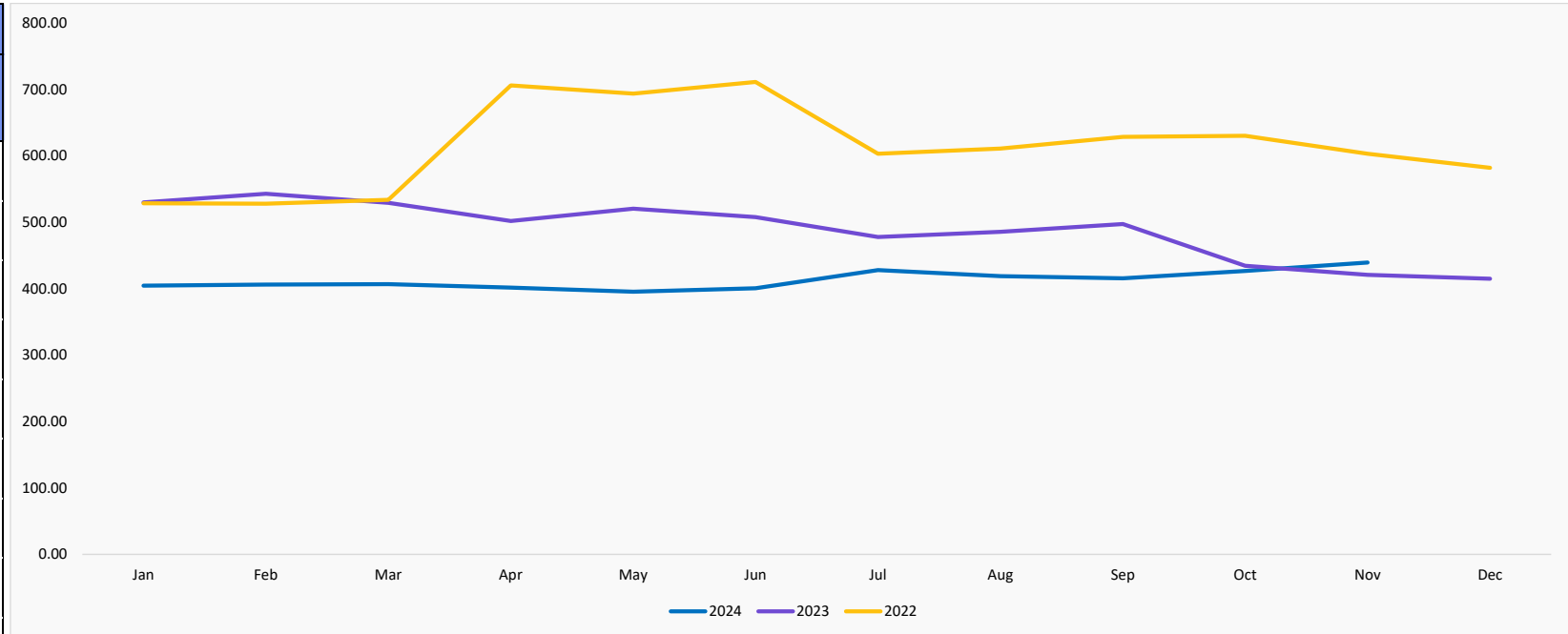
Monthly Price Variation

8.61%

NOTE: For prices in USD, please check the excel sent with the presentation

| Flour (Wheat) - USA

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-23.69%	404.55	530.13	528.68
February	-25.15%	406.37	542.92	528.02
March	-23.11%	407.08	529.44	534.06
April	-20.00%	401.75	502.19	706.36
May	-23.98%	395.67	520.46	693.92
June	-21.09%	400.75	507.85	711.57
July	-10.39%	428.16	477.78	603.17
August	-13.74%	418.97	485.73	611.22
September	-16.39%	415.88	497.40	628.64
October	-1.80%	426.81	434.65	630.24
November	4.36%	439.41	421.05	603.26
December			415.23	582.17
Year Average		413.22	488.74	613.44



Monthly Price Variation

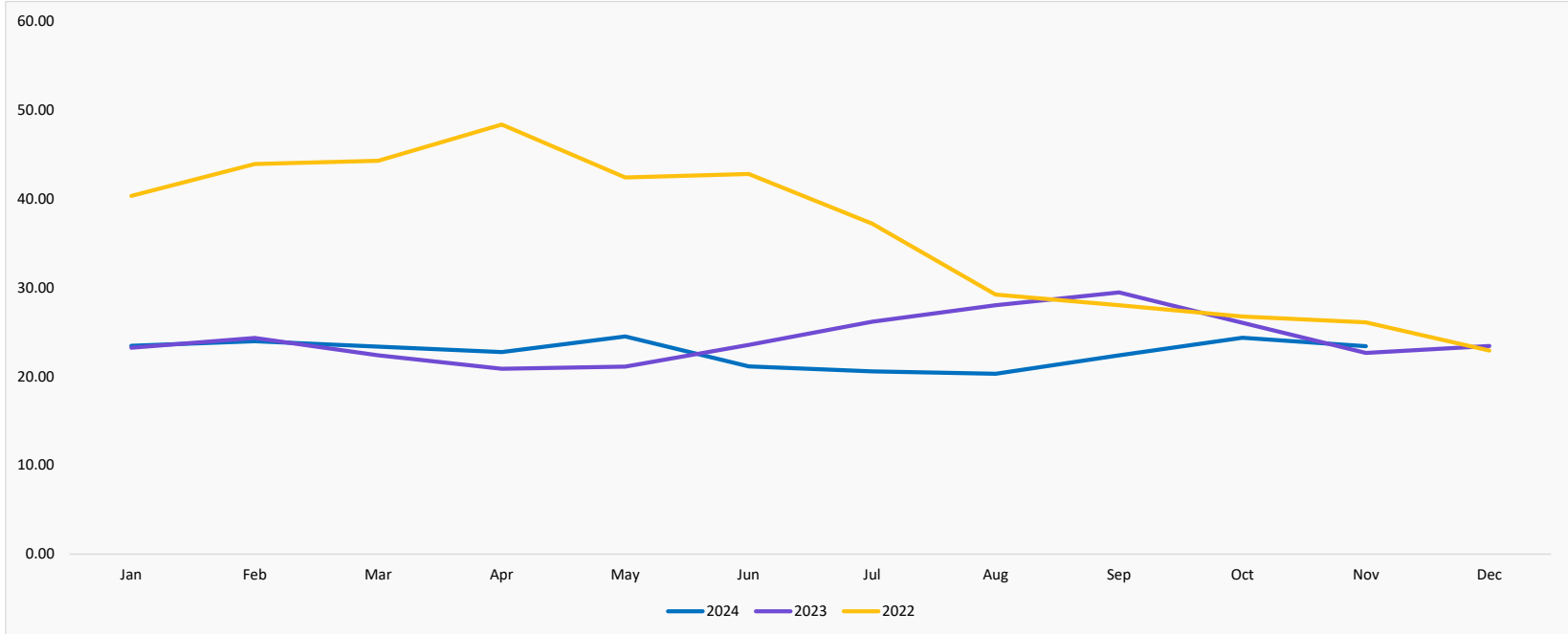
2.95%

NOTE: For prices in USD, please check the excel sent with the presentation

Oats - Usa (CBOT)

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	0.86%	23.45	23.25	40.34
February	-1.48%	23.98	24.34	43.94
March	4.42%	23.37	22.38	44.29
April	9.01%	22.75	20.87	48.37
May	16.11%	24.51	21.11	42.42
June	-10.23%	21.15	23.56	42.81
July	-21.43%	20.57	26.18	37.22
August	-27.58%	20.30	28.03	29.22
September	-24.00%	22.39	29.46	28.02
October	-6.49%	24.37	26.06	26.76
November	3.31%	23.41	22.66	26.09
December			23.43	22.92
Year Average		22.75	24.28	36.03



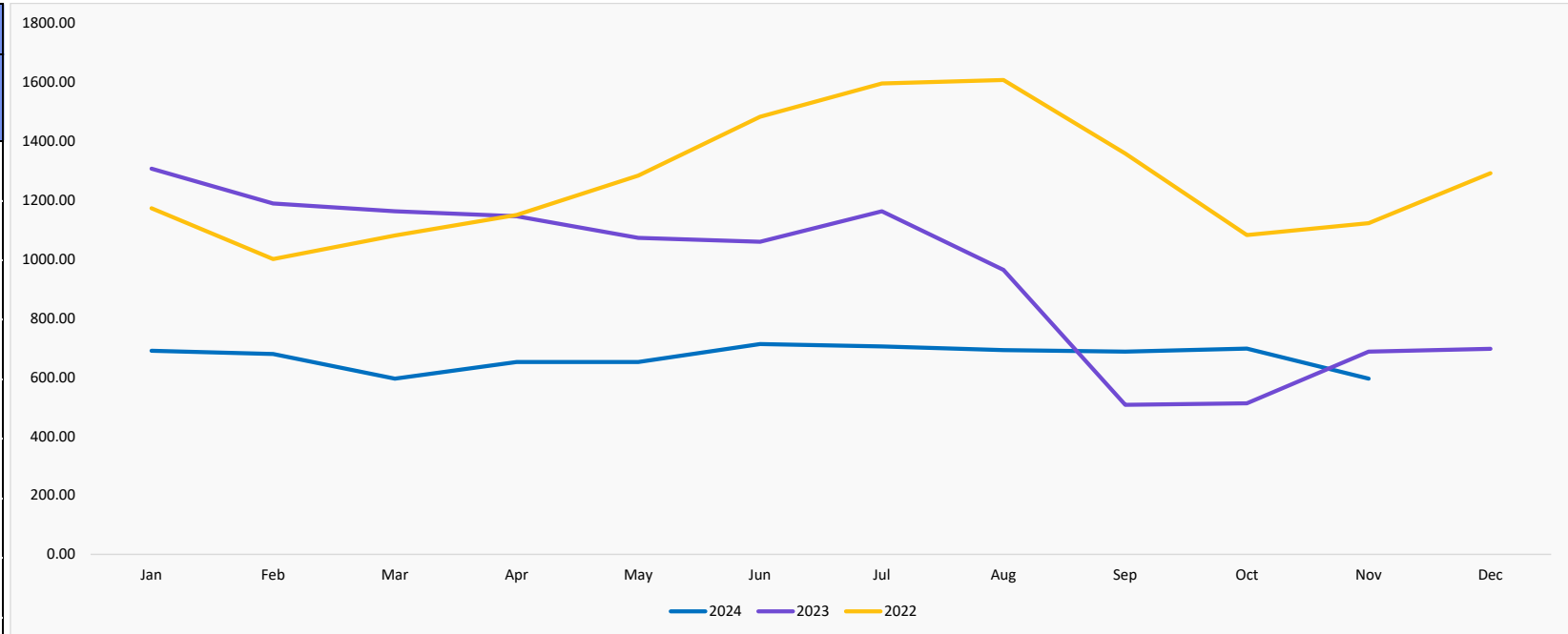
Monthly Price Variation

-3.94%

NOTE: For prices in USD, please check the excel sent with the presentation

Rice Basmati - India

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-47.19%	690.14	1,306.74	1,172.48
February	-42.92%	678.80	1,189.10	1,000.89
March	-48.77%	595.55	1,162.57	1,080.54
April	-43.13%	651.50	1,145.59	1,150.32
May	-39.21%	652.06	1,072.59	1,283.47
June	-32.73%	712.72	1,059.54	1,482.61
July	-39.41%	704.57	1,162.81	1,595.50
August	-28.22%	692.19	964.32	1,607.57
September	35.57%	687.16	506.88	1,358.55
October	36.29%	697.18	511.55	1,081.77
November	-13.36%	595.06	686.84	1,121.95
December			696.28	1,291.85
Year Average		668.81	955.40	1,268.96



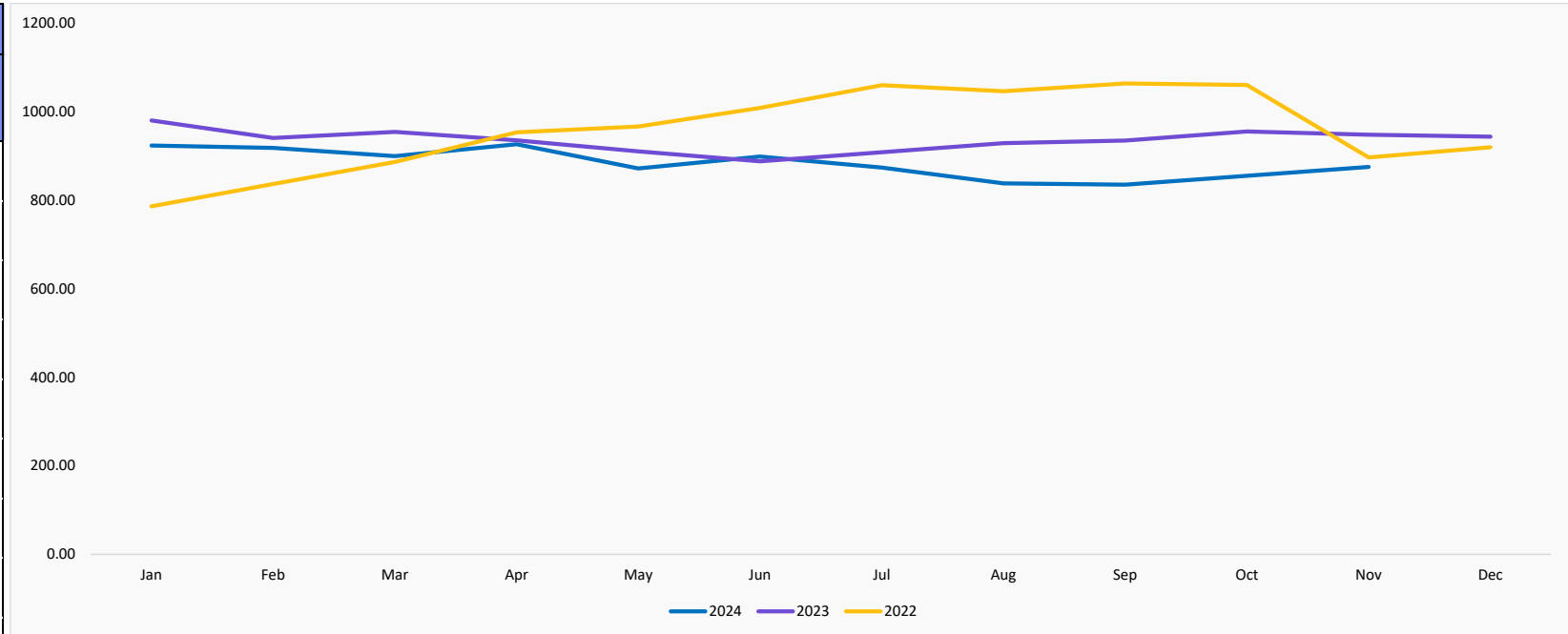
Monthly Price Variation

-14.65%

NOTE: For prices in USD, please check the excel sent with the presentation

Rice Basmati 1121 - India

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-5.78%	923.39	980.05	786.09
February	-2.37%	918.24	940.55	836.50
March	-5.76%	899.39	954.41	886.47
April	-0.91%	926.64	935.14	953.55
May	-4.20%	871.92	910.14	966.41
June	1.19%	898.64	888.10	1,008.36
July	-3.82%	873.80	908.53	1,060.06
August	-9.78%	838.10	928.91	1,046.05
September	-10.66%	835.24	934.92	1,063.89
October	-10.50%	855.05	955.39	1,060.25
November	-7.67%	875.36	948.04	896.84
December			943.58	919.70
Year Average		883.25	935.65	957.01



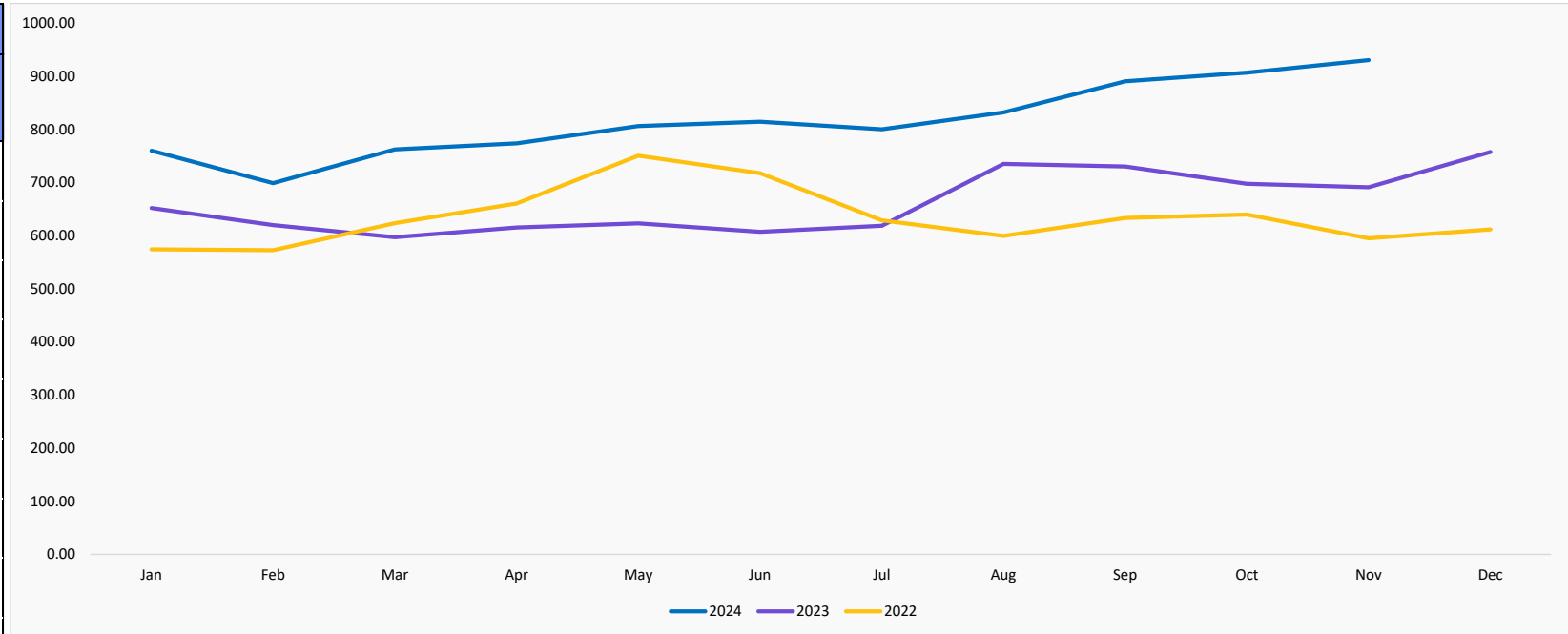
Monthly Price Variation

2.37%

NOTE: For prices in USD, please check the excel sent with the presentation

Rice Jasmine - Thailand

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	16.58%	759.96	651.87	574.04
February	12.75%	698.72	619.69	572.66
March	27.70%	762.19	596.87	623.47
April	25.71%	773.69	615.44	660.59
May	29.41%	806.19	622.96	750.58
June	34.17%	814.43	607.02	717.41
July	29.37%	800.21	618.55	628.75
August	13.14%	831.81	735.18	599.30
September	21.97%	890.51	730.08	633.09
October	29.99%	906.98	697.75	639.65
November	34.61%	930.37	691.14	595.02
December			757.59	611.66
Year Average		815.92	662.01	633.85



Monthly Price Variation

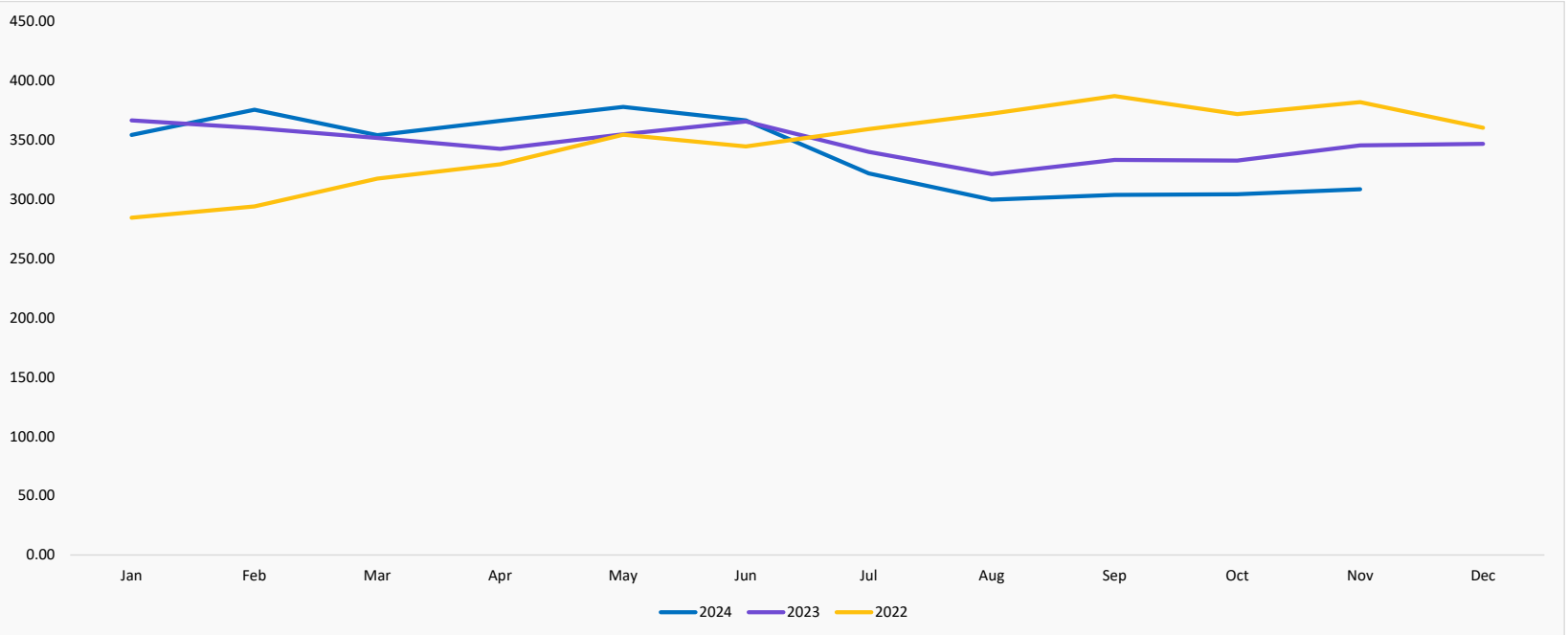
2.58%

NOTE: For prices in USD, please check the excel sent with the presentation

Rice Paddy - CBOT US

Euro/MT*

MONTH	YoY GROWTH	2024	2023	2022
January	-3.36%	354.15	366.46	284.39
February	4.24%	375.43	360.16	294.00
March	0.67%	353.99	351.64	317.38
April	6.94%	366.18	342.43	329.56
May	6.51%	377.83	354.73	354.37
June	0.26%	366.48	365.55	344.41
July	-5.29%	321.87	339.86	359.14
August	-6.72%	299.58	321.17	372.08
September	-8.84%	303.69	333.16	387.03
October	-8.53%	304.26	332.65	371.79
November	-10.73%	308.38	345.46	381.87
December			346.62	360.24
Year Average		339.26	346.66	346.36



Monthly Price Variation

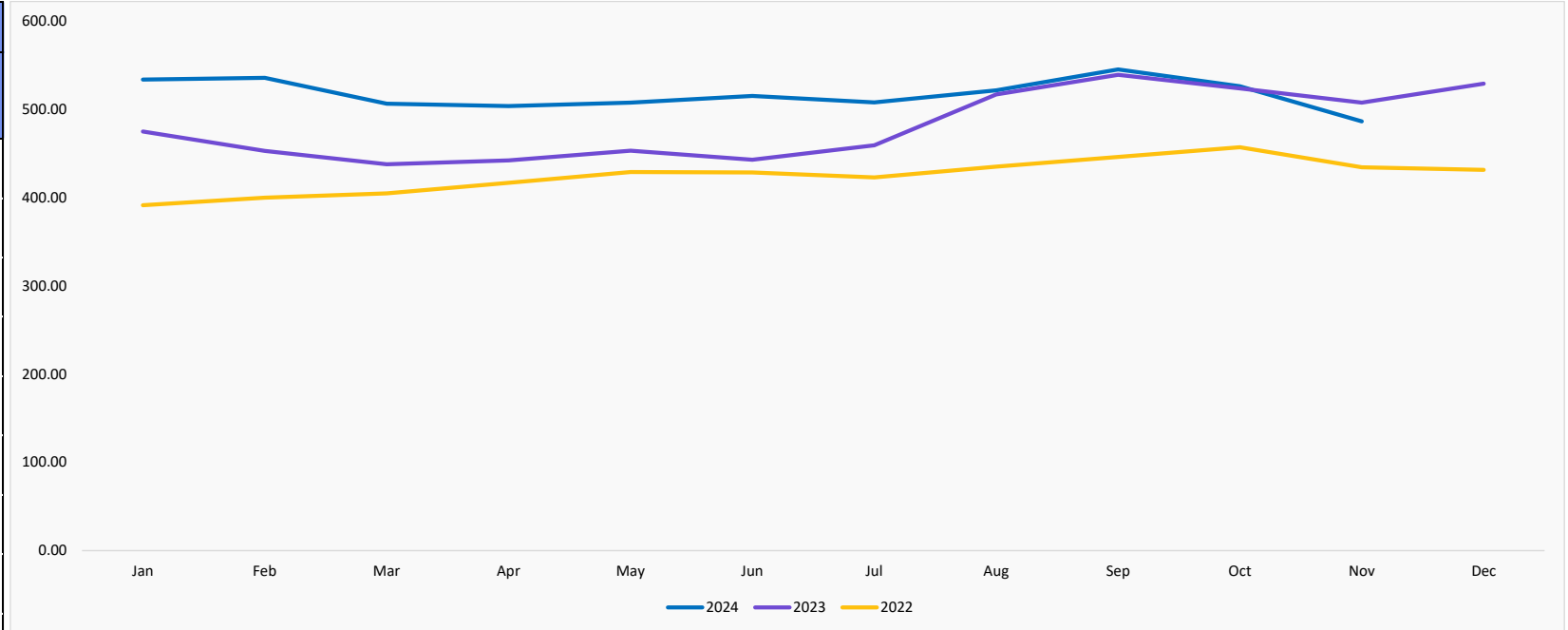
1.35%

NOTE: For prices in USD, please check the excel sent with the presentation

Rice Thai Hom Mali - Thailand

Euro/MT*

MONTH	YoY GROWTH	2024	2023	2022
January	12.41%	533.92	474.97	391.53
February	18.29%	535.68	452.87	400.07
March	15.69%	506.59	437.89	404.76
April	13.92%	503.83	442.27	416.87
May	12.04%	507.76	453.19	428.94
June	16.33%	515.38	443.04	428.55
July	10.56%	507.88	459.39	422.93
August	0.91%	521.69	517.01	435.21
September	1.17%	545.43	539.13	446.04
October	0.45%	526.17	523.78	457.22
November	-4.22%	486.35	507.76	434.46
December			529.21	431.59
Year Average		517.33	481.71	424.85



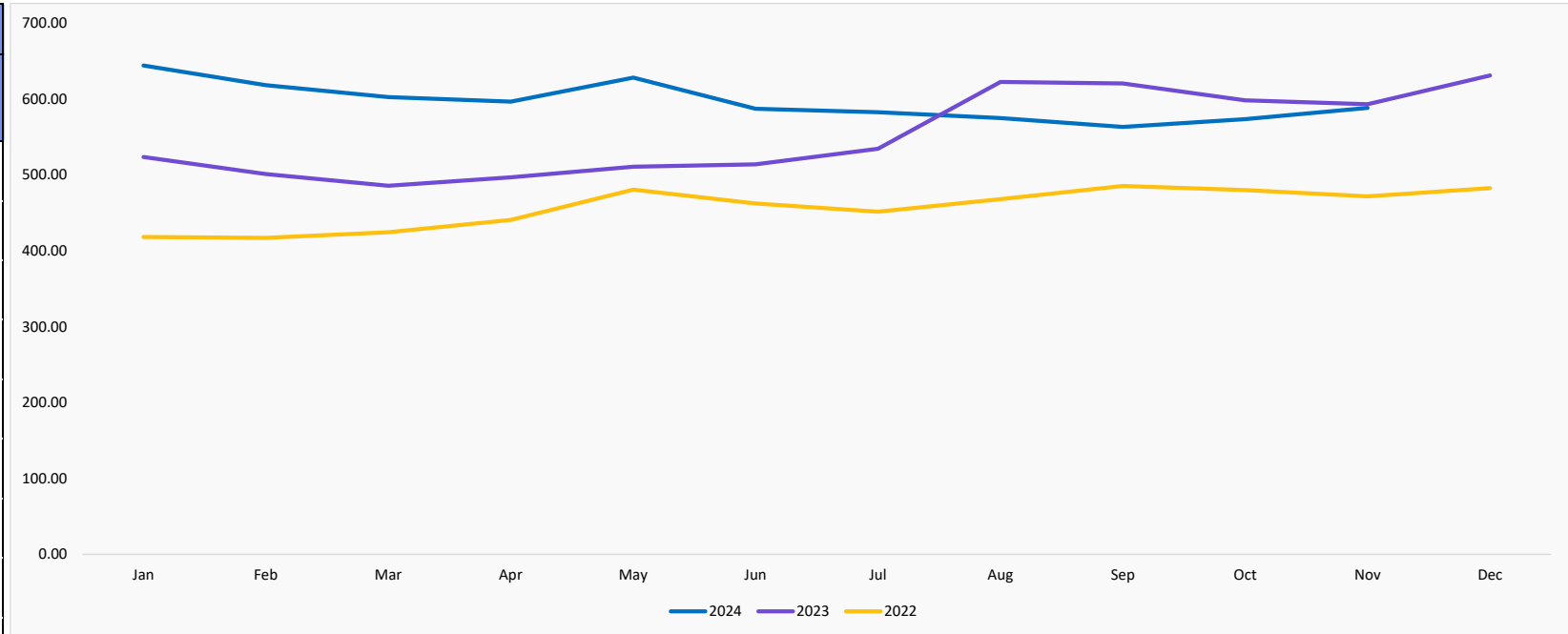
Monthly Price Variation

-7.57%

NOTE: For prices in USD, please check the excel sent with the presentation

Rice White - Thailand

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	23.00%	644.19	523.73	418.05
February	23.38%	618.36	501.16	417.04
March	24.03%	602.45	485.72	424.54
April	20.06%	596.58	496.91	440.60
May	23.03%	628.30	510.70	480.69
June	14.27%	587.18	513.84	462.25
July	9.01%	582.58	534.45	451.42
August	-7.65%	574.82	622.43	467.99
September	-9.24%	563.21	620.57	485.42
October	-4.13%	573.62	598.34	480.12
November	-0.78%	588.42	593.07	471.75
December			631.02	482.58
Year Average		596.34	552.66	456.87



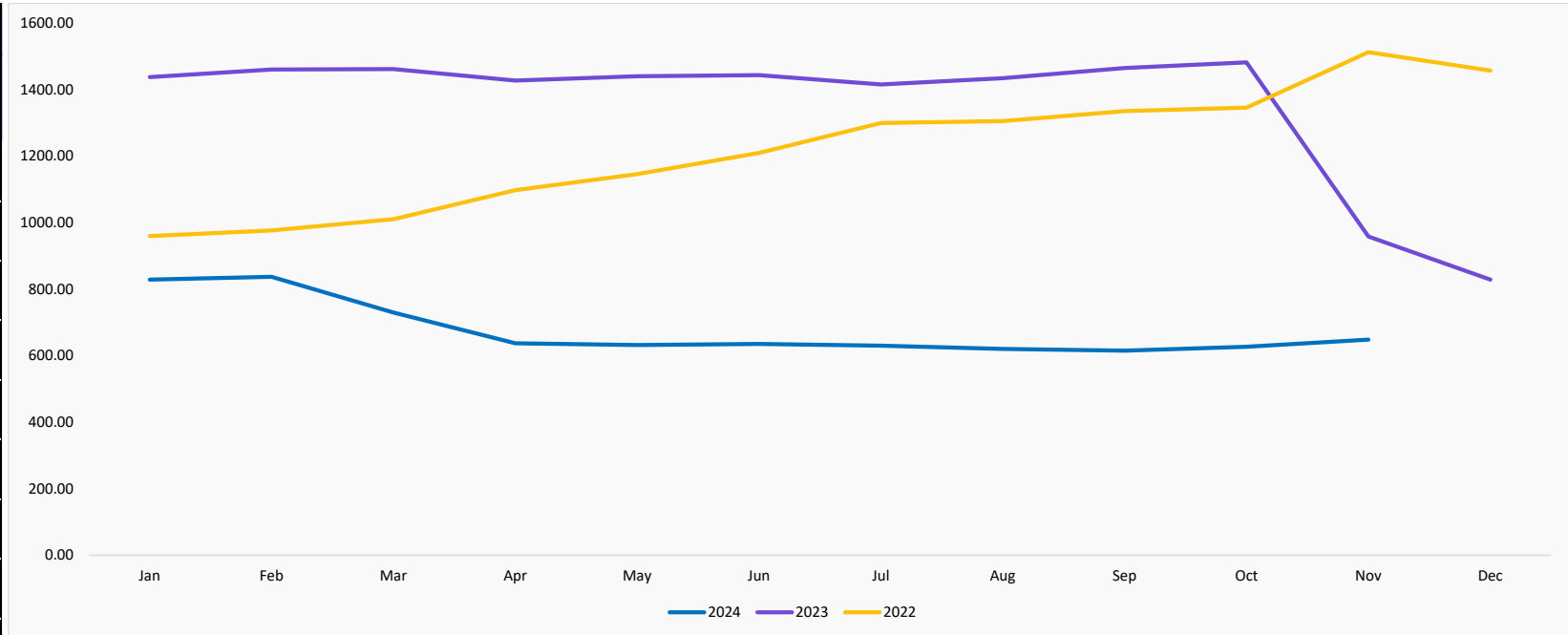
Monthly Price Variation

2.58%

NOTE: For prices in USD, please check the excel sent with the presentation

Rice White (California) - USA

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-42.37%	828.87	1,438.14	959.63
February	-42.68%	837.34	1,460.81	976.74
March	-50.07%	729.99	1,462.07	1,010.37
April	-55.36%	637.07	1,427.16	1,097.85
May	-56.11%	632.09	1,440.32	1,146.22
June	-56.01%	635.22	1,443.99	1,210.19
July	-55.48%	630.23	1,415.49	1,299.51
August	-56.75%	620.61	1,434.86	1,305.99
September	-58.00%	615.37	1,465.09	1,335.61
October	-57.71%	626.75	1,481.91	1,346.23
November	-32.40%	648.10	958.68	1,512.77
December			829.02	1,457.41
Year Average		676.51	1,354.79	1,221.54



Monthly Price Variation

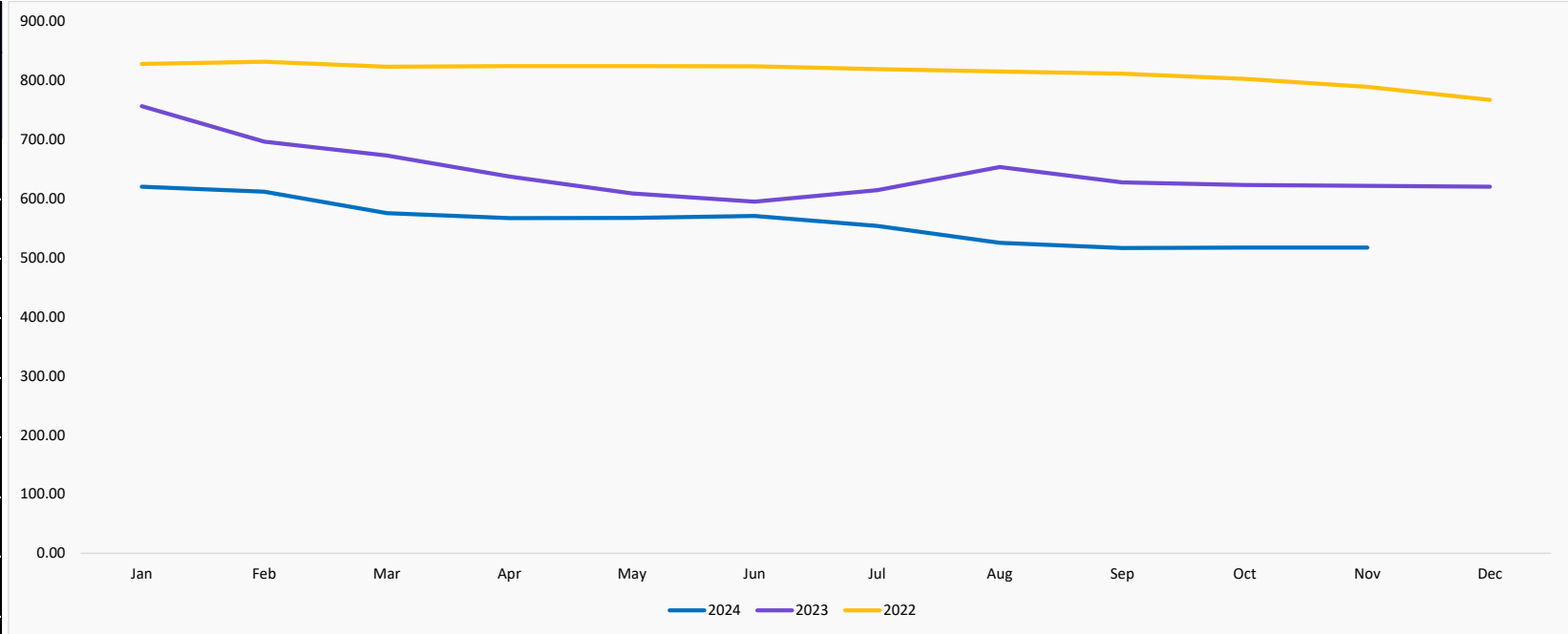
3.41%

NOTE: For prices in USD, please check the excel sent with the presentation

Semolina - Italy

Euro/MT*

MONTH	YoY GROWTH	2024	2023	2022
January	-18.03%	620.00	756.38	828.00
February	-12.14%	611.75	696.25	831.50
March	-14.49%	575.50	673.00	823.20
April	-11.04%	567.12	637.50	824.25
May	-6.80%	567.40	608.80	824.25
June	-4.12%	570.50	595.00	824.00
July	-9.86%	553.80	614.38	819.25
August	-19.63%	525.25	653.50	815.00
September	-17.69%	516.50	627.50	811.25
October	-17.00%	517.00	622.88	802.50
November	-16.81%	517.00	621.50	789.20
December			620.00	767.00
Year Average		558.35	643.89	813.28



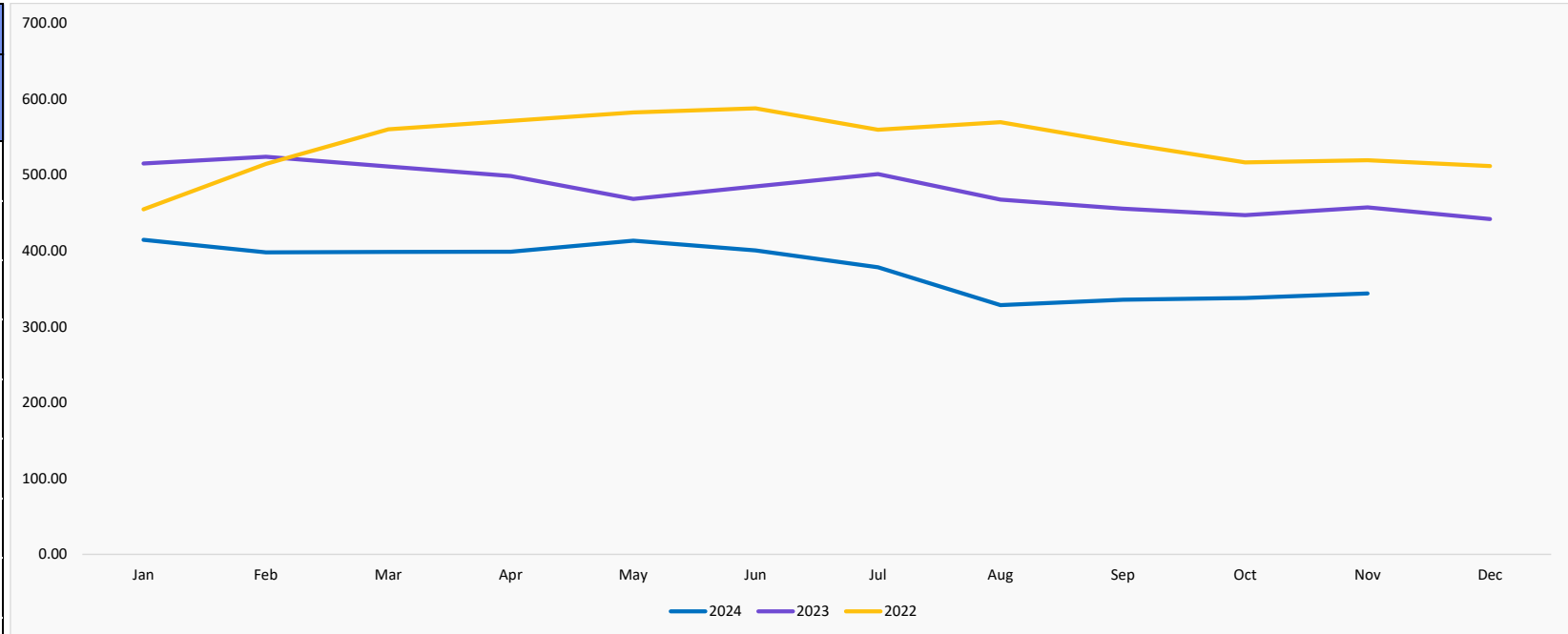
Monthly Price Variation

0.00%

NOTE: For prices in USD, please check the excel sent with the presentation

Soyabean - CBOT US

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-19.56%	414.46	515.23	454.66
February	-24.01%	398.02	523.80	514.61
March	-22.03%	398.52	511.11	560.10
April	-19.99%	398.86	498.53	571.33
May	-11.76%	413.38	468.45	582.48
June	-17.41%	400.52	484.94	587.72
July	-24.53%	378.17	501.11	559.64
August	-29.74%	328.55	467.62	569.48
September	-26.32%	335.53	455.42	541.89
October	-24.38%	337.91	446.83	516.52
November	-24.77%	343.91	457.17	519.36
December			441.76	511.60
Year Average		377.08	481.00	540.78



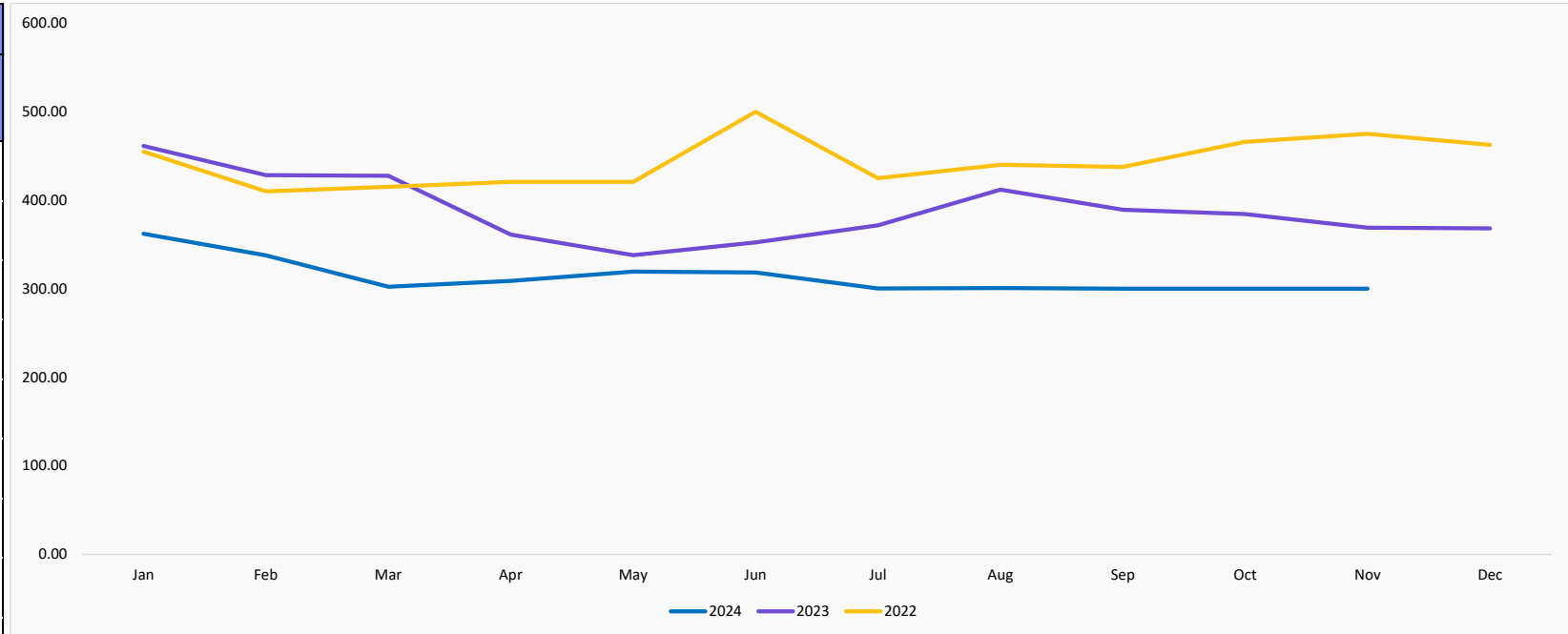
Monthly Price Variation

1.77%

NOTE: For prices in USD, please check the excel sent with the presentation

Wheat Durum - France

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-21.50%	362.10	461.25	455.00
February	-21.17%	337.67	428.33	410.00
March	-29.31%	302.20	427.50	415.00
April	-14.53%	308.75	361.25	420.62
May	-5.50%	319.40	338.00	420.62
June	-9.59%	318.50	352.27	500.00
July	-19.16%	300.40	371.62	425.00
August	-26.97%	300.88	412.00	440.00
September	-22.93%	300.00	389.25	437.50
October	-21.93%	300.00	384.25	465.83
November	-18.70%	300.00	369.00	475.00
December			368.25	462.50
Year Average		313.63	388.58	443.92



Monthly Price Variation

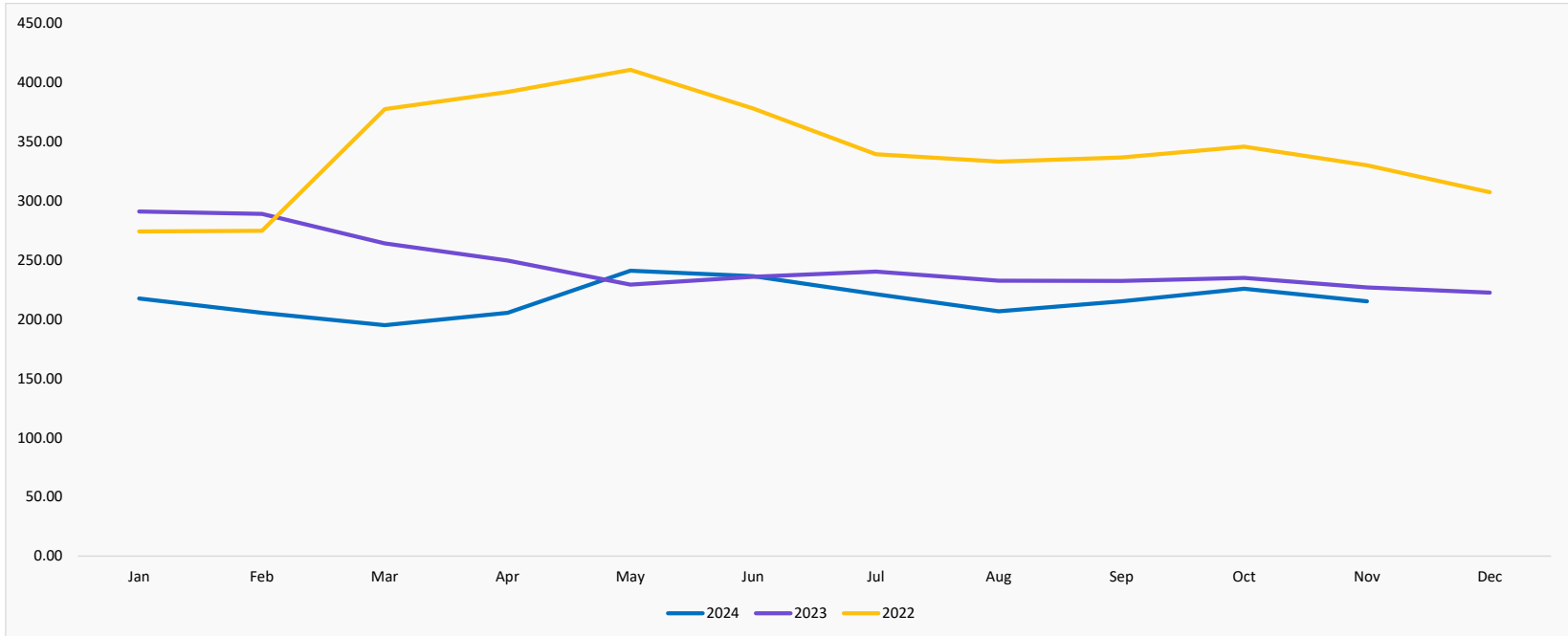
0.00%

NOTE: For prices in USD, please check the excel sent with the presentation

Wheat Euronext - Europe

Euro/MT*

MONTH	YoY GROWTH	2024	2023	2022
January	-25.22%	217.58	290.95	274.24
February	-28.90%	205.49	289.01	274.64
March	-26.18%	194.94	264.09	377.45
April	-17.73%	205.39	249.66	391.92
May	5.11%	240.95	229.24	410.67
June	0.23%	236.35	235.80	377.99
July	-7.91%	221.25	240.26	339.37
August	-11.13%	206.74	232.64	333.12
September	-7.41%	215.17	232.39	336.61
October	-3.92%	225.77	234.98	345.75
November	-5.17%	215.23	226.97	329.97
December			222.43	307.31
Year Average		216.81	245.70	341.59



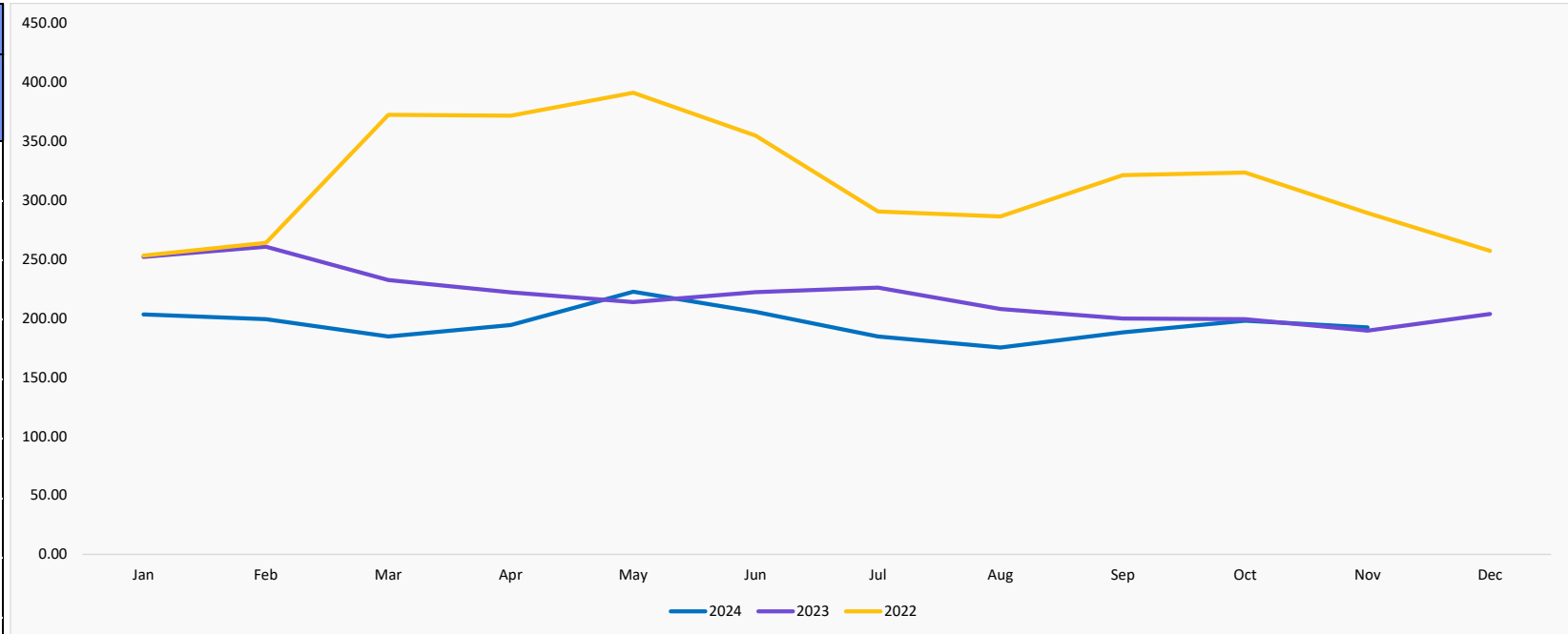
Monthly Price Variation

-4.67%

NOTE: For prices in USD, please check the excel sent with the presentation

Wheat Milling Hard/Soft - USA (CBOT)

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-19.36%	203.18	251.95	253.13
February	-23.56%	199.15	260.52	263.83
March	-20.55%	184.56	232.31	372.44
April	-12.49%	194.24	221.96	371.64
May	4.07%	222.40	213.71	391.11
June	-7.47%	205.52	222.12	354.85
July	-18.29%	184.57	225.89	290.53
August	-15.69%	175.18	207.78	286.24
September	-5.91%	188.03	199.83	321.22
October	-0.58%	198.00	199.15	323.49
November	1.45%	192.29	189.55	289.09
December			203.55	257.06
Year Average		195.19	219.03	314.55



Monthly Price Variation

-2.88%

NOTE: For prices in USD, please check the excel sent with the presentation

OILS

PRICE UPDATE

Oils

Commodity lookup

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Coconut Oil - Rotterdam	MT	976.95	1555.84	1687.59	▶ 8.47%	▶ 72.74%
Corn Oil - USA	MT	1378.58	1004.19	1030.09	▶ 2.58%	▶ -25.28%
Groundnut Oil - Italy	MT	2400.00	2160.00	2180.00	▶ 0.93%	▶ -9.17%
Olive Oil - Italy	KG	7.00	6.30	5.66	▶ -10.16%	▶ -19.14%
Olive Oil - Portugal	KG	1.21	1.73	1.41	▶ -18.24%	▶ 16.87%
Olive Oil - Spain	KG	7.00	6.23	4.86	▶ -21.99%	▶ -30.57%
Palm Oil - Rotterdam	MT	850.38	1097.64	1239.14	▶ 12.89%	▶ 45.72%
Palm Olein - Malaysia	MT	745.45	963.31	1084.72	▶ 12.60%	▶ 45.51%
Palm Stearin - Malaysia	MT	744.78	984.27	1093.23	▶ 11.07%	▶ 46.78%
Rapeseed Oil - Rotterdam	MT	934.10	1011.03	1125.74	▶ 11.35%	▶ 20.52%
Soyabean Oil - Argentina	MT	903.88	969.40	1050.81	▶ 8.40%	▶ 16.26%
Soyabean Oil - CBOT Chicago	MT	1053.97	876.35	926.38	▶ 5.71%	▶ -12.10%
Sunflower Oil - NW Europe	MT	855.91	1085.50	1185.67	▶ 9.23%	▶ 38.53%
Sunflower Oil - Ukraine	MT	734.70	1001.62	1104.91	▶ 10.31%	▶ 50.39%

Commodity lookup

The **FAO Vegetable Oil Price Index** averaged 164.1 points in November, rising 11.4 points (7.5%) month-on-month to reach its highest level since July 2022. The increase was driven by higher quotations for palm, rapeseed, soy and sunflower oils. International palm oil prices increased for the sixth consecutive month, maintaining a premium over alternative oils due to lingering concerns about lower-than-expected global production amid excessive rainfall in Southeast Asia. Meanwhile, world soybean prices also continued to rise, mainly due to robust global import demand. Similarly, prices of rapeseed and sunflower oils increased, reflecting prospects of tightening global supplies in their respective markets.

Source: FAO

Global Oilseed Markets – 09th December 2024

Vegetable oil prices found strength from India's vegetable oil imports during November reaching a four-month high. Indian imports rose as refiners sought to replenish inventories after firm demand during the festival season. There was also support from a Reuters poll forecasting Malaysian palm oil stocks tightening by 5.1% on the month in November to 1.79 Mt due to heavy rainfall impacting production. The Malaysian Palm Oil Board release palm oil figures for November tomorrow (10 Dec). However, the Indonesian Palm Oil Association reported that stocks rose 23.3% in October to 3.02 Mt as exports fell back. US soybean sales for 22-28 November totalled 2.3 Mt, towards the upper-end of analyst estimates (LSEG). The period when US soybean exports typically peak (Sep – Dec) is nearing its end, and the Southern Hemisphere harvests approach. US soybean exports so far total 21.7 Mt. This is 44% of the USDA's forecast (49.7 Mt), ahead of the five-year average for this time of year (38%). US soybean crush for October totalled 6.5 Mt, the largest monthly crush on electronic records back to May 2015 (USDA). **Conab reported that planting of Brazil's soybean crop reached 90% complete as of 01 Dec**, ahead of last year's 83%. For most states, development is considered favourable due to benign weather conditions. Celeres and StoneX forecasted the crop at 170.8 Mt and 166.2 Mt respectively last week.

Source: AHDB

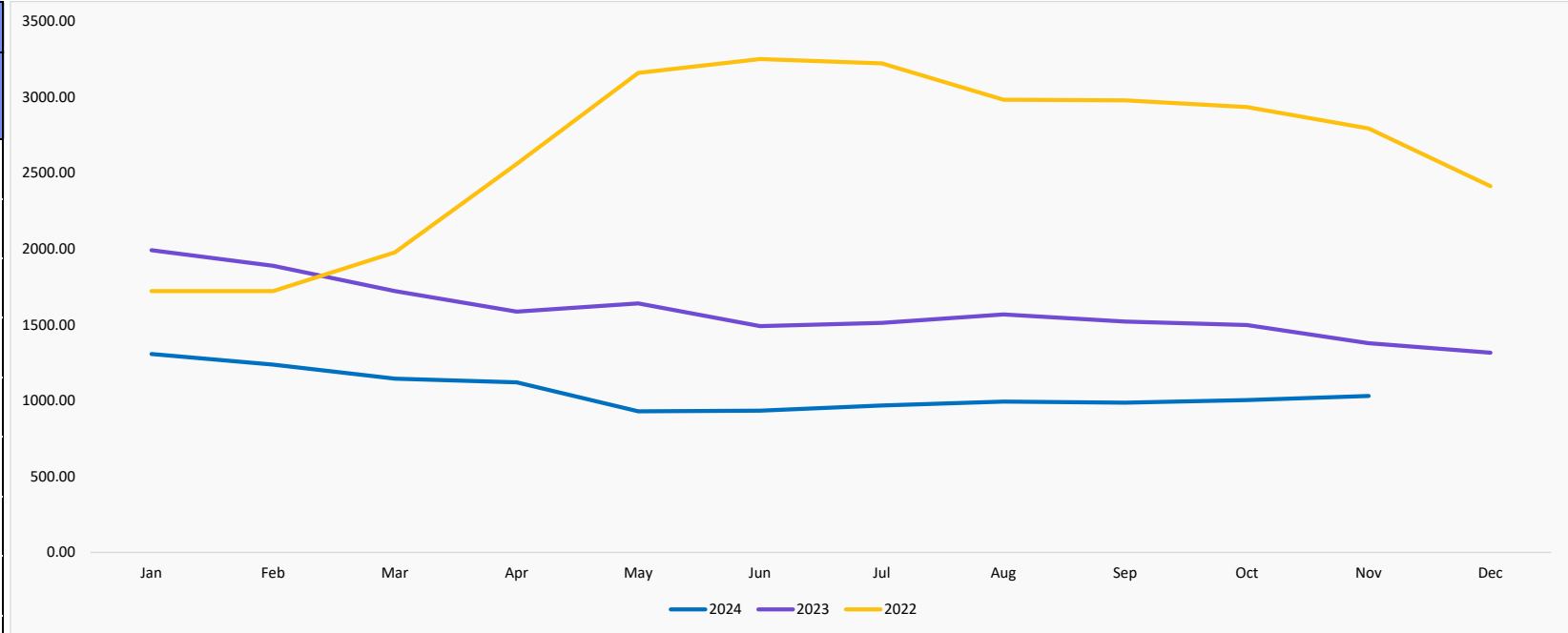
EU Sunflower Seed Supply Outlook – 04th December 2024

Sunflower Seed Oil Prices in the EU are facing upward pressure as supply forecasts continue to tighten. According to industry sources speaking with Expana, the EU-27 sunflower harvest for the 2024/25 season may plunge to as low as **9 million metric tons**, approximately 9% lower than last season. This would mark the lowest production level since 2016. Multiple participants have expressed the possibility that final figures could fall below the 9 million mt mark once all harvest data is in. Concerns are especially high over the quality and quantity of France's late-harvested sunflower crop, further underpinning the tight supply scenario and potentially lifting sunflower seed oil prices. Uncertainty also surrounds **Ukrainian sunflower seed production**, with current market estimates ranging from **10.8 million to 12.4 million mt** for 2024/25. Most forecasts lean toward the lower end of this range, suggesting a potential shortfall of over 2.9 million mt compared to the prior season. Market insiders warn that such a deficit could significantly tighten fundamentals and add upward momentum to **sunflower seed oil prices**. Given that Ukrainian supply is a critical component of the global sunflower seed oil market, any reduction in harvest volumes amplifies price volatility.

Source: AHDB

Corn Oil - USA

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-34.35%	1,306.72	1,990.57	1,721.78
February	-34.52%	1,236.72	1,888.69	1,722.15
March	-33.52%	1,145.12	1,722.55	1,976.63
April	-29.41%	1,119.86	1,586.47	2,559.72
May	-43.34%	929.50	1,640.52	3,159.29
June	-37.33%	934.10	1,490.50	3,251.05
July	-35.96%	968.27	1,511.92	3,222.35
August	-36.57%	994.35	1,567.53	2,983.42
September	-35.15%	985.95	1,520.33	2,978.66
October	-32.99%	1,004.19	1,498.56	2,934.49
November	-25.28%	1,030.09	1,378.58	2,793.77
December			1,315.92	2,413.57
Year Average		1,059.53	1,592.68	2,643.07



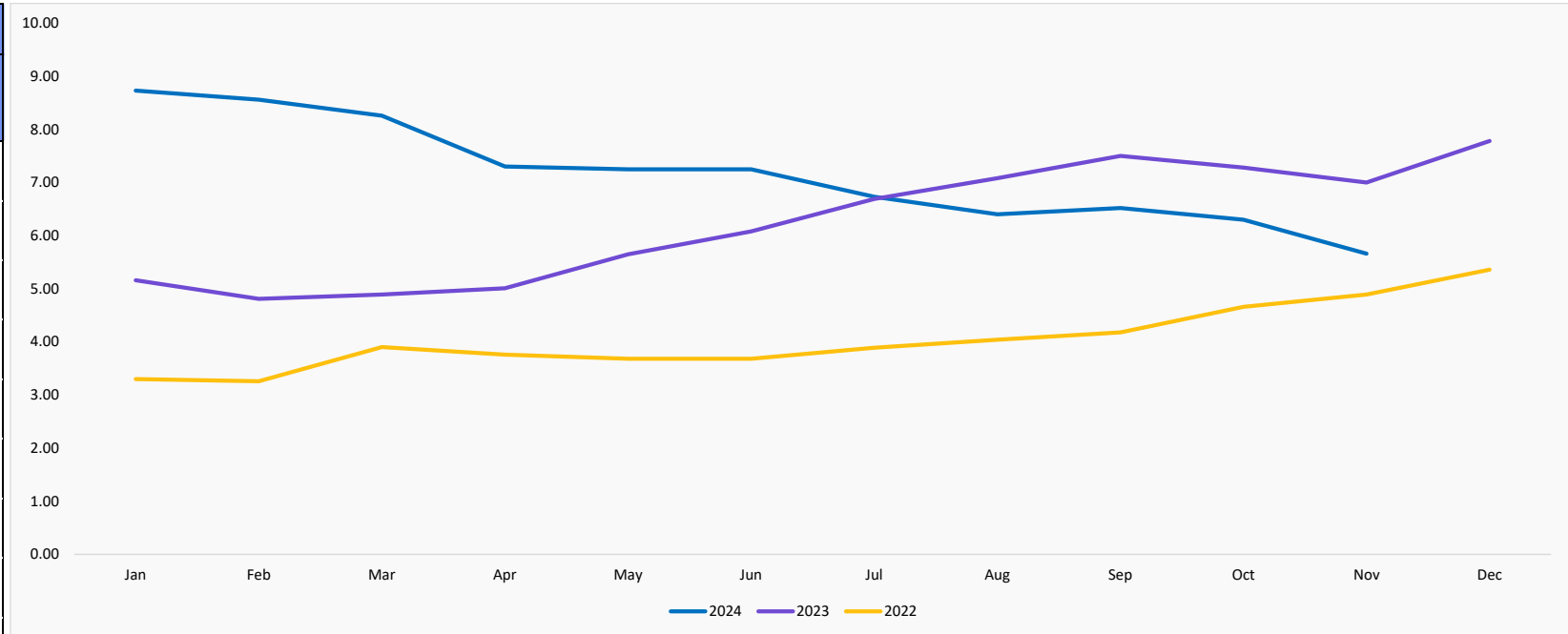
Monthly Price Variation

2.58%

NOTE: For prices in USD, please check the excel sent with the presentation

Olive Oil - Italy

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	69.19%	8.73	5.16	3.30
February	77.96%	8.56	4.81	3.26
March	68.92%	8.26	4.89	3.90
April	45.71%	7.30	5.01	3.76
May	28.32%	7.25	5.65	3.68
June	19.24%	7.25	6.08	3.68
July	0.60%	6.73	6.69	3.89
August	-9.60%	6.40	7.08	4.04
September	-13.07%	6.52	7.50	4.18
October	-13.46%	6.30	7.28	4.66
November	-19.14%	5.66	7.00	4.89
December			7.78	5.36
Year Average		7.18	6.24	4.05



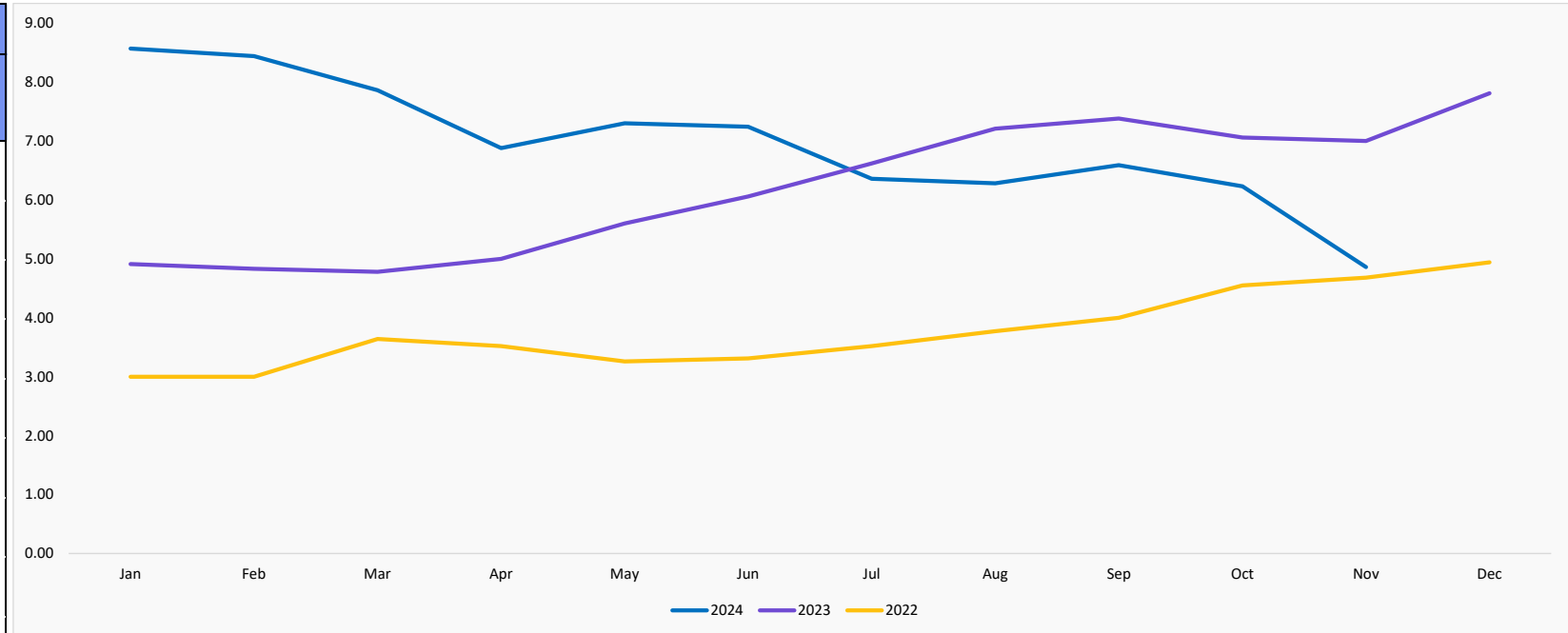
Monthly Price Variation

-10.16%

NOTE: For prices in USD, please check the excel sent with the presentation

Olive Oil - Spain

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	74.54%	8.57	4.91	3.00
February	74.74%	8.44	4.83	3.00
March	64.44%	7.86	4.78	3.64
April	37.60%	6.88	5.00	3.52
May	30.36%	7.30	5.60	3.26
June	19.47%	7.24	6.06	3.31
July	-3.93%	6.36	6.62	3.52
August	-12.90%	6.28	7.21	3.77
September	-10.70%	6.59	7.38	4.00
October	-11.76%	6.23	7.06	4.55
November	-30.57%	4.86	7.00	4.68
December			7.81	4.94
Year Average		6.96	6.19	3.77



Monthly Price Variation

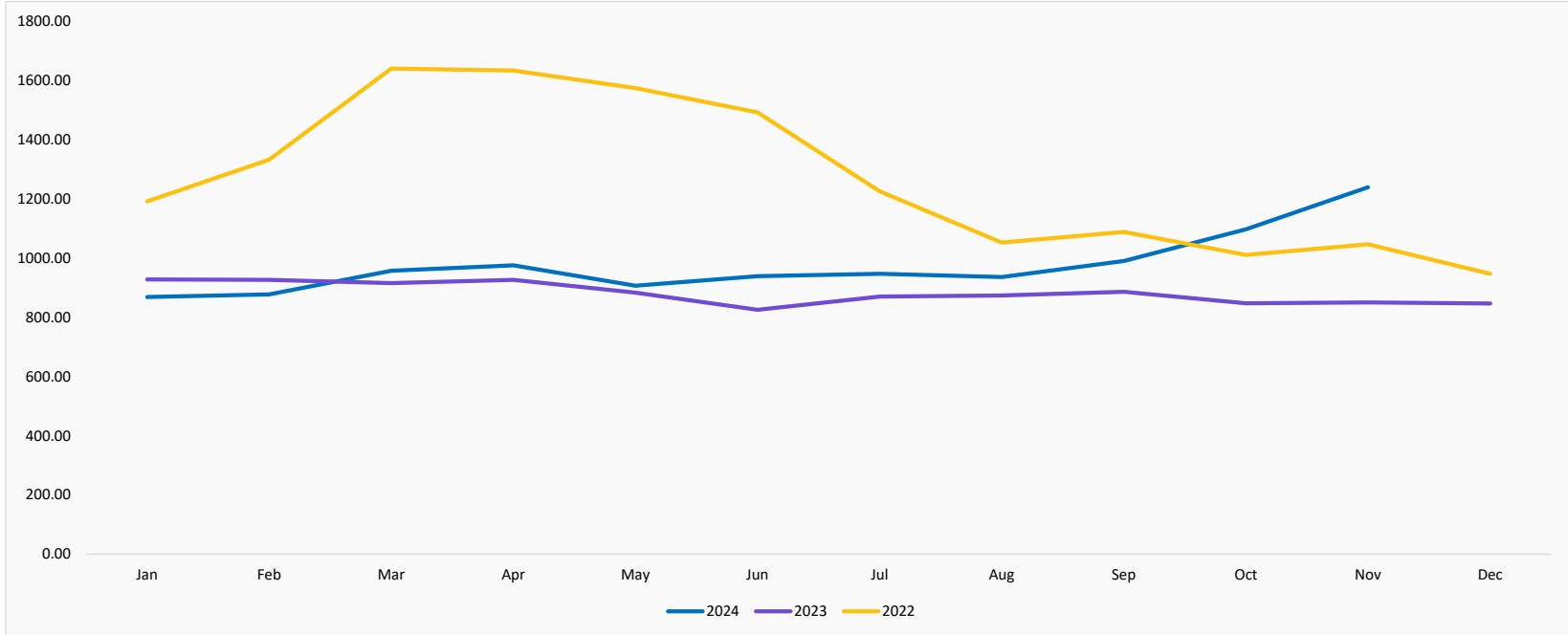
-21.99%

NOTE: For prices in USD, please check the excel sent with the presentation

| Palm Oil - Rotterdam

Euro/MT*

MONTH	YoY GROWTH	2024	2023	2022
January	-6.36%	868.95	927.95	1,192.21
February	-5.32%	877.23	926.56	1,332.42
March	4.55%	957.22	915.55	1,640.70
April	5.22%	975.32	926.91	1,633.61
May	2.62%	906.60	883.42	1,574.35
June	13.78%	939.18	825.47	1,492.32
July	8.85%	947.11	870.08	1,225.23
August	7.08%	935.87	873.96	1,052.28
September	11.75%	990.23	886.08	1,088.55
October	29.49%	1,097.64	847.67	1,010.91
November	45.72%	1,239.14	850.38	1,046.82
December			847.02	947.44
Year Average		975.86	881.75	1,269.74



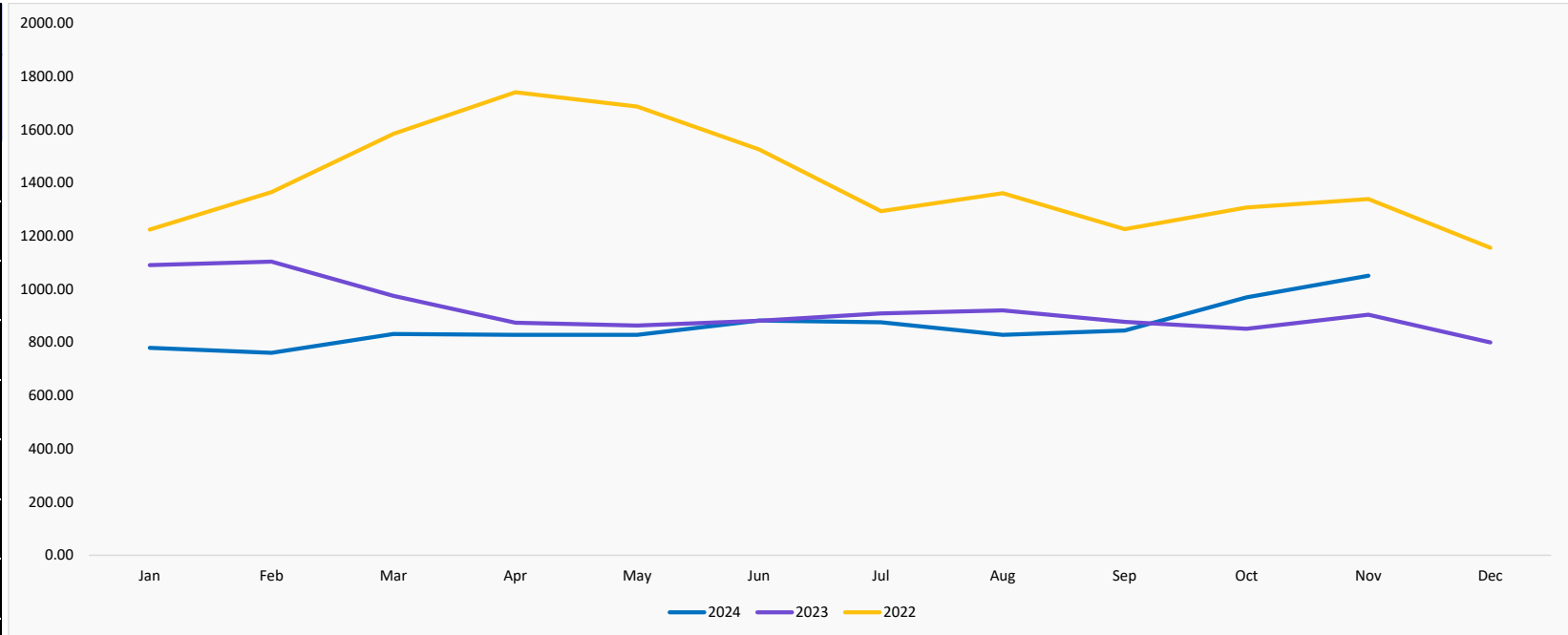
Monthly Price Variation

12.89%

NOTE: For prices in USD, please check the excel sent with the presentation

| Soyabean Oil - Argentina

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-28.56%	779.26	1,090.86	1,224.40
February	-31.05%	760.99	1,103.72	1,364.96
March	-14.63%	832.06	974.63	1,584.35
April	-5.22%	828.71	874.34	1,740.72
May	-4.07%	828.34	863.50	1,686.67
June	0.07%	882.23	881.59	1,525.37
July	-3.71%	875.52	909.26	1,293.11
August	-9.96%	828.53	920.23	1,361.16
September	-3.70%	844.78	877.24	1,225.76
October	13.93%	969.40	850.85	1,307.41
November	16.26%	1,050.81	903.88	1,339.03
December			799.79	1,155.40
Year Average		861.88	920.82	1,400.70



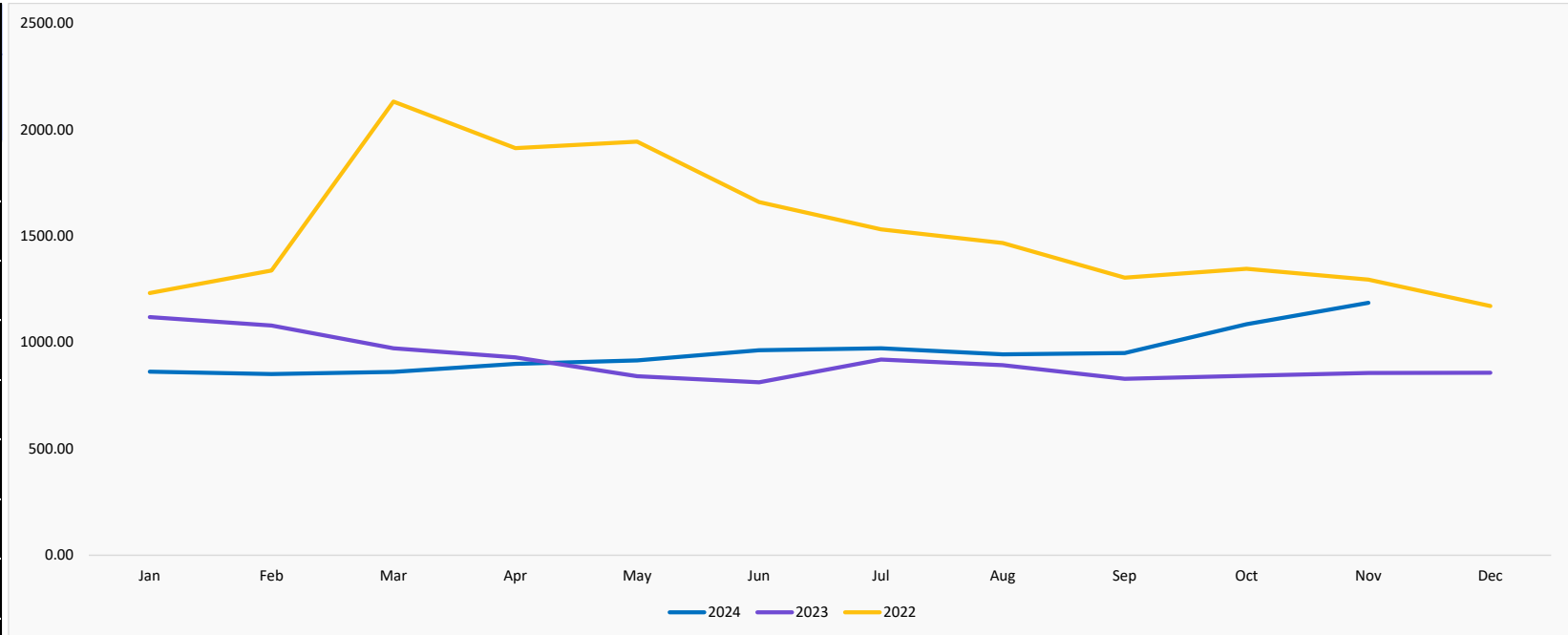
Monthly Price Variation

8.40%

NOTE: For prices in USD, please check the excel sent with the presentation

Sunflower Oil - NW Europe

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-22.91%	862.62	1,118.93	1,231.87
February	-21.11%	851.58	1,079.41	1,338.00
March	-11.47%	861.19	972.77	2,131.53
April	-3.26%	899.20	929.52	1,913.11
May	8.77%	915.30	841.50	1,942.98
June	18.53%	962.78	812.28	1,659.90
July	5.77%	972.30	919.25	1,530.73
August	5.64%	943.91	893.52	1,467.51
September	14.67%	949.94	828.42	1,304.05
October	28.79%	1,085.50	842.86	1,346.26
November	38.53%	1,185.67	855.91	1,295.20
December			857.75	1,170.65
Year Average		953.63	912.68	1,527.65



Monthly Price Variation

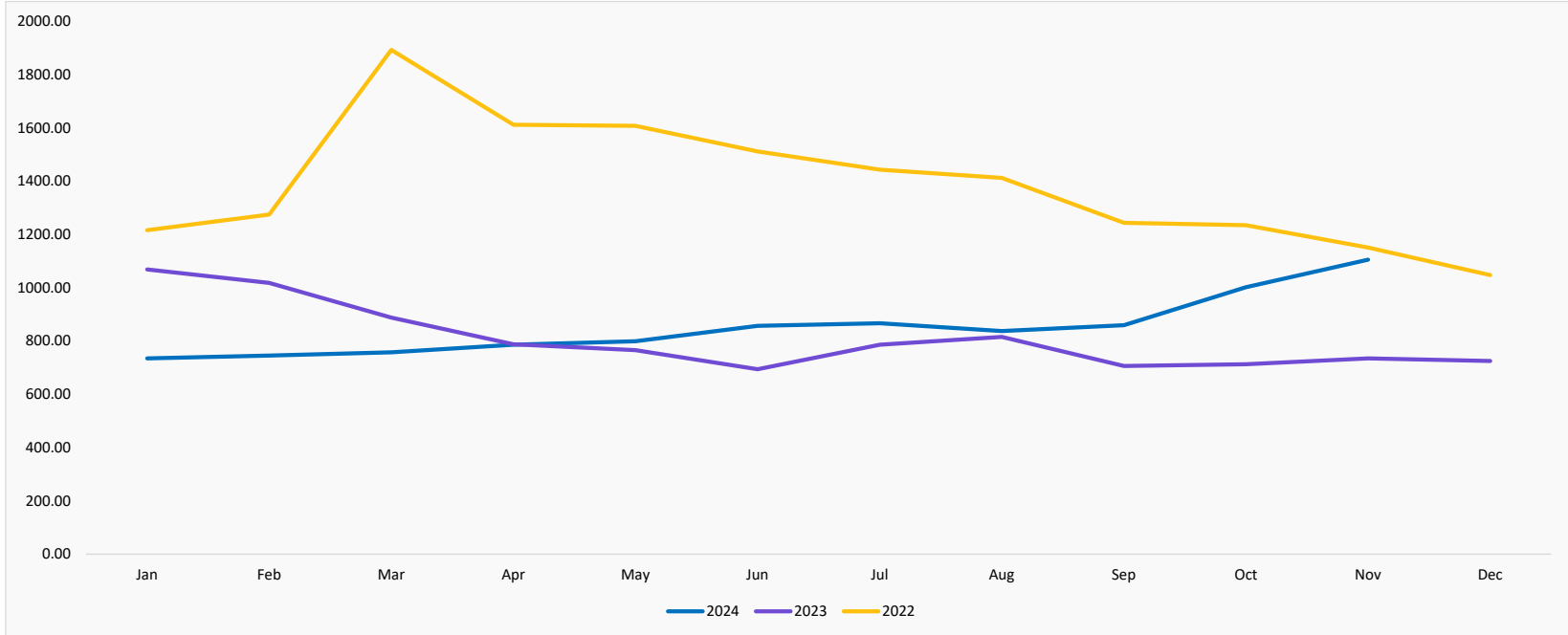
9.23%

NOTE: For prices in USD, please check the excel sent with the presentation

Sunflower Oil - Ukraine

Euro/MT*

MONTH	YoY GROWTH	2024	2023	2022
January	-31.23%	734.66	1,068.33	1,215.99
February	-26.84%	745.14	1,018.52	1,274.50
March	-14.69%	757.55	888.04	1,892.30
April	-0.22%	786.21	787.98	1,611.97
May	4.44%	799.48	765.49	1,607.58
June	23.55%	857.07	693.71	1,511.50
July	10.29%	866.92	786.03	1,443.34
August	2.68%	837.20	815.33	1,411.86
September	21.78%	859.63	705.89	1,243.38
October	40.54%	1,001.62	712.71	1,234.63
November	50.39%	1,104.91	734.70	1,150.65
December			725.17	1,047.19
Year Average		850.04	808.49	1,387.07



Monthly Price Variation

10.31%

NOTE: For prices in USD, please check the excel sent with the presentation

SOFTS

PRICE UPDATE

Softs

Commodity lookup

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Cocoa Beans - United Kingdom (LIFFE)	KG	4.04	6.45	8.18	▶ 26.82%	▶ 102.48%
Cocoa Butter - United Kingdom	KG	8.88	18.11	22.44	▶ 23.91%	▶ 152.70%
Cocoa Liquor - Europe	KG	6.38	13.92	17.08	▶ 22.70%	▶ 167.71%
Cocoa Powder - United Kingdom	KG	2.83	6.47	6.54	▶ 1.08%	▶ 131.10%
Coffee Arabica - Brazil	60 KG	167.75	242.92	287.61	▶ 18.40%	▶ 71.45%
Coffee Arabica - Colombia	MT	3896.40	4902.37	5028.82	▶ 2.58%	▶ 29.06%
Coffee Arabica - ICE US	MT	3599.17	5109.48	5834.47	▶ 14.19%	▶ 62.11%
Coffee Robusta - Brazil	60 KG	124.79	230.99	254.81	▶ 10.31%	▶ 104.18%
Coffee Robusta - LIFFE	MT	2424.63	4348.60	4479.99	▶ 3.02%	▶ 84.77%
Glucose Syrup - USA	KG	1.31	1.26	1.30	▶ 3.17%	▶ -0.76%
Sugar - Brazil	100 KG	63.53	52.24	56.80	▶ 8.74%	▶ -10.60%
Sugar - China	100 KG	114.81	86.39	91.76	▶ 6.22%	▶ -20.08%
Sugar - India	100 KG	63.92	49.46	54.15	▶ 9.48%	▶ -15.29%
Sugar Beet Molasses - Italy	100 KG	31.00	27.50	27.25	▶ -0.91%	▶ -12.10%
Sugar White (#11 - ICE) - USA	100 KG	55.20	45.39	45.27	▶ -0.26%	▶ -17.99%
Sugar White (Beet Or Cane - ICE) - Europe	100 KG	68.32	52.52	52.57	▶ 0.10%	▶ -23.05%
Tea - India	KG	1.85	2.39	2.35	▶ -1.67%	▶ 27.03%

Commodity lookup

The **FAO Sugar Price Index** averaged 126.4 points in November, down 3.1 points (2.4%) from October, following two consecutive monthly increases, and as much as 35.0 points (21.7%) below its level a year ago. The decline in November is attributed to the start of the crushing season in India and Thailand, along with eased concerns over next year's crop prospects in Brazil. While increased rainfall in key southern growing regions of Brazil disrupted harvest progress during the month, it improved soil moisture, benefiting the upcoming crop after a prolonged period of dry weather. Additionally, the weakening of the Brazilian real against the United States dollar and lower international crude oil prices contributed to the decline in world sugar prices.

Source: FAO

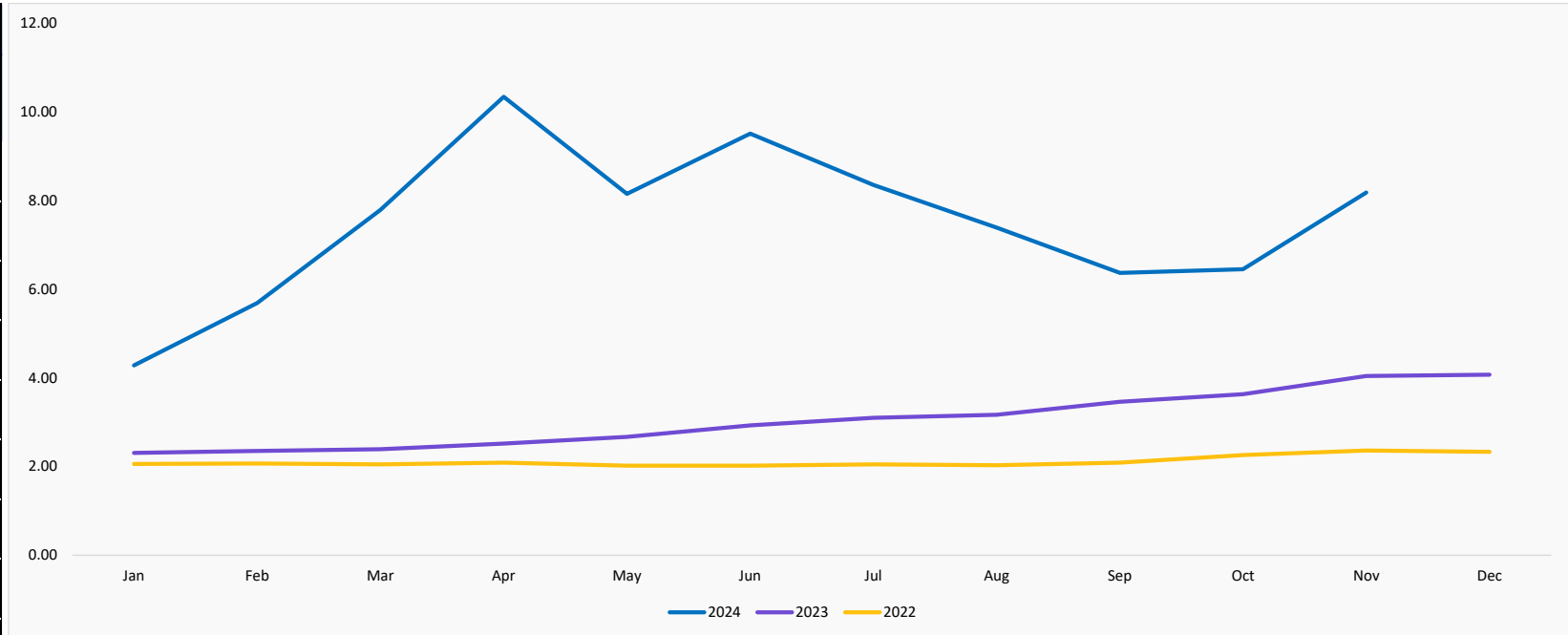
Coffee – 03rd December 2024

Brazilian Coffee Price News focuses on surging prices and heightened market uncertainty. Despite initial expectations for a recovery in Brazil's 24/25 coffee crop, persistent drought conditions and reduced production forecasts have sparked significant volatility. Market participants report that while downbeat forecasts for Brazil's upcoming season are well known, no one has a clear sense of where the market's ceiling might be or how long elevated prices will endure. In mid-November, the USDA's Foreign Agricultural Service (FAS) adjusted its projection for Brazil's 24/25 coffee crop to **66.4 million bags**, a sharp drop from the previously forecast **69.9 million bags**. This figure brings the outlook nearly in line with the poor 23/24 crop severely affected by hot and dry weather. Industry observers note that these lowered estimates are a key driver behind recent price rallies, contributing to bullish sentiment across global coffee markets. Several agronomists had publicly forecast a slight recovery in Brazil's robusta (conilon) crop to around **25 million bags**, suggesting that the arabica harvest might yield little more than **40 million bags**. This shortfall in arabica supply prompts a dramatic round of buying on the exchange. The latest Commitment of Traders (COT) report through 19 November reflects an extension of net long managed money positions, illustrating growing confidence among speculators that current supply tightness will support sustained price strength. Brazil's coffee-growing regions have struggled with poor rainfall since April, compounding several successive dry seasons. According to Cemaden, Brazil is experiencing its **driest weather since 1981**. Early flowering across much of the coffee belt had already raised alarms, making November rainfall critical for setting future price trends. However, Somar Meteorologia recently reported that Minas Gerais, Brazil's largest arabica-producing state, received just 10% of its historical average rainfall last week. Weather-related production concerns, coupled with broader geopolitical factors and the future impact of the European Union's deforestation law, are all fueling recent price gains. As **Brazilian Coffee Price News** continues to highlight, the interplay between reduced crop forecasts, extreme drought, and speculative positioning creates a highly dynamic environment. While robusta production may partially offset arabica shortfalls, overall supply tightness remains a key concern. Until weather conditions improve or producers become more willing to sell at current levels, it appears that coffee prices may remain elevated. Market participants will be closely monitoring rainfall patterns, credit negotiations, and regulatory shifts—factors that will all help determine the future trajectory of Brazil's coffee prices.

Source: Expaña

Cocoa Beans - United Kingdom (LIFFE)

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	85.28%	4.28	2.31	2.06
February	142.13%	5.69	2.35	2.07
March	225.94%	7.79	2.39	2.05
April	310.32%	10.34	2.52	2.09
May	205.24%	8.15	2.67	2.02
June	224.57%	9.51	2.93	2.02
July	169.35%	8.35	3.10	2.05
August	133.12%	7.39	3.17	2.03
September	84.10%	6.37	3.46	2.09
October	77.69%	6.45	3.63	2.26
November	102.48%	8.18	4.04	2.36
December			4.07	2.33
Year Average		7.50	3.05	2.12



Monthly Price Variation

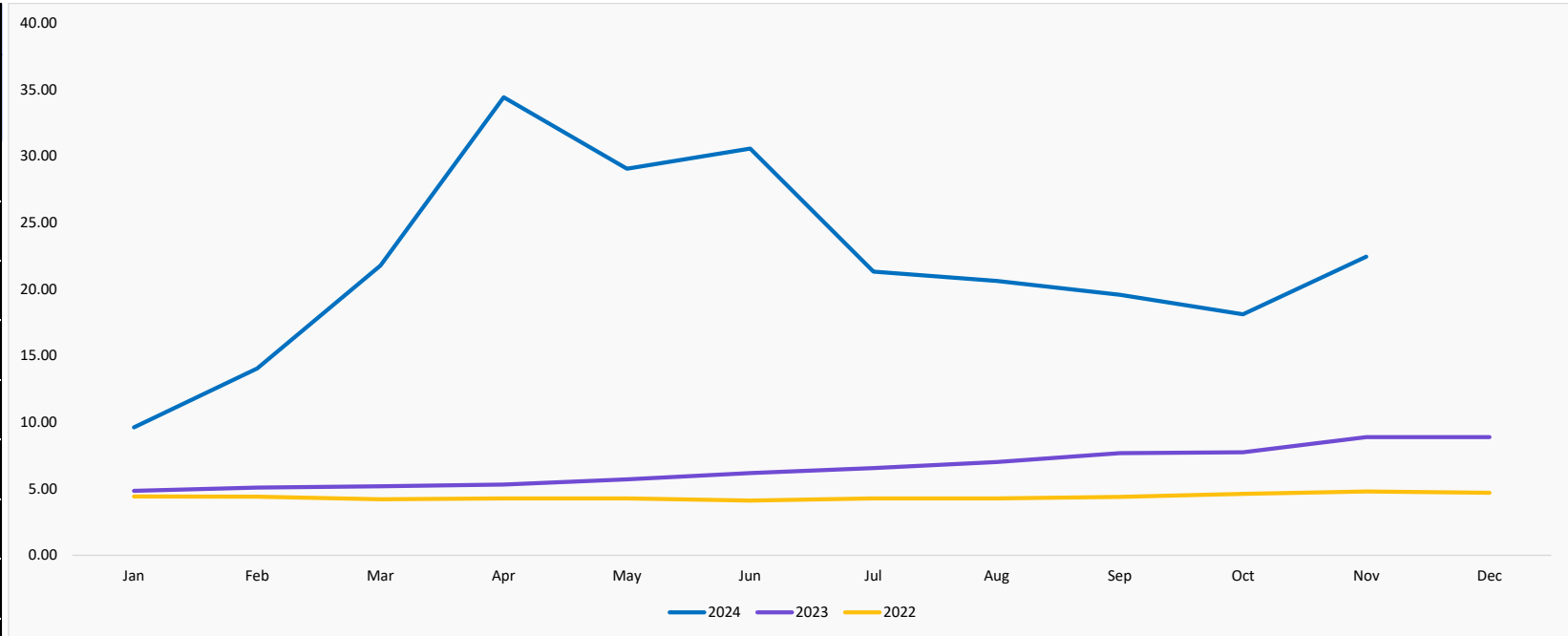
26.82%

NOTE: For prices in USD, please check the excel sent with the presentation

Cocoa Butter - United Kingdom

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	98.55%	9.61	4.84	4.42
February	176.38%	14.04	5.08	4.41
March	320.46%	21.78	5.18	4.20
April	548.40%	34.43	5.31	4.28
May	409.82%	29.06	5.70	4.28
June	394.82%	30.58	6.18	4.11
July	225.00%	21.32	6.56	4.28
August	194.29%	20.63	7.01	4.27
September	154.95%	19.58	7.68	4.38
October	133.98%	18.11	7.74	4.61
November	152.70%	22.44	8.88	4.79
December			8.88	4.70
Year Average		21.96	6.59	4.39



Monthly Price Variation

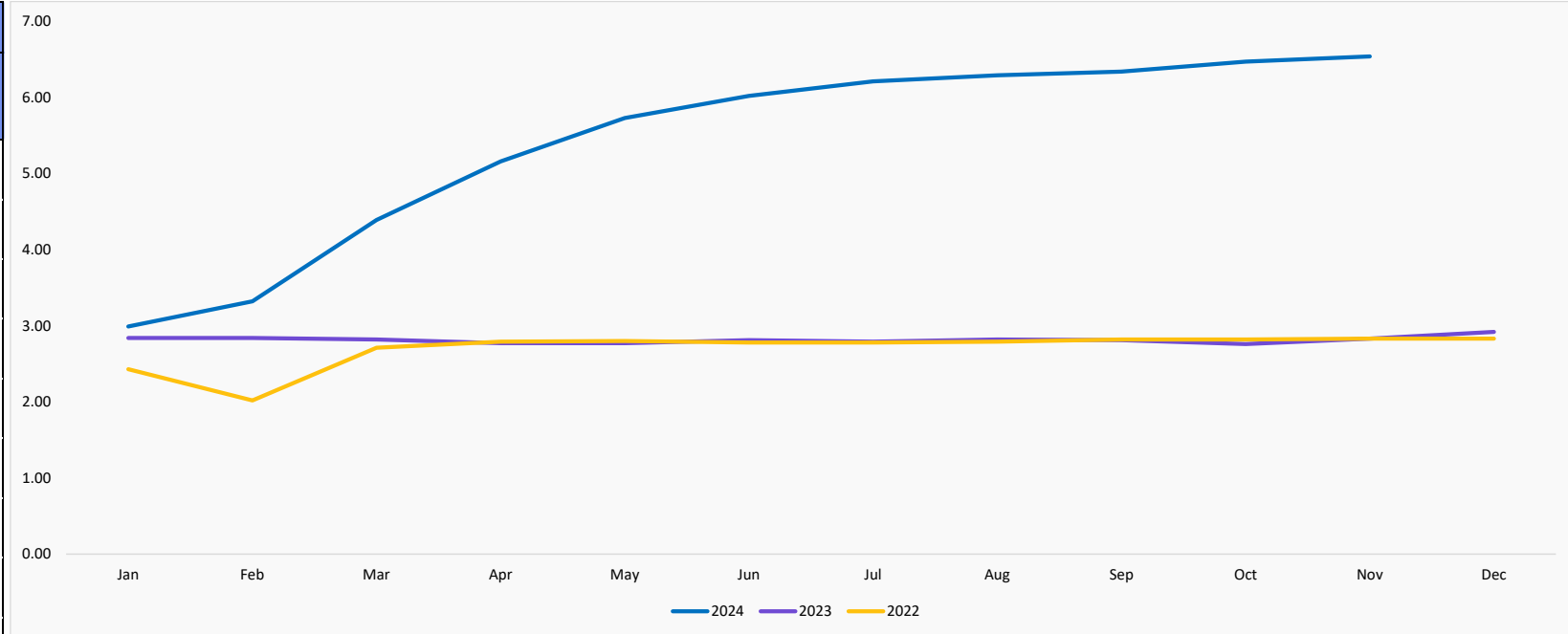
23.91%

NOTE: For prices in USD, please check the excel sent with the presentation

Cocoa Powder - United Kingdom

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	5.28%	2.99	2.84	2.43
February	16.90%	3.32	2.84	2.02
March	55.67%	4.39	2.82	2.71
April	86.28%	5.16	2.77	2.79
May	106.86%	5.73	2.77	2.80
June	114.23%	6.02	2.81	2.78
July	122.58%	6.21	2.79	2.78
August	123.05%	6.29	2.82	2.79
September	125.62%	6.34	2.81	2.82
October	134.42%	6.47	2.76	2.82
November	131.10%	6.54	2.83	2.83
December			2.92	2.83
Year Average		5.41	2.82	2.70



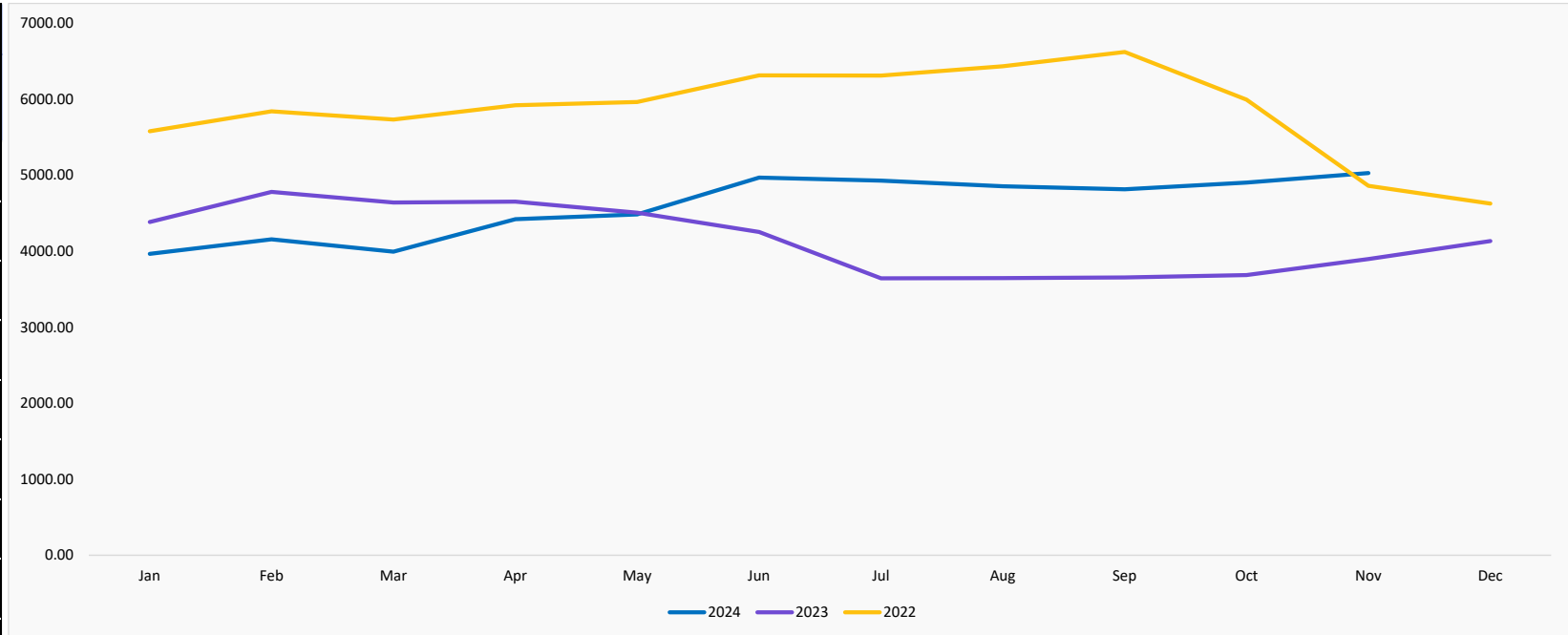
Monthly Price Variation

1.08%

NOTE: For prices in USD, please check the excel sent with the presentation

Coffee Arabica - Colombia

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-9.56%	3,964.27	4,383.10	5,579.46
February	-13.04%	4,156.35	4,779.71	5,841.60
March	-13.92%	3,994.33	4,640.19	5,732.67
April	-4.92%	4,422.37	4,651.37	5,920.10
May	-0.49%	4,483.76	4,505.64	5,962.64
June	16.79%	4,968.59	4,254.38	6,313.99
July	35.33%	4,929.61	3,642.75	6,311.40
August	33.18%	4,854.36	3,644.98	6,433.46
September	31.69%	4,813.35	3,655.07	6,621.74
October	32.96%	4,902.37	3,686.96	5,993.69
November	29.06%	5,028.82	3,896.40	4,860.58
December			4,133.07	4,627.89
Year Average		4,592.56	4,156.14	5,849.93



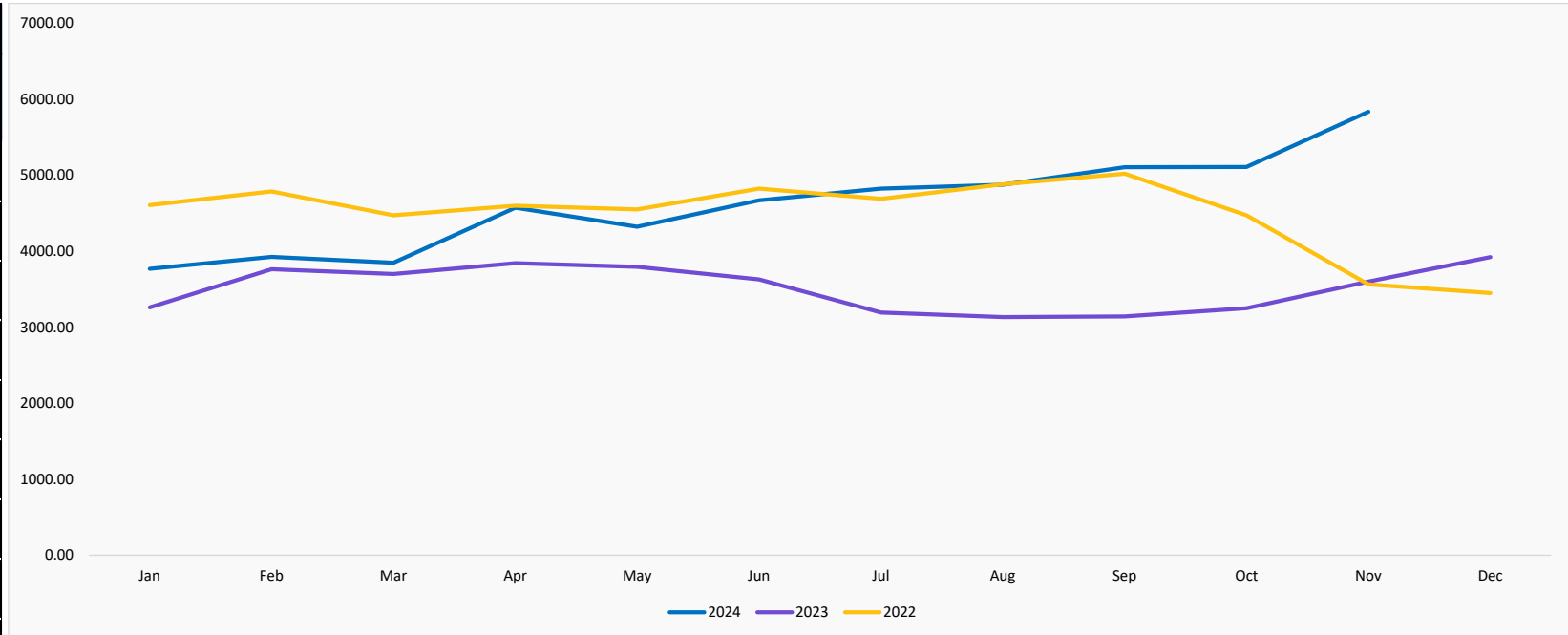
Monthly Price Variation

2.58%

NOTE: For prices in USD, please check the excel sent with the presentation

Coffee Arabica - ICE US

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	15.51%	3,767.28	3,261.47	4,606.25
February	4.28%	3,924.88	3,763.94	4,786.14
March	4.08%	3,849.72	3,698.86	4,471.81
April	18.96%	4,572.99	3,844.12	4,597.39
May	13.86%	4,320.79	3,794.97	4,550.15
June	28.63%	4,669.02	3,629.67	4,823.84
July	51.00%	4,822.84	3,193.96	4,690.20
August	55.58%	4,875.01	3,133.40	4,880.51
September	62.58%	5,105.89	3,140.44	5,019.36
October	57.27%	5,109.48	3,248.80	4,473.11
November	62.11%	5,834.47	3,599.17	3,564.30
December			3,923.07	3,450.88
Year Average		4,622.94	3,519.32	4,492.83



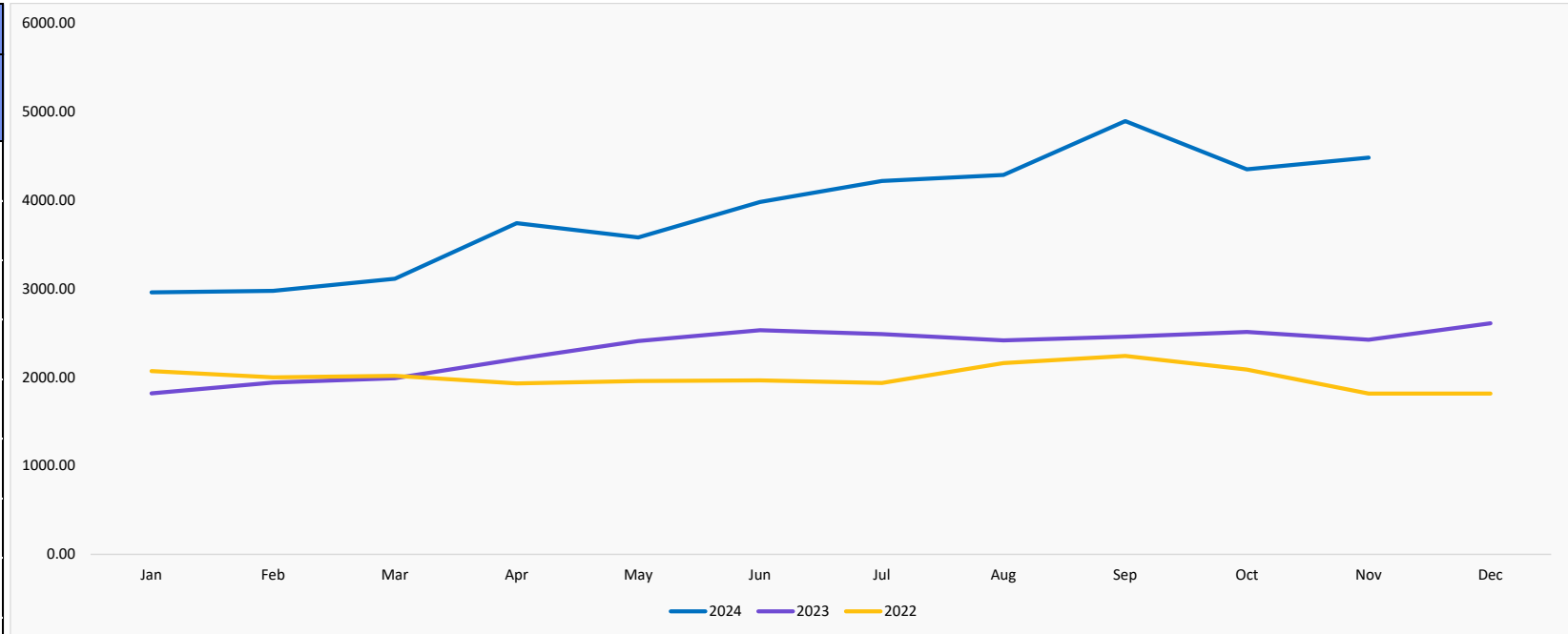
Monthly Price Variation

14.19%

NOTE: For prices in USD, please check the excel sent with the presentation

Coffee Robusta - LIFFE

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	62.77%	2,960.27	1,818.73	2,069.46
February	53.33%	2,976.50	1,941.19	1,998.61
March	56.45%	3,113.12	1,989.85	2,015.54
April	69.38%	3,739.78	2,207.87	1,929.74
May	48.52%	3,579.12	2,409.94	1,956.37
June	57.22%	3,979.27	2,530.98	1,964.05
July	69.53%	4,216.57	2,487.15	1,934.72
August	77.34%	4,286.45	2,417.06	2,159.48
September	99.04%	4,893.32	2,458.41	2,241.52
October	73.07%	4,348.60	2,512.60	2,087.73
November	84.77%	4,479.99	2,424.63	1,814.74
December			2,609.32	1,815.38
Year Average		3,870.27	2,317.31	1,998.94



Monthly Price Variation

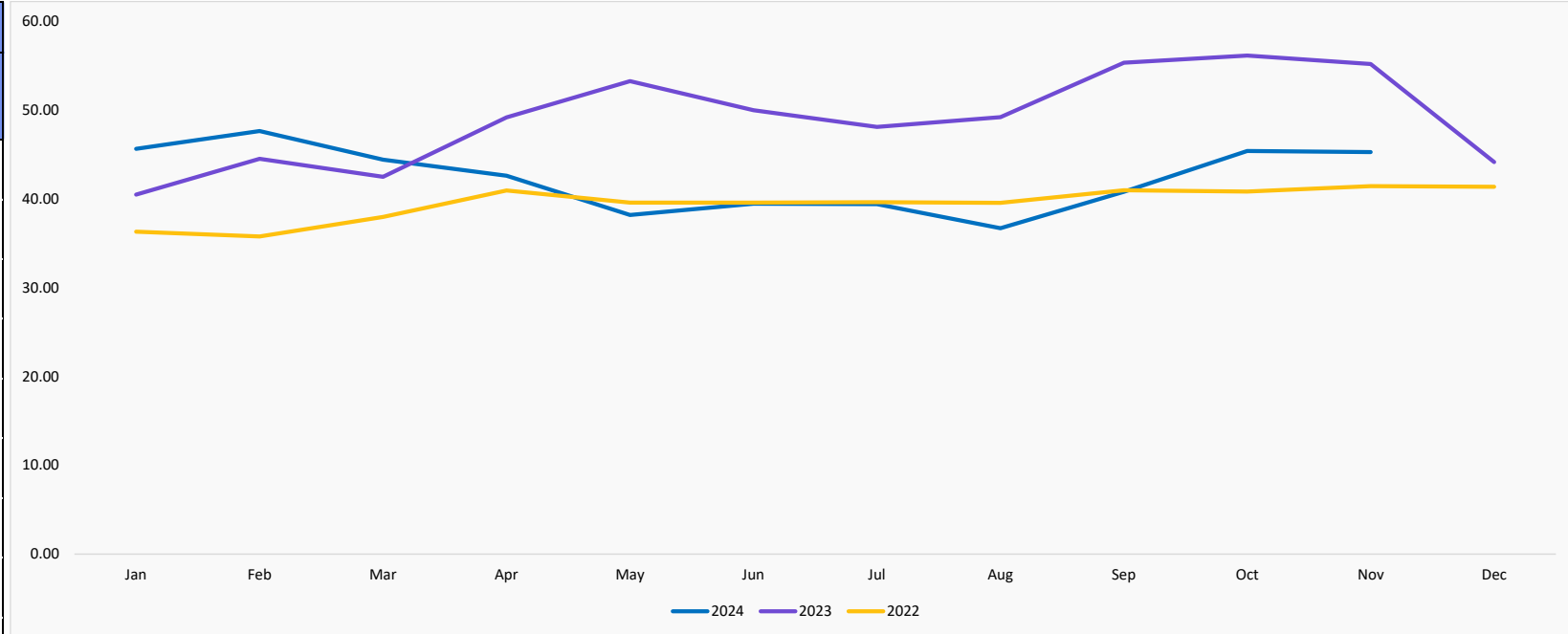
3.02%

NOTE: For prices in USD, please check the excel sent with the presentation

Sugar White (#11 - ICE) - USA

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	12.72%	45.64	40.49	36.30
February	7.03%	47.64	44.51	35.76
March	4.49%	44.41	42.50	37.96
April	-13.40%	42.60	49.19	40.94
May	-28.28%	38.19	53.25	39.58
June	-21.08%	39.46	50.00	39.59
July	-18.05%	39.42	48.10	39.64
August	-25.40%	36.71	49.21	39.56
September	-26.24%	40.81	55.33	40.97
October	-19.15%	45.39	56.14	40.84
November	-17.99%	45.27	55.20	41.45
December			44.15	41.36
Year Average		42.32	49.01	39.50



Monthly Price Variation

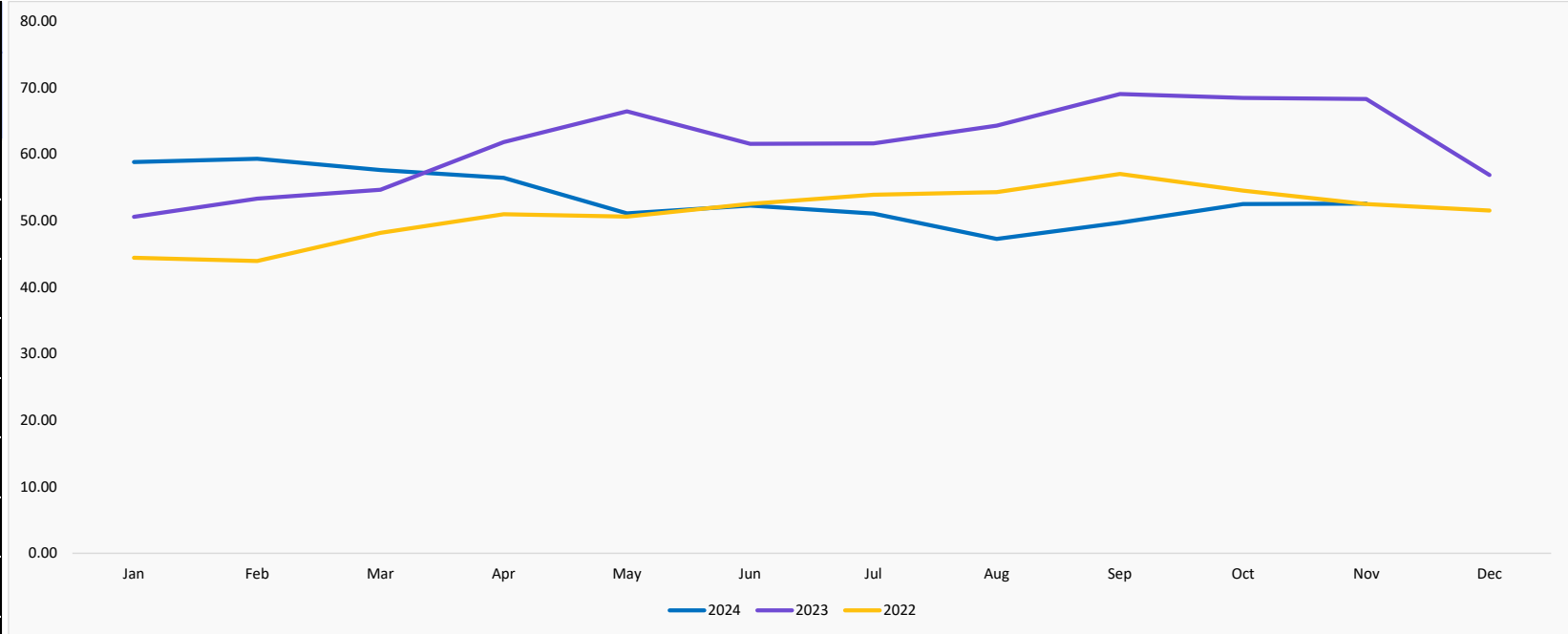
-0.26%

NOTE: For prices in USD, please check the excel sent with the presentation

Sugar White (Beet Or Cane - ICE) - Europe

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	16.28%	58.84	50.60	44.45
February	11.23%	59.33	53.34	43.96
March	5.47%	57.64	54.65	48.20
April	-8.67%	56.46	61.82	50.98
May	-23.10%	51.10	66.45	50.63
June	-15.06%	52.29	61.56	52.54
July	-17.09%	51.09	61.62	53.92
August	-26.50%	47.26	64.30	54.32
September	-28.00%	49.73	69.07	57.03
October	-23.31%	52.52	68.48	54.54
November	-23.05%	52.57	68.32	52.50
December			56.87	51.55
Year Average		53.53	61.42	51.22



Monthly Price Variation

0.10%

NOTE: For prices in USD, please check the excel sent with the presentation

NUTS & DRIED FRUITS

PRICE UPDATE

| Nuts & Dried Fruits

Commodity lookup

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Almonds - Spain	KG	2.77	3.88	4.00	▶ 3.09%	▶ 44.40%
Almonds - USA	KG	3.82	5.17	5.59	▶ 8.04%	▶ 46.24%
Apricots - Turkey	KG	6.18	4.58	4.65	▶ 1.53%	▶ -24.76%
Brazil Nut - Brazil	KG	6.10	10.70	11.10	▶ 3.74%	▶ 81.97%
Cashews - Vietnam	KG	5.47	7.55	7.92	▶ 4.90%	▶ 44.79%
Currants - United King	KG	2.81	2.90	2.95	▶ 1.72%	▶ 4.98%
Hazelnuts - Turkey	KG	6.54	6.48	6.94	▶ 7.10%	▶ 6.12%
Macadamia - Europe	KG	9.90	12.99	13.46	▶ 3.62%	▶ 35.96%
Peanuts - China	KG	1.65	1.70	1.75	▶ 2.94%	▶ 6.06%
Peanuts - Rotterdam	KG	1.81	1.64	1.66	▶ 1.22%	▶ -8.29%
Pecan - USA	KG	9.32	10.45	11.08	▶ 6.03%	▶ 18.88%
Pine Nuts - Italy	KG	56.20	53.00	53.00	▶ 0.00%	▶ -5.69%
Pistachios - USA	KG	7.04	8.69	9.02	▶ 3.77%	▶ 28.13%
Raisins - Turkey	KG	2.65	3.62	3.78	▶ 4.42%	▶ 42.64%
Sultanas - Turkey	KG	2.40	3.32	3.45	▶ 3.92%	▶ 43.75%
Walnuts - USA	KG	3.85	4.21	4.55	▶ 8.08%	▶ 18.18%

| Nuts & Dried Fruits

Commodity lookup

California Walnuts 2024/25: Shrinking Crop, Growing Prices - The 2024/25 California walnuts crop is forecast at 600,000 inshell tons, marking a significant decrease compared to industry expectations. This lower output has pushed many packers to sell off inventory faster than planned, contributing to rising prices. For growers, this price increase offers some respite after facing unsustainably low prices in previous seasons. However, the smaller crop size limits the full potential of these benefits, creating a bittersweet situation for many in the industry.

Source: Commodity Board

Indian Peanut Market Struggles; Weak Global Demand - Peanut seed prices have plummeted in India, reaching their lowest levels this season. Demand for peanut-based products remains muted, while the influx of peanuts into the market has slowed slightly. A portion of farmers, selling peanuts to meet personal financial needs, has further pressured the market. The bumper peanut crop in Madhya Pradesh and Uttar Pradesh, estimated at 1.5 million tonnes, has added to Gujarat's market woes. Traders in Uttar Pradesh have been offloading peanuts at any price, while stockists holding last year's inventory are also selling at steep discounts, unable to clear their stocks from warehouses.

Source: Commodity Board

Cashew - Market insiders confirm that cashew prices rise due to strong underlying demand, supply chain adjustments, and strategic buying. Even as prices escalate, consumers appear to maintain their appetite for cashews. Early pre-buying—partly due to potential logistical issues, port strikes, and geopolitical uncertainties—supported these price hikes. Now, as prices remain elevated, buyers and sellers are adapting. Some buyers secured ample supply at lower prices, while others cautiously wait for more favorable market conditions. With elevated cashew kernel prices, ongoing geopolitical volatility, fluctuating freight rates, and currency shifts (such as the strengthening US dollar), the global cashew market remains in flux. Many traders believe that, moving forward, buyers in Western markets have time on their side as inventories remain relatively comfortable. Still, the fundamental backdrop of tight carry-over stocks, rising input costs, and shifting demand patterns suggests cashew prices rise may persist into the near future. As the market navigates these complexities, stakeholders will closely monitor both seasonal crop developments and changing trade flows for clues on where prices head next.

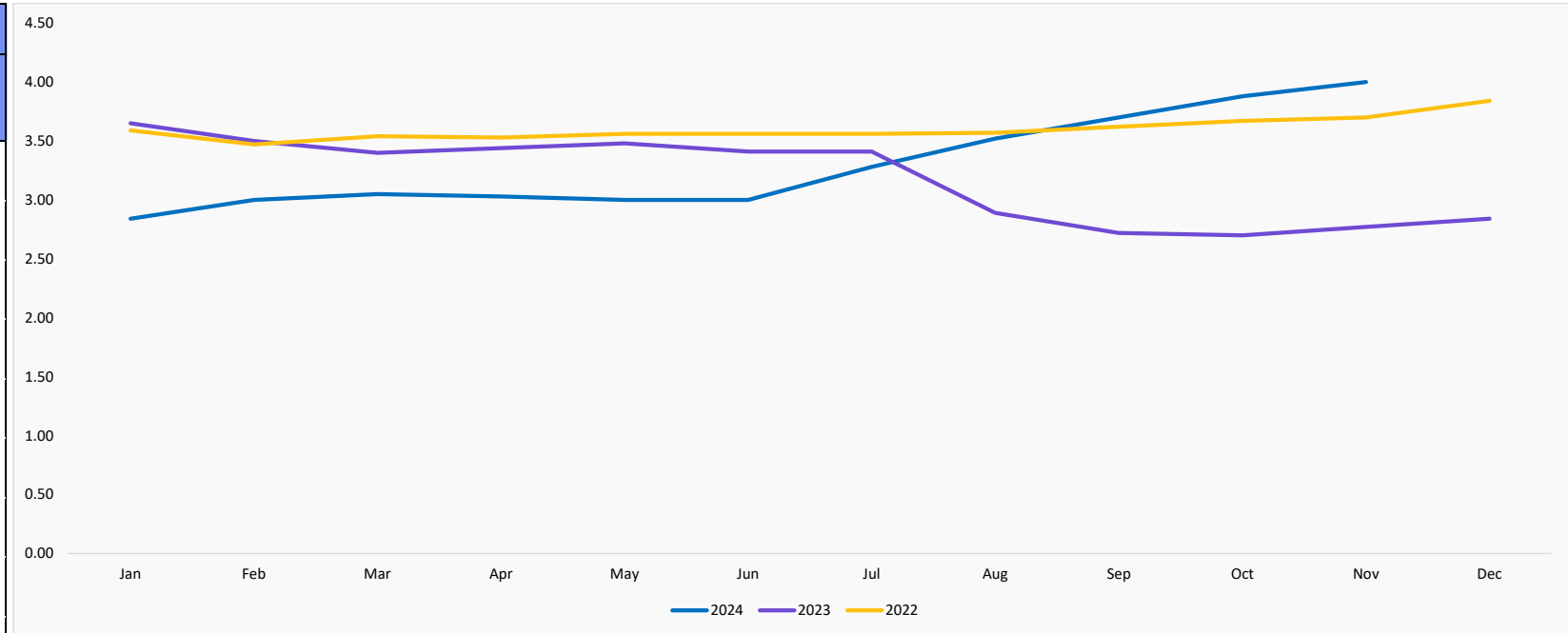
Source: Expana

Dried Apricots – Although prices on the Turkish apricot market have remained stable compared to last week, they can vary significantly depending on the supplier. Due to the cold weather, fewer goods are reaching the markets, but exports are still going well.

Source: Mundus Agri

| Almonds - Spain

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-22.19%	2.84	3.65	3.59
February	-14.29%	3.00	3.50	3.47
March	-10.29%	3.05	3.40	3.54
April	-11.92%	3.03	3.44	3.53
May	-13.79%	3.00	3.48	3.56
June	-12.02%	3.00	3.41	3.56
July	-3.81%	3.28	3.41	3.56
August	21.80%	3.52	2.89	3.57
September	36.03%	3.70	2.72	3.62
October	43.70%	3.88	2.70	3.67
November	44.40%	4.00	2.77	3.70
December			2.84	3.84
Year Average		3.30	3.18	3.60



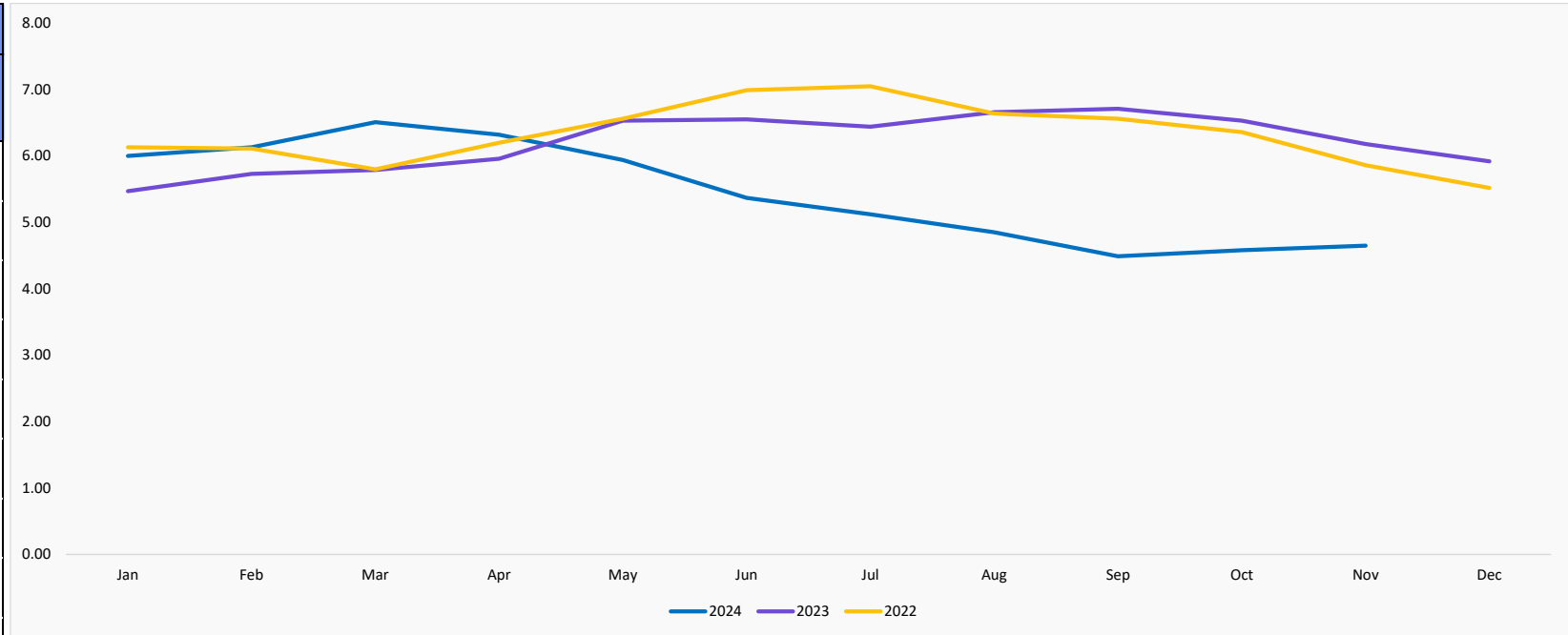
Monthly Price Variation

3.09%

NOTE: For prices in USD, please check the excel sent with the presentation

| Apricots - Turkey

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	9.69%	6.00	5.47	6.13
February	6.98%	6.13	5.73	6.11
March	12.44%	6.51	5.79	5.80
April	6.04%	6.32	5.96	6.20
May	-9.04%	5.94	6.53	6.56
June	-18.02%	5.37	6.55	6.99
July	-20.50%	5.12	6.44	7.05
August	-27.18%	4.85	6.66	6.64
September	-33.08%	4.49	6.71	6.56
October	-29.86%	4.58	6.53	6.36
November	-24.76%	4.65	6.18	5.86
December			5.92	5.52
Year Average		5.45	6.21	6.32



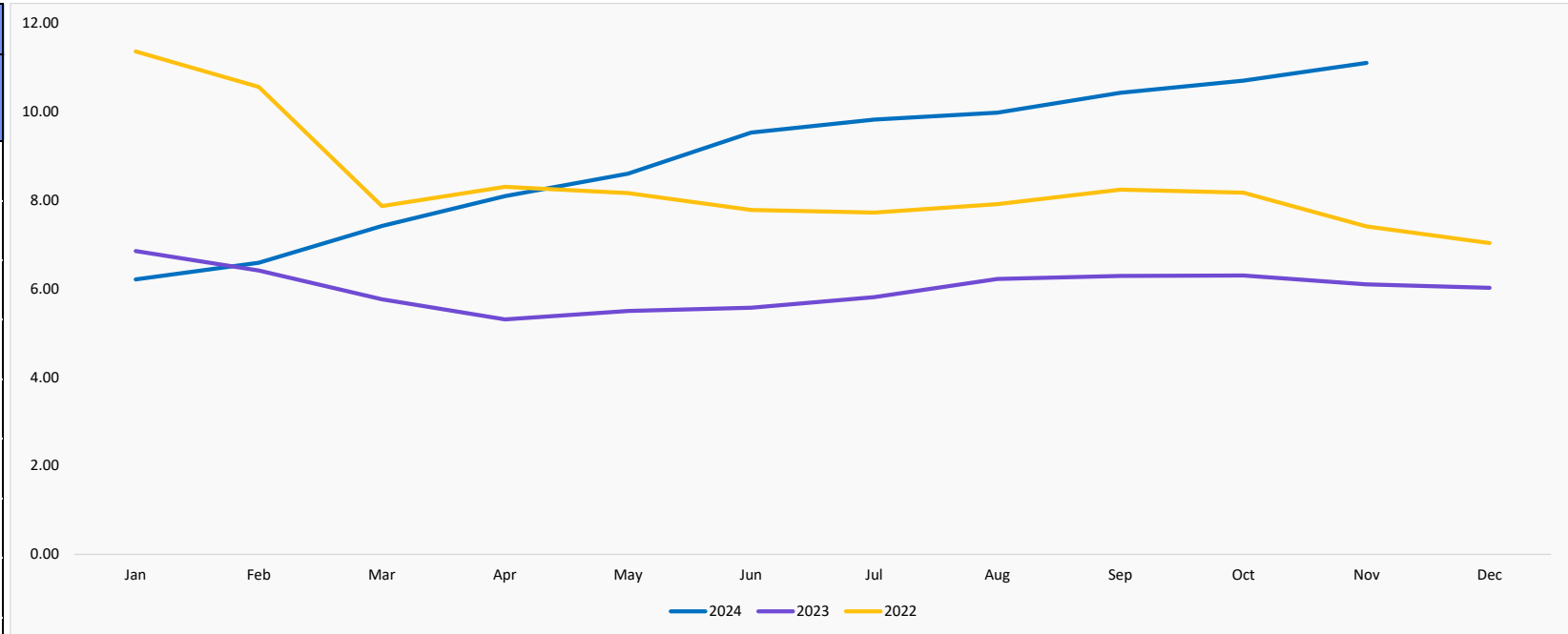
Monthly Price Variation

1.53%

NOTE: For prices in USD, please check the excel sent with the presentation

Brazil Nut - Brazil

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-9.34%	6.21	6.85	11.36
February	2.81%	6.59	6.41	10.56
March	28.82%	7.42	5.76	7.87
April	52.35%	8.09	5.31	8.30
May	56.36%	8.60	5.50	8.16
June	71.10%	9.53	5.57	7.78
July	69.02%	9.82	5.81	7.72
August	60.45%	9.98	6.22	7.91
September	65.82%	10.43	6.29	8.24
October	69.84%	10.70	6.30	8.17
November	81.97%	11.10	6.10	7.41
December			6.02	7.03
Year Average		8.95	6.01	8.38



Monthly Price Variation

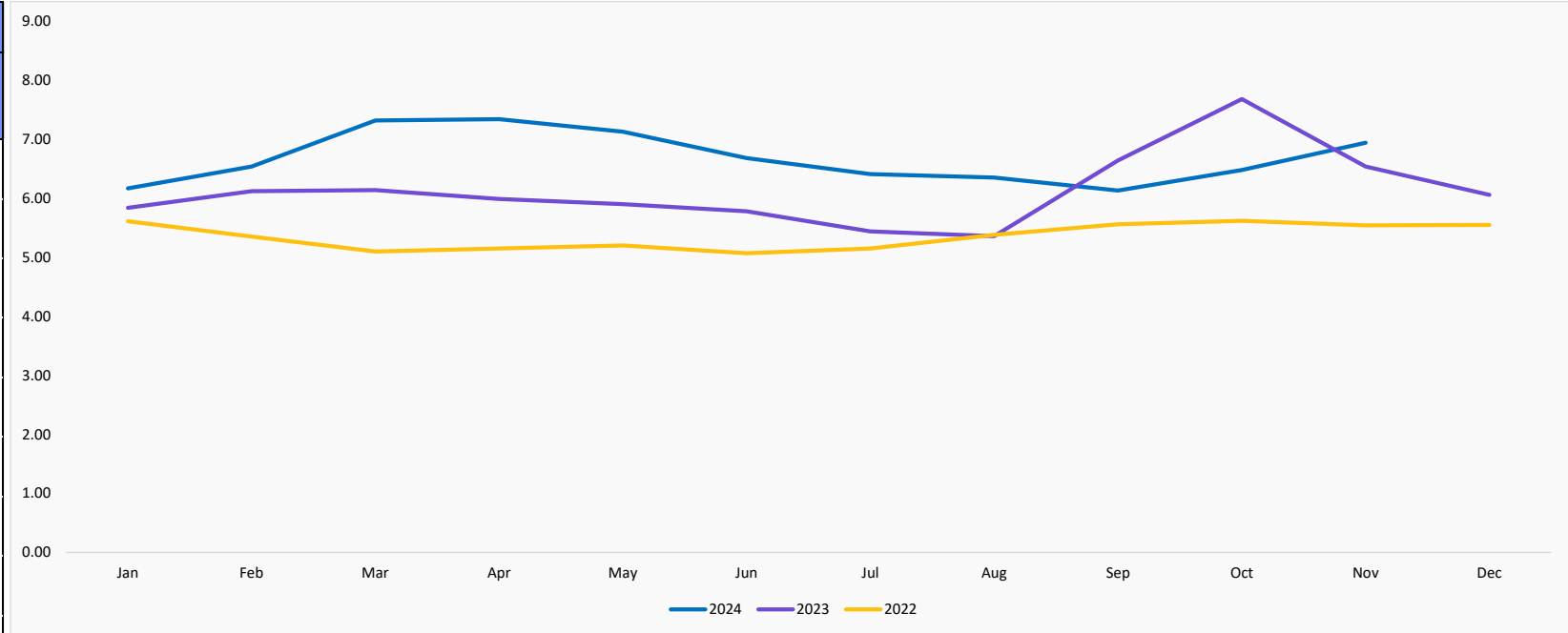
3.74%

NOTE: For prices in USD, please check the excel sent with the presentation

Hazelnuts - Turkey

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	5.65%	6.17	5.84	5.61
February	6.86%	6.54	6.12	5.35
March	19.22%	7.32	6.14	5.10
April	22.54%	7.34	5.99	5.15
May	20.85%	7.13	5.90	5.20
June	15.57%	6.68	5.78	5.07
July	17.83%	6.41	5.44	5.15
August	18.47%	6.35	5.36	5.38
September	-7.68%	6.13	6.64	5.56
October	-15.63%	6.48	7.68	5.62
November	6.12%	6.94	6.54	5.54
December			6.06	5.55
Year Average		6.68	6.12	5.36



Monthly Price Variation

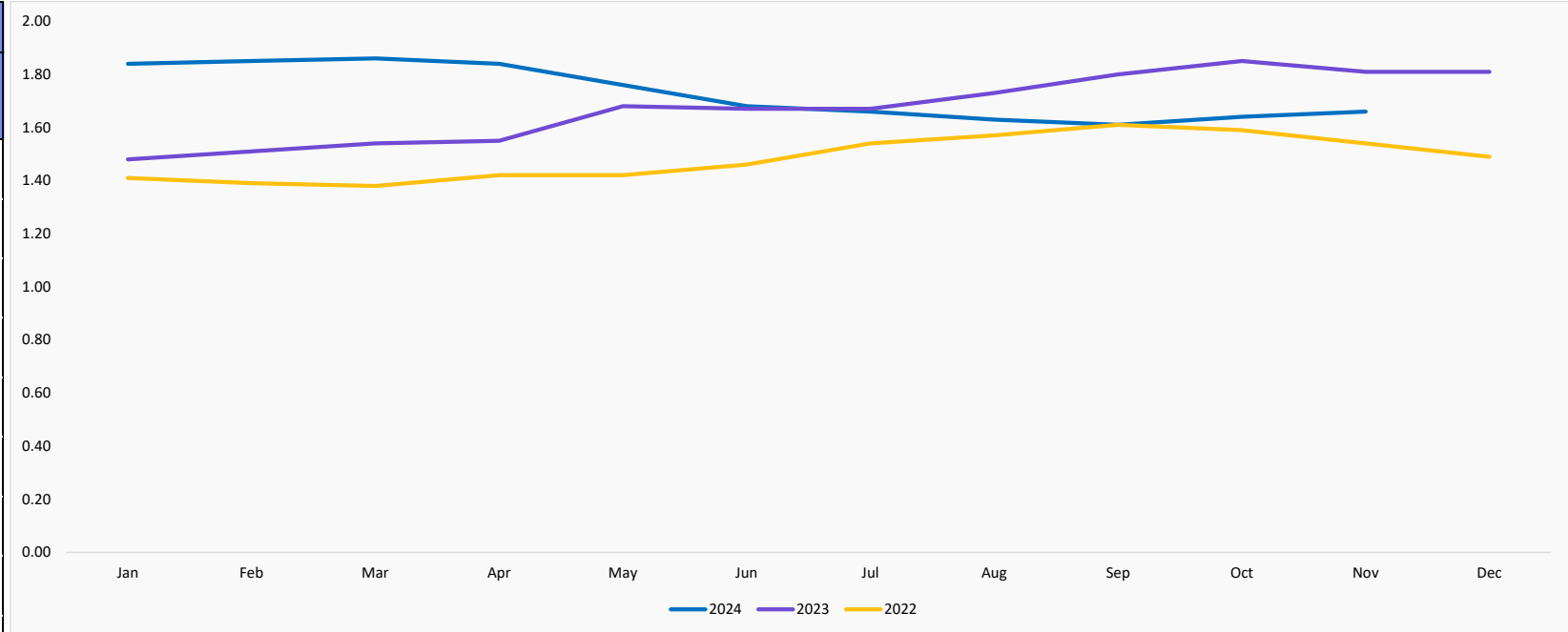
7.10%

NOTE: For prices in USD, please check the excel sent with the presentation

| Peanuts - Rotterdam

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	24.32%	1.84	1.48	1.41
February	22.52%	1.85	1.51	1.39
March	20.78%	1.86	1.54	1.38
April	18.71%	1.84	1.55	1.42
May	4.76%	1.76	1.68	1.42
June	0.60%	1.68	1.67	1.46
July	-0.60%	1.66	1.67	1.54
August	-5.78%	1.63	1.73	1.57
September	-10.56%	1.61	1.80	1.61
October	-11.35%	1.64	1.85	1.59
November	-8.29%	1.66	1.81	1.54
December			1.81	1.49
Year Average		1.73	1.68	1.49



Monthly Price Variation

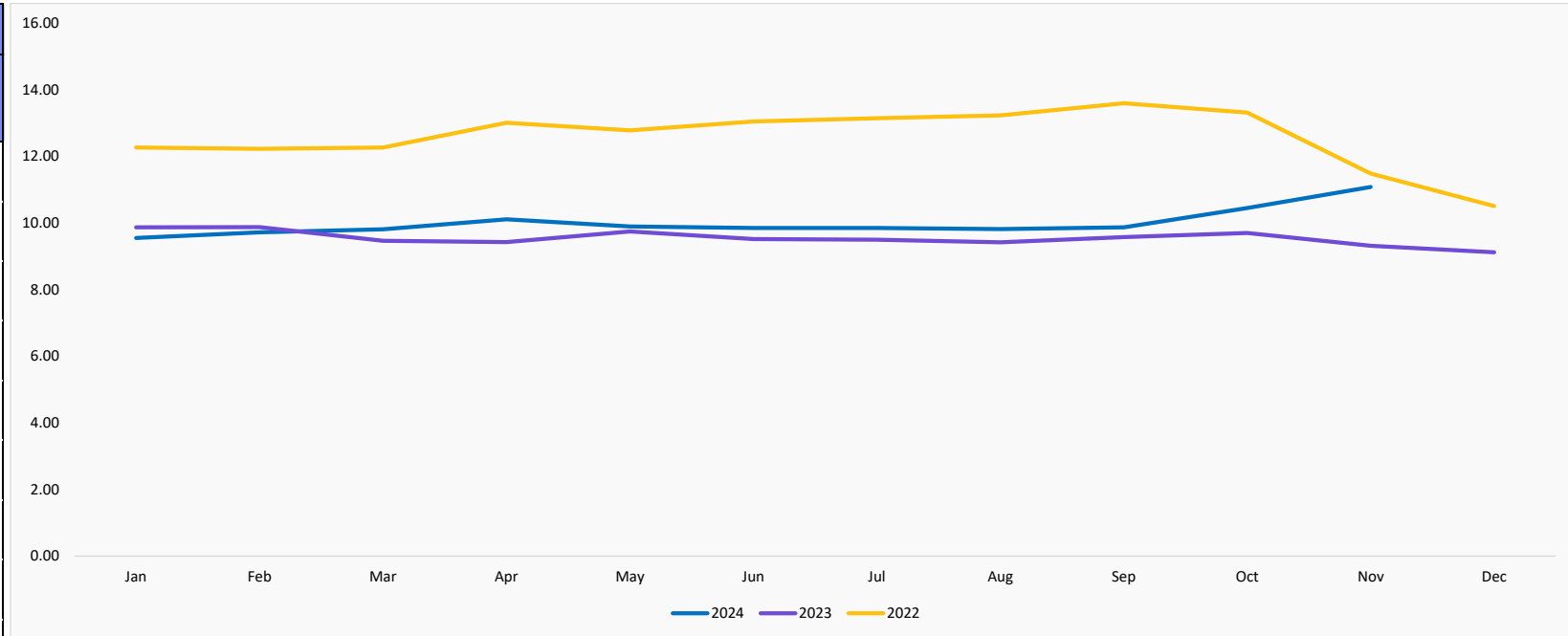
1.22%

NOTE: For prices in USD, please check the excel sent with the presentation

Pecan - USA

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-3.24%	9.55	9.87	12.27
February	-1.62%	9.72	9.88	12.23
March	3.59%	9.81	9.47	12.27
April	7.21%	10.11	9.43	13.01
May	1.54%	9.90	9.75	12.78
June	3.47%	9.85	9.52	13.05
July	3.68%	9.85	9.50	13.15
August	4.25%	9.82	9.42	13.23
September	3.03%	9.87	9.58	13.60
October	7.73%	10.45	9.70	13.32
November	18.88%	11.08	9.32	11.49
December			9.12	10.51
Year Average		10.00	9.55	12.58



Monthly Price Variation

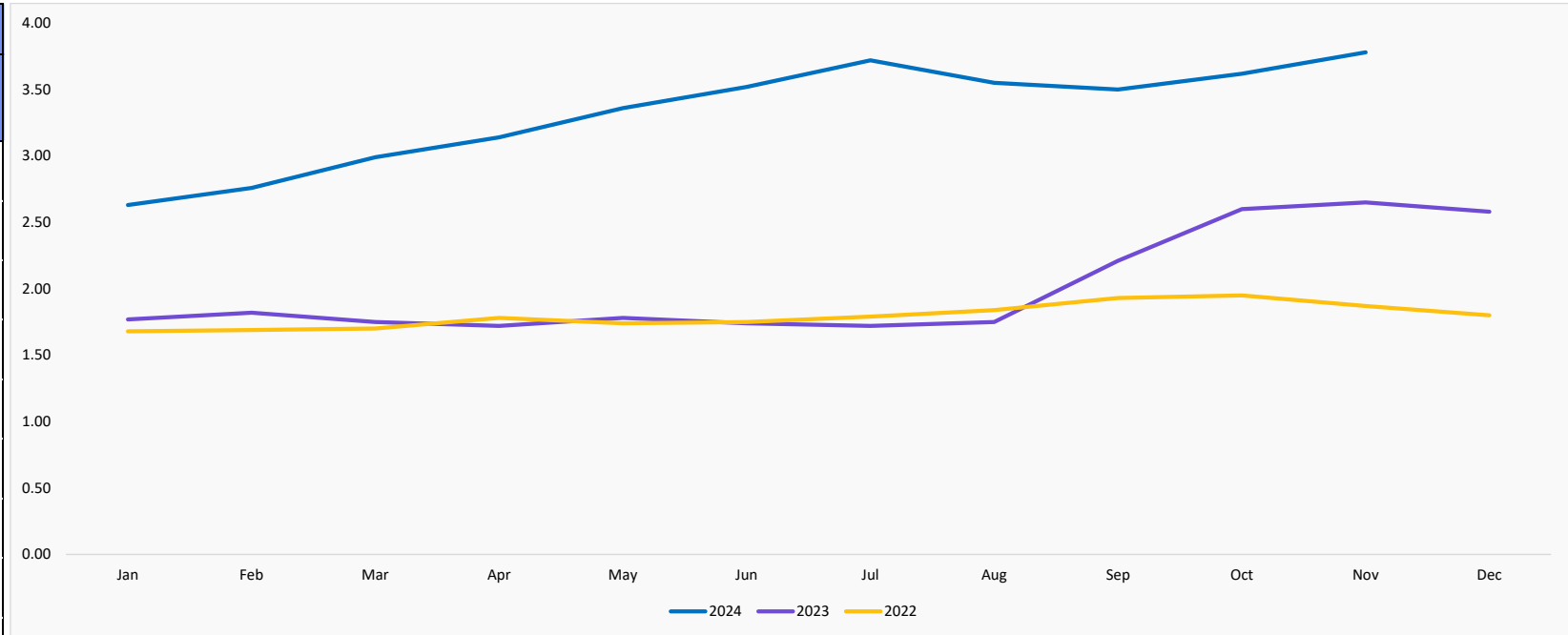
6.03%

NOTE: For prices in USD, please check the excel sent with the presentation

Raisins - Turkey

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	48.59%	2.63	1.77	1.68
February	51.65%	2.76	1.82	1.69
March	70.86%	2.99	1.75	1.70
April	82.56%	3.14	1.72	1.78
May	88.76%	3.36	1.78	1.74
June	102.30%	3.52	1.74	1.75
July	116.28%	3.72	1.72	1.79
August	102.86%	3.55	1.75	1.84
September	58.37%	3.50	2.21	1.93
October	39.23%	3.62	2.60	1.95
November	42.64%	3.78	2.65	1.87
December			2.58	1.80
Year Average		3.32	2.01	1.79



Monthly Price Variation

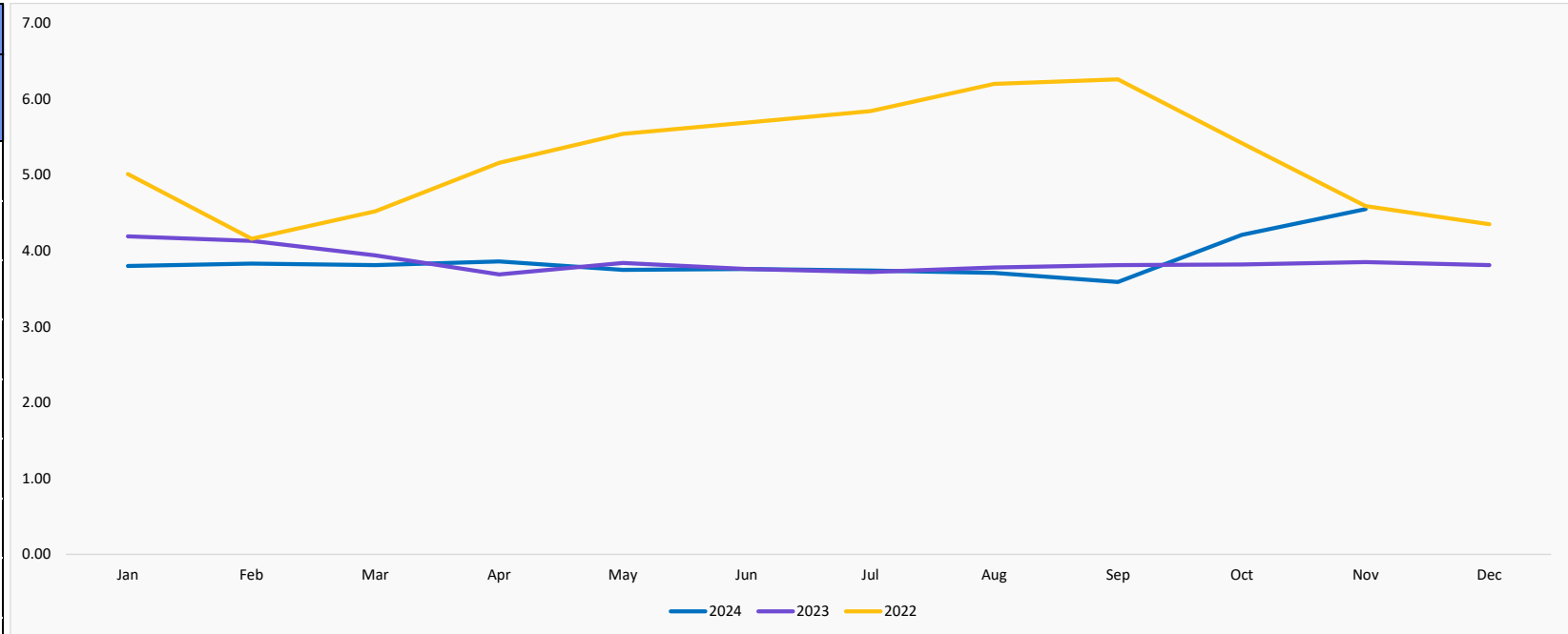
4.42%

NOTE: For prices in USD, please check the excel sent with the presentation

Walnuts - USA

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-9.31%	3.80	4.19	5.01
February	-7.26%	3.83	4.13	4.16
March	-3.30%	3.81	3.94	4.52
April	4.61%	3.86	3.69	5.16
May	-2.34%	3.75	3.84	5.54
June	0.00%	3.76	3.76	5.69
July	0.54%	3.74	3.72	5.84
August	-1.85%	3.71	3.78	6.20
September	-5.77%	3.59	3.81	6.26
October	10.21%	4.21	3.82	5.42
November	18.18%	4.55	3.85	4.59
December			3.81	4.35
Year Average		3.87	3.86	5.23



Monthly Price Variation

8.08%

NOTE: For prices in USD, please check the excel sent with the presentation

LIVESTOCK

PRICE UPDATE

Livestock

Commodity lookup

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Calf - Brazil	100 KG	191.01	187.55	222.31	▶ 18.53%	▶ 16.39%
Calf - Netherlands	100 KG	565.62	583.35	608.29	▶ 4.28%	▶ 7.54%
Chicken - Netherlands	100 KG	113.40	125.40	120.50	▶ -3.91%	▶ 6.26%
Chicken - Portugal	100 KG	130.00	125.00	125.00	▶ 0.00%	▶ -3.85%
Chicken - South Africa	100 KG	184.76	176.12	176.87	▶ 0.43%	▶ -4.27%
Chicken - USA	100 KG	236.49	255.64	264.70	▶ 3.54%	▶ 11.93%
Cow Meat - Europe	100 KG	318.80	436.64	440.27	▶ 0.83%	▶ 38.10%
Cow Meat - Netherlands	100 KG	380.60	460.20	464.75	▶ 0.99%	▶ 22.11%
Cow Meat - Portugal	100 KG	312.60	355.82	349.69	▶ -1.72%	▶ 11.87%
Cow Meat - Romania	100 KG	358.39	390.23	382.74	▶ -1.92%	▶ 6.79%
Cow Meat - USA	100 KG	160.94	237.60	247.19	▶ 4.04%	▶ 53.59%
Lamb - Europe	100 KG	839.30	895.89	920.62	▶ 2.76%	▶ 9.69%
Lamb - USA	100 KG	393.93	327.29	349.12	▶ 6.67%	▶ -11.38%
Pork - Denmark	100 KG	192.29	173.54	172.56	▶ -0.56%	▶ -10.26%
Pork - France	100 KG	187.40	184.00	181.00	▶ -1.63%	▶ -3.42%
Pork - Germany	100 KG	224.00	210.40	204.00	▶ -3.04%	▶ -8.93%
Pork - Netherlands	100 KG	195.22	164.91	161.94	▶ -1.80%	▶ -17.05%
Pork - Poland	100 KG	227.40	209.20	197.75	▶ -5.47%	▶ -13.04%
Pork - Portugal	100 KG	220.20	219.50	212.35	▶ -3.26%	▶ -3.56%
Pork - Romania	100 KG	235.62	217.03	209.71	▶ -3.37%	▶ -11.00%
Pork - Spain	100 KG	200.80	196.40	184.00	▶ -6.31%	▶ -8.37%
Pork - USA	100 KG	129.58	157.90	177.65	▶ 12.51%	▶ 37.10%

| Livestock

Commodity lookup

The **FAO Meat Price Index** averaged 118.1 points in November, down 0.9 points (0.8%) from the revised October value but up 6.6 points (5.9%) from a year ago. The decline was mainly due to lower international pig meat prices, which fell for the fifth consecutive month, principally driven by weaker quotations in the European Union, reflecting abundant supplies and persistently subdued global and domestic demand. Ovine meat prices declined slightly in November, influenced by currency movements despite strong international demand. Similarly, world poultry meat prices fell marginally, pressured by ample export supplies from major producing regions. Meanwhile, international bovine meat quotations remained broadly stable. A sharp rise in Brazilian bovine meat prices, fuelled by robust global demand, was offset by lower Australian prices due to reduced purchasing interest from the USA.

Source: FAO

Global Beef - According to a recent RaboResearch report, **herd contraction in the world's four largest beef-producing countries is going to lead to the first global beef supply reductions since the Covid-19 pandemic and will alter trade flows**. Brazil and the U.S. are likely to lead beef production declines in 2025, but reductions in China, Europe and New Zealand are also likely. RaboResearch reported that an estimated 1% reduction in the global supply versus the prior year is possible. While North American cattle prices have been high for close to two years as a result of the lower cattle numbers and strong consumer demand, other regions have experienced low cattle prices. This trend has started to change as global beef declines and support for cattle prices in South America, Australia, and New Zealand has started to firm up. The report expects beef trade to shift dramatically with available supplies altered across the top global beef markets. According to Angus Gidley-Baird, senior animal protein analyst for RaboResearch and lead author of the "Global Beef Quarterly Q4 2024" report, **Australian beef producers will start to increasingly depend on exports to absorb stronger domestic production, while Brazil will see global markets as a better demand opportunity compared to lacklustre domestic demand**. Beef production has the potential to swing dramatically if weather patterns change. U.S. producers are waiting on more dependable precipitation to rebuild the herd, and Brazilian production is being slowed by rain delays. Australia has maintained relatively adequate precipitation for a few years, but the threat of dryness could lead to more production. The status quo is likely to be maintained for 2025 weather. The latest El Niño Southern Oscillation models are predicting that La Niña weather conditions will persist into the first quarter of 2025 before a transition to a more neutral pattern by midyear. This will support Australian beef production.

Source: Rabobank

Turkey – 10th December 2024

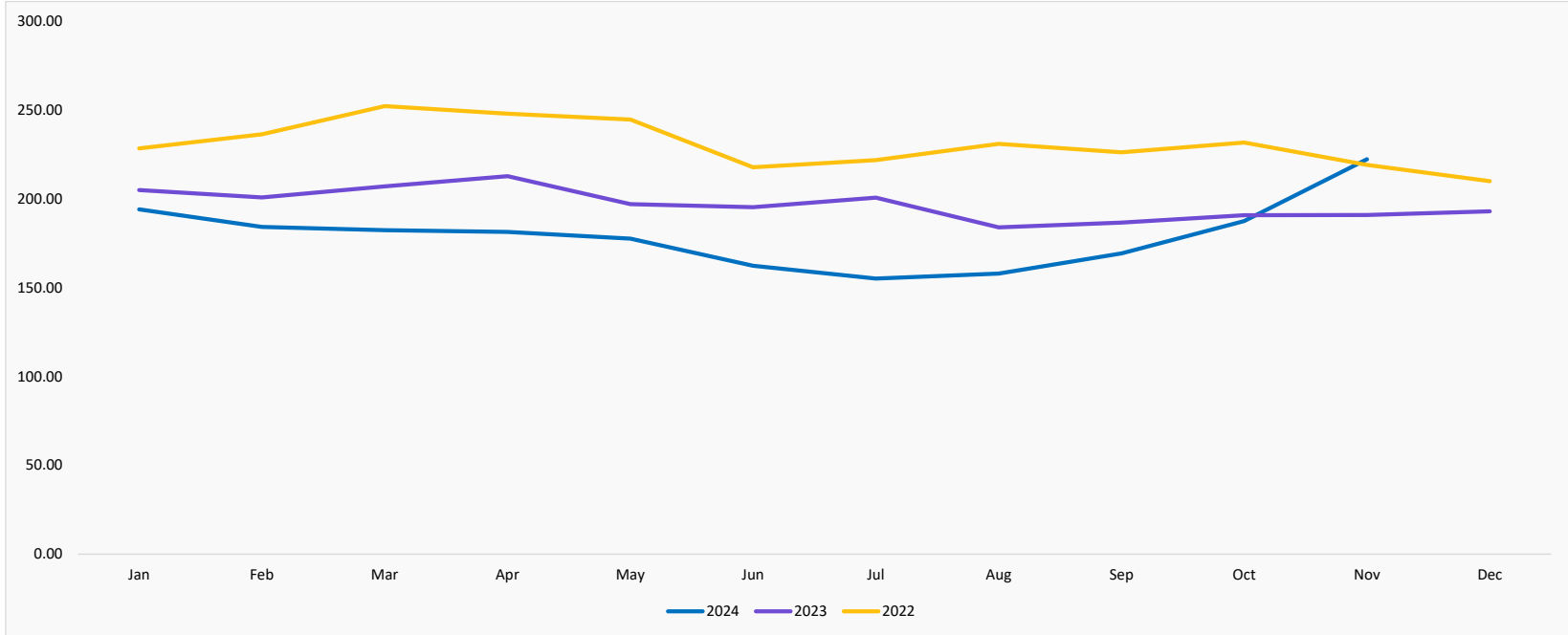
The US turkey shortage continues to intensify, leaving buyers scrambling for limited supplies of parts and raw materials. As processors face multiple challenges—from reduced poul placements to disease pressures—year-to-date slaughter figures have hit record lows. This scarcity has filtered through the supply chain, affecting everything from frozen whole birds to highly sought-after items like turkey necks, tails, and specialty cuts.

Source: Expansa

| Calf - Brazil

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-5.29%	194.10	204.95	228.42
February	-8.26%	184.29	200.88	236.43
March	-11.88%	182.42	207.02	252.28
April	-14.76%	181.43	212.85	248.04
May	-9.85%	177.61	197.02	244.70
June	-16.90%	162.33	195.35	217.88
July	-22.68%	155.19	200.71	221.90
August	-14.16%	157.93	183.98	231.04
September	-9.29%	169.29	186.63	226.27
October	-1.72%	187.55	190.84	231.73
November	16.39%	222.31	191.01	219.16
December			193.00	210.03
Year Average		179.50	197.02	230.66



Monthly Price Variation

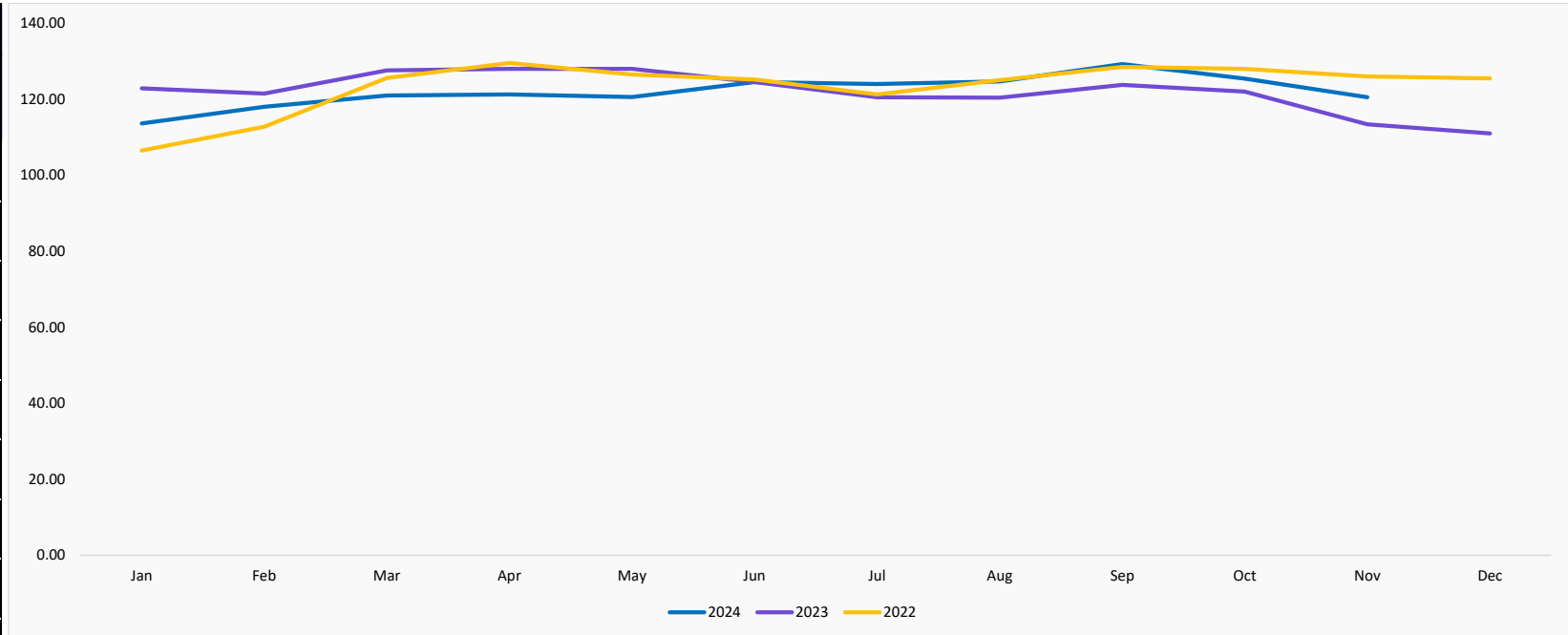
18.53%

NOTE: For prices in USD, please check the excel sent with the presentation

Chicken - Netherlands

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-7.55%	113.60	122.88	106.50
February	-2.88%	118.00	121.50	112.75
March	-5.17%	121.00	127.60	125.60
April	-5.27%	121.25	128.00	129.50
May	-5.78%	120.60	128.00	126.50
June	0.00%	124.50	124.50	125.20
July	2.90%	124.00	120.50	121.25
August	3.55%	124.67	120.40	125.00
September	4.44%	129.25	123.75	128.50
October	2.79%	125.40	122.00	128.00
November	6.26%	120.50	113.40	126.00
December			111.00	125.50
Year Average		122.07	121.96	123.36



Monthly Price Variation

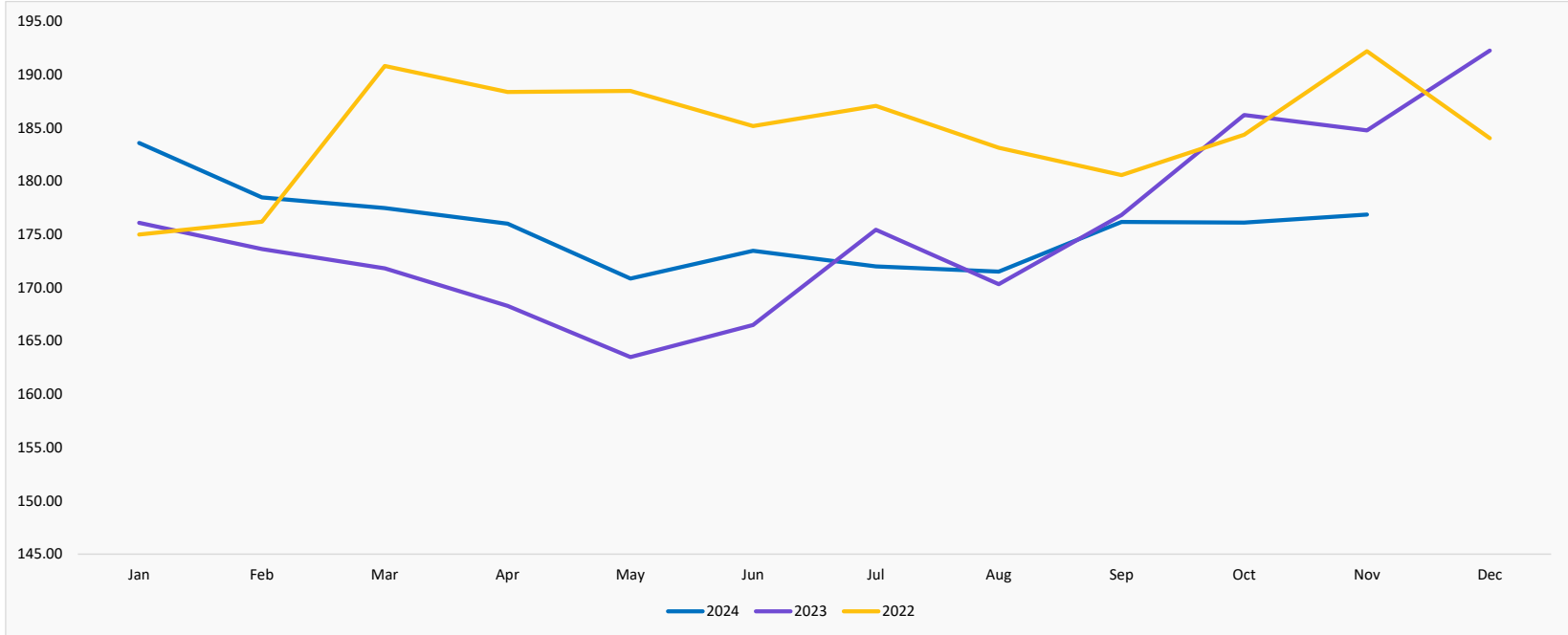
-3.91%

NOTE: For prices in USD, please check the excel sent with the presentation

Chicken - South Africa

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	4.25%	183.59	176.10	175.00
February	2.79%	178.48	173.63	176.20
March	3.29%	177.47	171.81	190.80
April	4.58%	176.01	168.30	188.36
May	4.51%	170.86	163.49	188.46
June	4.18%	173.47	166.51	185.17
July	-1.96%	172.00	175.44	187.06
August	0.69%	171.52	170.34	183.13
September	-0.37%	176.17	176.82	180.57
October	-5.41%	176.12	186.20	184.36
November	-4.27%	176.87	184.76	192.19
December			192.26	184.03
Year Average		175.69	175.47	184.61



Monthly Price Variation

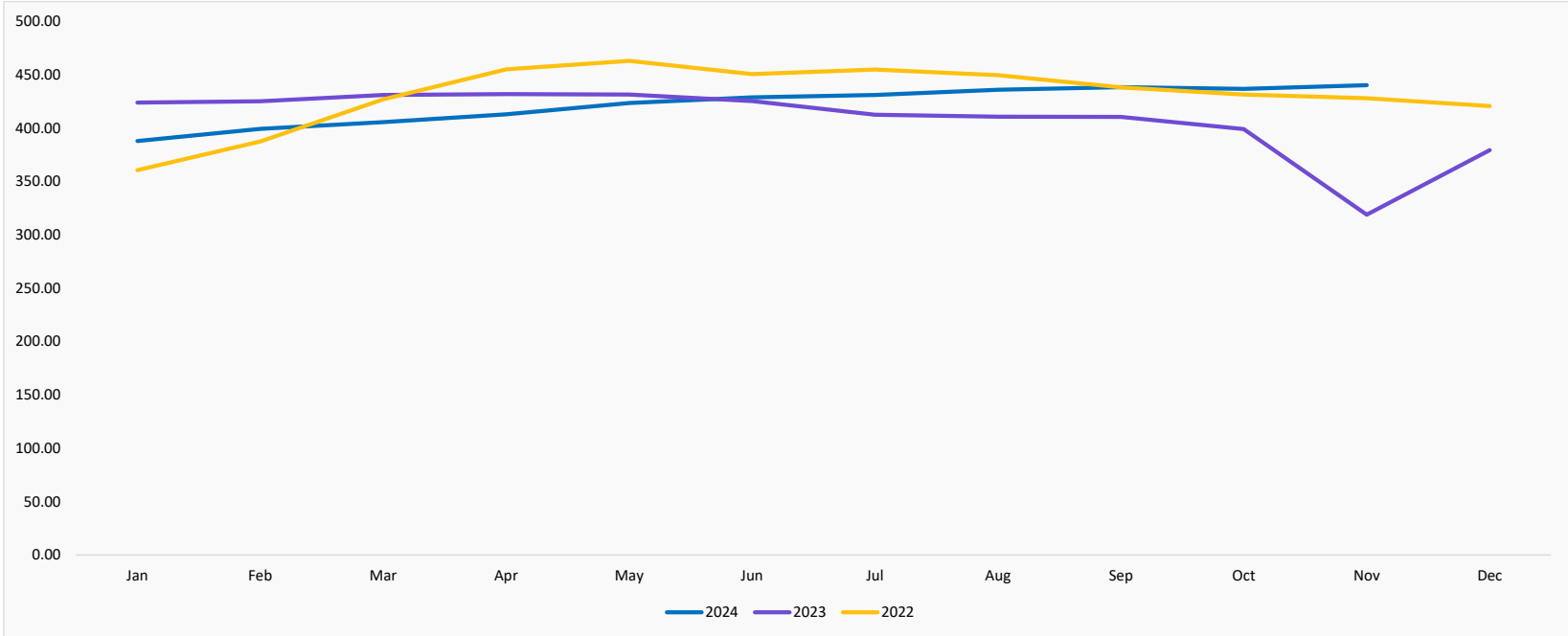
0.43%

NOTE: For prices in USD, please check the excel sent with the presentation

Cow Meat - Europe

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-8.49%	387.82	423.80	360.50
February	-6.06%	399.35	425.12	387.50
March	-5.90%	405.61	431.03	427.00
April	-4.37%	413.00	431.86	455.00
May	-1.86%	423.47	431.49	463.00
June	0.82%	428.80	425.32	450.65
July	4.46%	430.99	412.57	454.91
August	6.14%	435.91	410.68	449.56
September	6.77%	438.29	410.48	438.06
October	9.39%	436.64	399.15	431.39
November	38.10%	440.27	318.80	428.02
December			379.27	420.55
Year Average		421.83	408.30	430.51



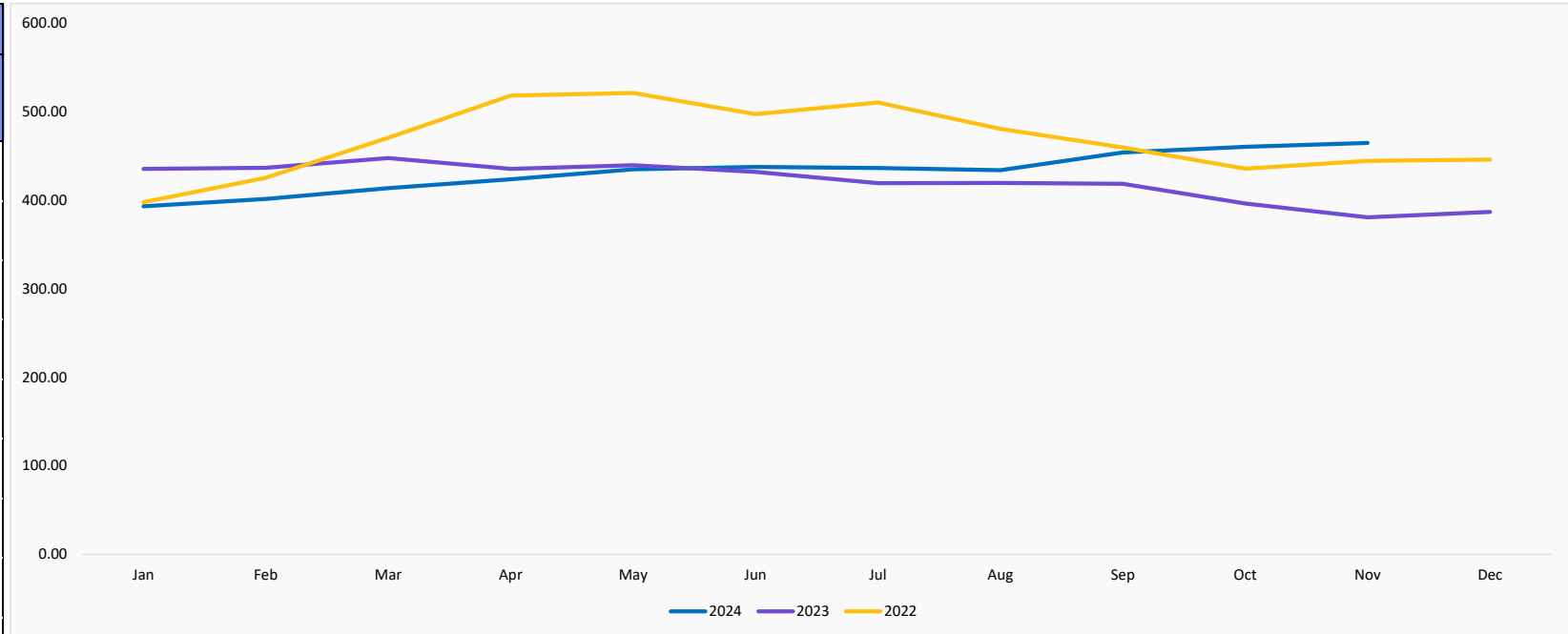
Monthly Price Variation

0.83%

NOTE: For prices in USD, please check the excel sent with the presentation

Cow Meat - Netherlands

Euro/100 KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-9.71%	393.20	435.50	397.75
February	-8.02%	401.50	436.50	425.50
March	-7.56%	413.75	447.60	470.60
April	-2.70%	423.75	435.50	518.25
May	-1.09%	434.80	439.60	521.25
June	1.27%	437.50	432.00	497.20
July	4.09%	436.40	419.25	510.50
August	3.48%	434.00	419.40	480.60
September	8.48%	454.00	418.50	459.50
October	16.14%	460.20	396.25	435.75
November	22.11%	464.75	380.60	444.40
December			386.88	446.00
Year Average		432.17	420.63	467.28



Monthly Price Variation

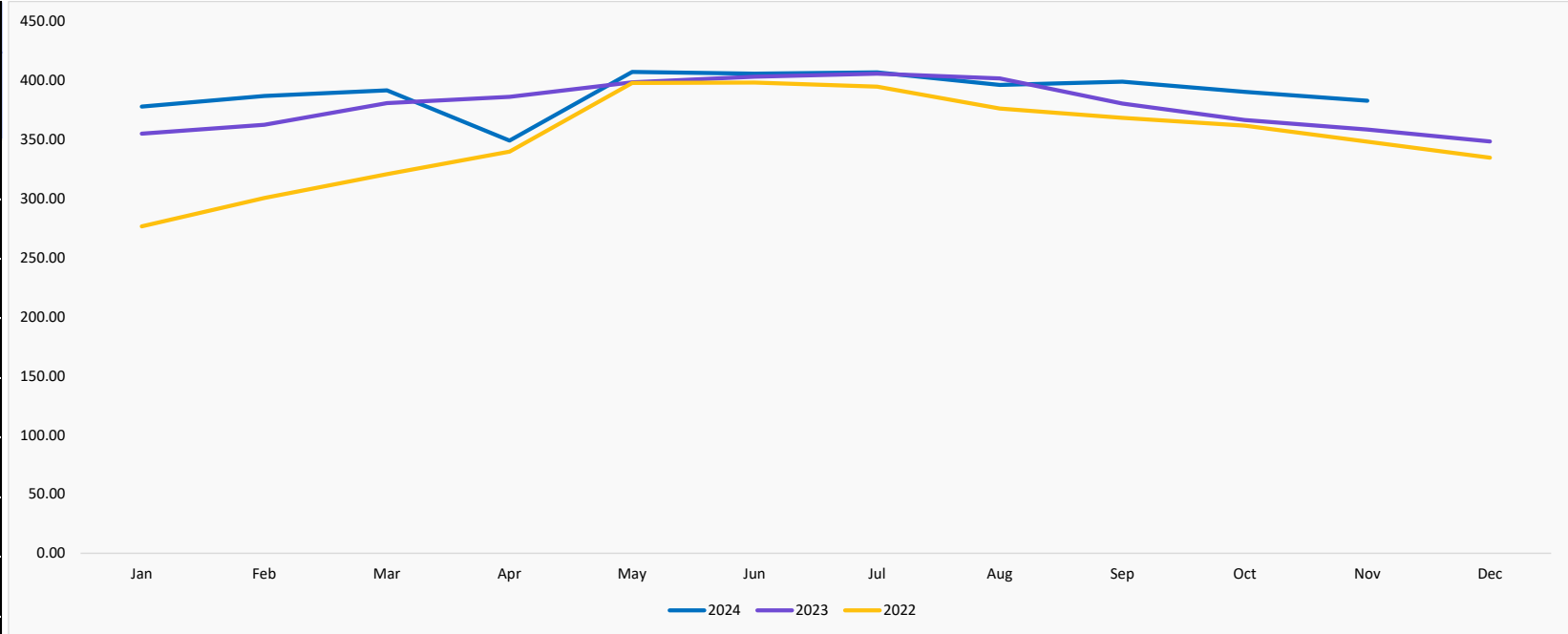
0.99%

NOTE: For prices in USD, please check the excel sent with the presentation

Cow Meat - Romania

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	6.45%	377.87	354.98	276.50
February	6.73%	386.83	362.44	300.50
March	2.84%	391.67	380.85	320.60
April	-9.57%	349.07	386.01	339.75
May	2.20%	407.22	398.45	397.75
June	0.67%	405.78	403.09	398.16
July	0.28%	406.73	405.61	394.61
August	-1.37%	396.24	401.75	376.20
September	4.84%	398.89	380.46	368.38
October	6.47%	390.23	366.53	361.65
November	6.79%	382.74	358.39	348.16
December			348.31	334.60
Year Average		390.30	378.91	351.41



Monthly Price Variation

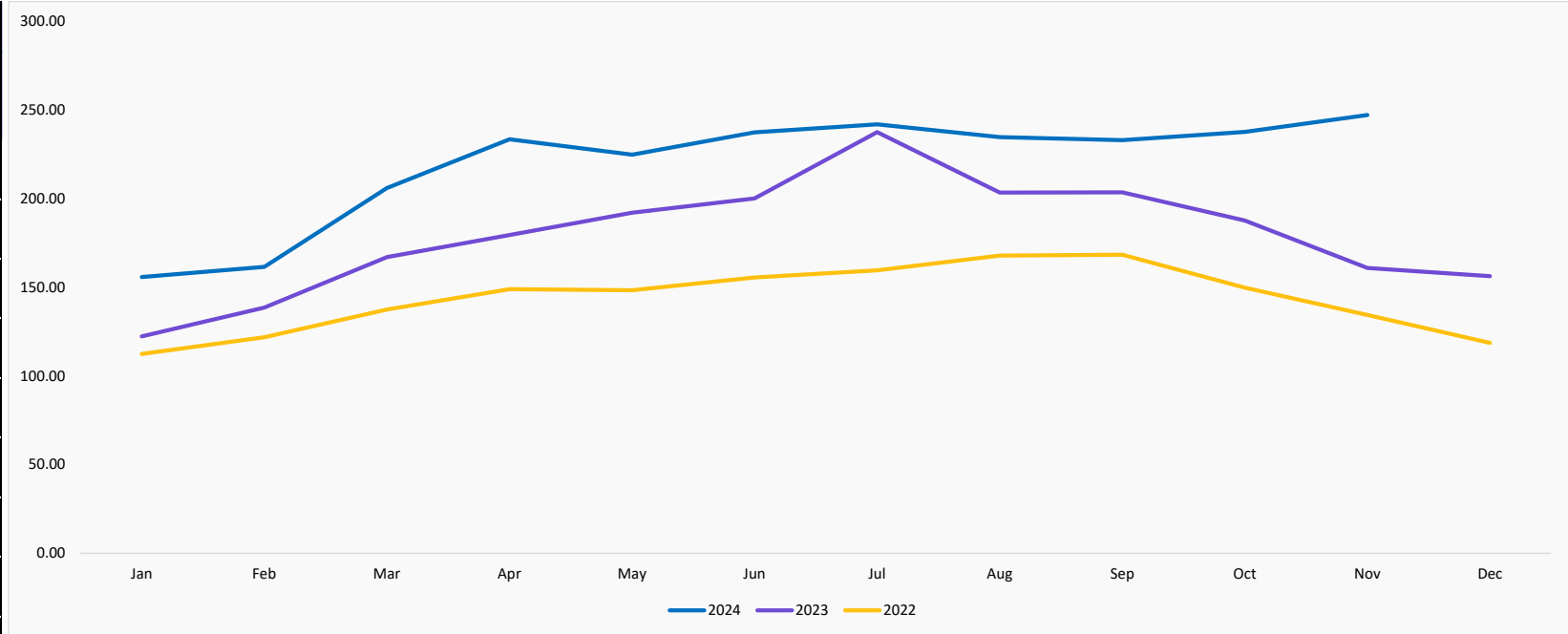
-1.92%

NOTE: For prices in USD, please check the excel sent with the presentation

Cow Meat - USA

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	27.42%	155.77	122.25	112.37
February	16.56%	161.57	138.61	121.87
March	23.37%	205.98	166.96	137.44
April	30.04%	233.43	179.50	148.99
May	17.08%	224.84	192.04	148.28
June	18.62%	237.34	200.09	155.59
July	1.88%	241.92	237.45	159.51
August	15.34%	234.63	203.42	167.88
September	14.45%	232.98	203.57	168.41
October	26.58%	237.60	187.70	149.76
November	53.59%	247.19	160.94	134.38
December			156.23	118.66
Year Average		219.39	179.06	143.60



Monthly Price Variation

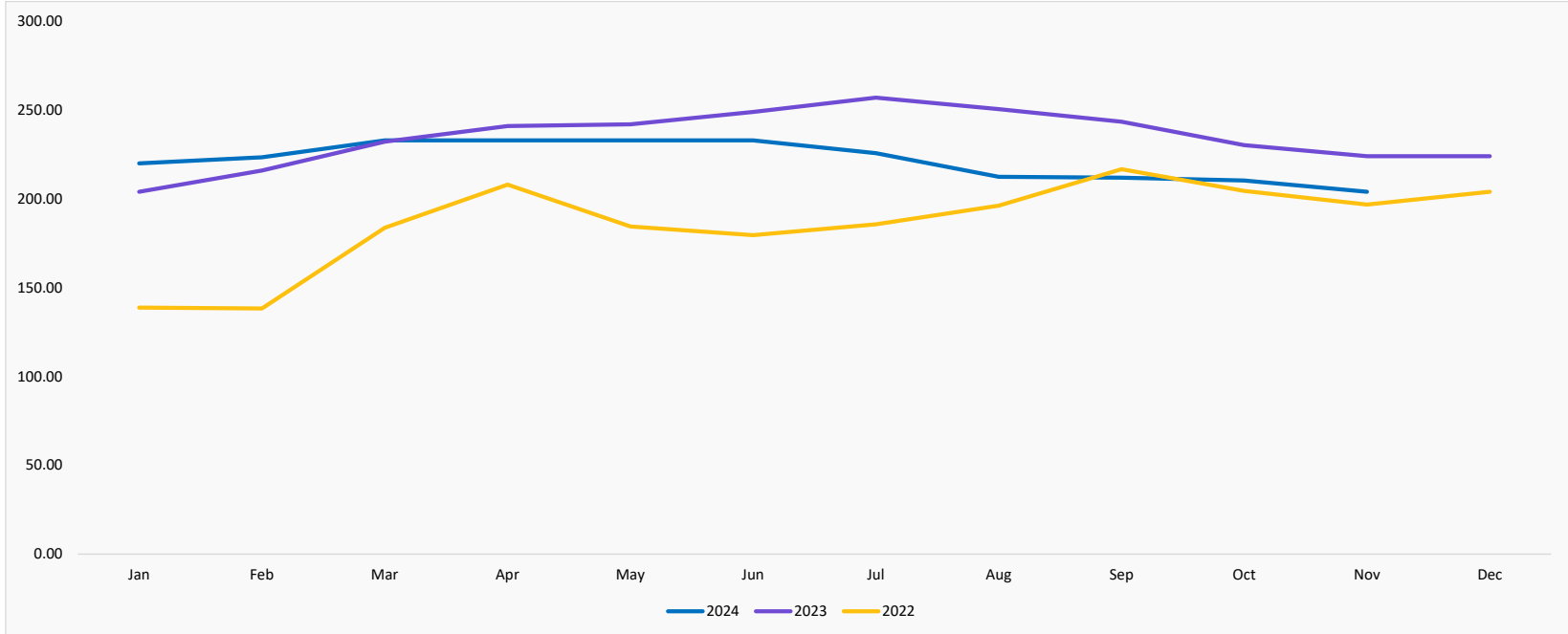
4.04%

NOTE: For prices in USD, please check the excel sent with the presentation

| Pork - Germany

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	7.84%	220.00	204.00	138.75
February	3.47%	223.50	216.00	138.25
March	0.34%	233.00	232.20	183.80
April	-3.32%	233.00	241.00	208.00
May	-3.72%	233.00	242.00	184.50
June	-6.43%	233.00	249.00	179.60
July	-12.14%	225.80	257.00	185.75
August	-15.20%	212.50	250.60	196.20
September	-12.94%	212.00	243.50	216.75
October	-8.62%	210.40	230.25	204.50
November	-8.93%	204.00	224.00	196.80
December			224.00	204.00
Year Average		221.84	234.46	186.41



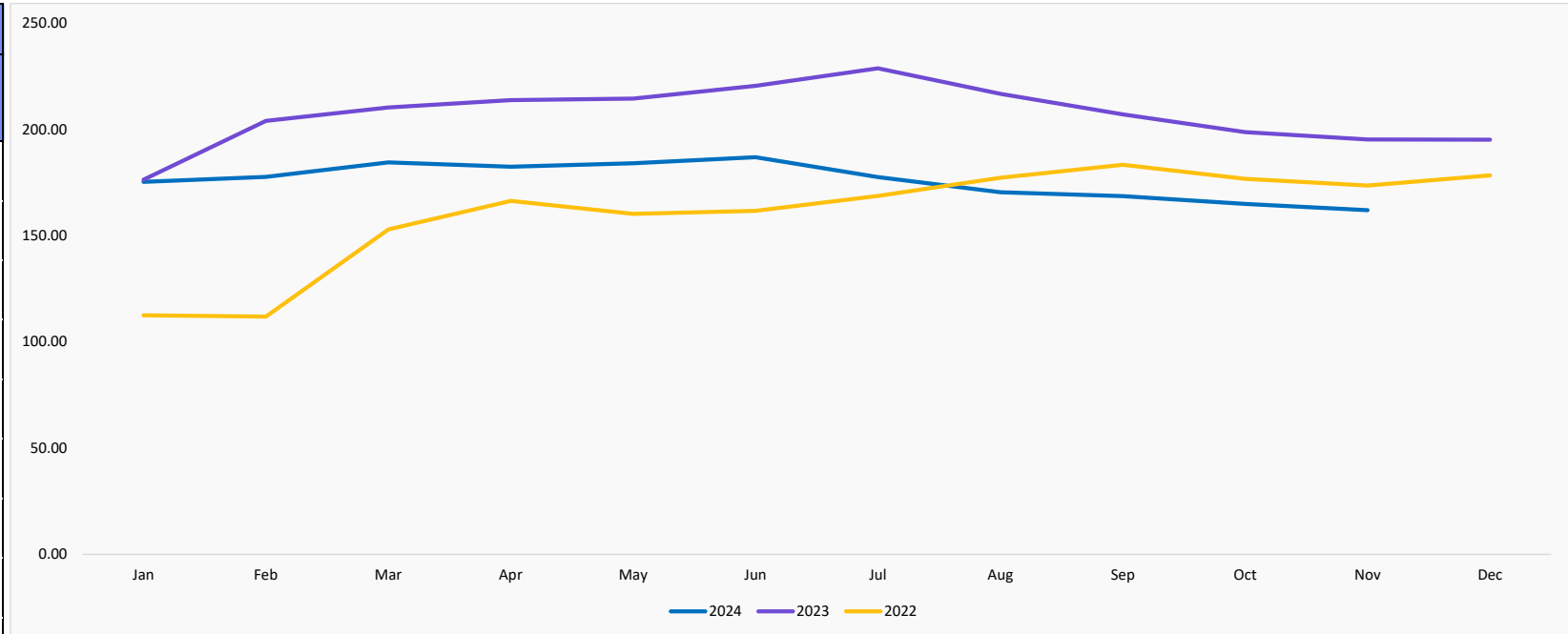
Monthly Price Variation

-3.04%

NOTE: For prices in USD, please check the excel sent with the presentation

Pork - Netherlands

Euro/100 KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-0.57%	175.27	176.28	112.47
February	-12.90%	177.70	204.02	111.88
March	-12.28%	184.46	210.28	152.96
April	-14.67%	182.46	213.83	166.34
May	-14.19%	184.02	214.46	160.28
June	-15.19%	186.96	220.45	161.63
July	-22.39%	177.51	228.71	168.69
August	-21.35%	170.47	216.75	177.20
September	-18.55%	168.62	207.02	183.33
October	-17.02%	164.91	198.73	176.75
November	-17.05%	161.94	195.22	173.61
December			195.18	178.33
Year Average		175.85	206.74	160.29



Monthly Price Variation

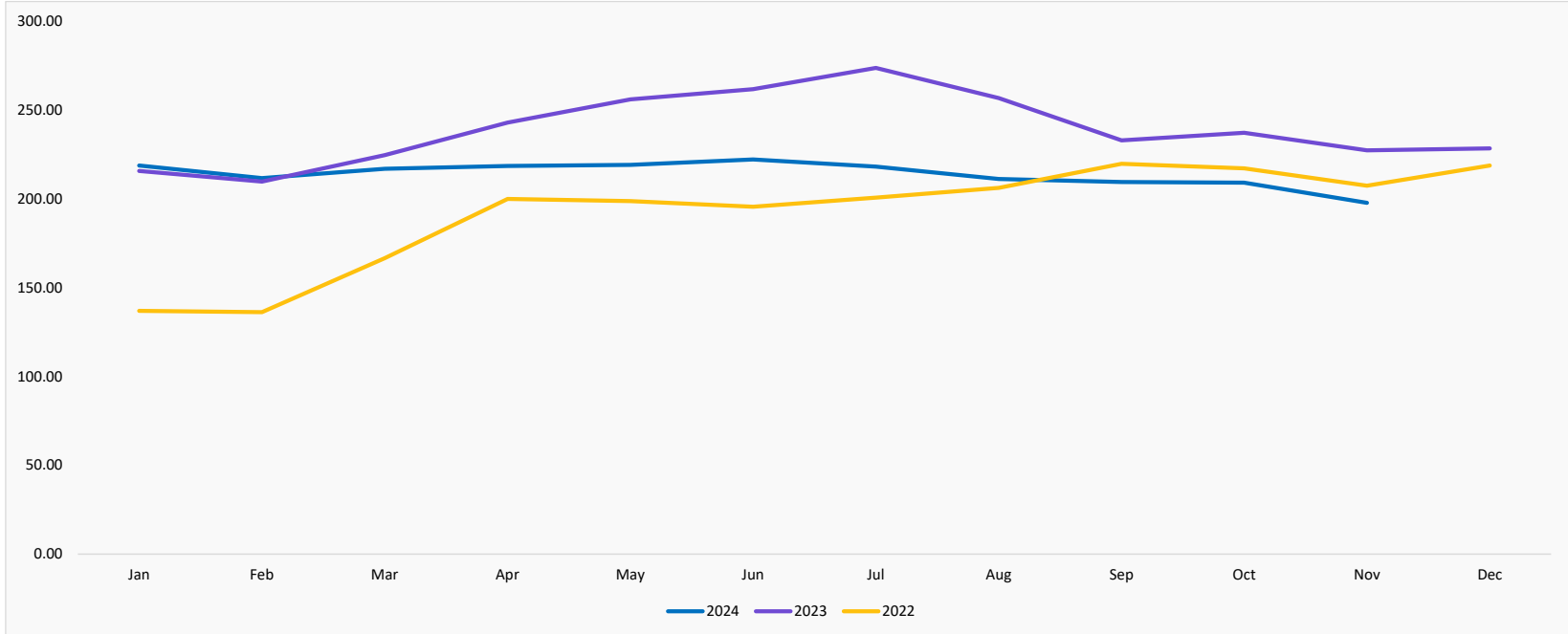
-1.80%

NOTE: For prices in USD, please check the excel sent with the presentation

| Pork - Poland

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	1.41%	218.80	215.75	137.00
February	0.95%	211.75	209.75	136.25
March	-3.38%	217.00	224.60	166.60
April	-10.08%	218.50	243.00	200.00
May	-14.38%	219.20	256.00	198.75
June	-15.09%	222.25	261.75	195.60
July	-20.29%	218.20	273.75	200.75
August	-17.74%	211.25	256.80	206.20
September	-10.09%	209.50	233.00	219.75
October	-11.82%	209.20	237.25	217.25
November	-13.04%	197.75	227.40	207.40
December			228.50	218.75
Year Average		213.95	238.96	192.03



Monthly Price Variation

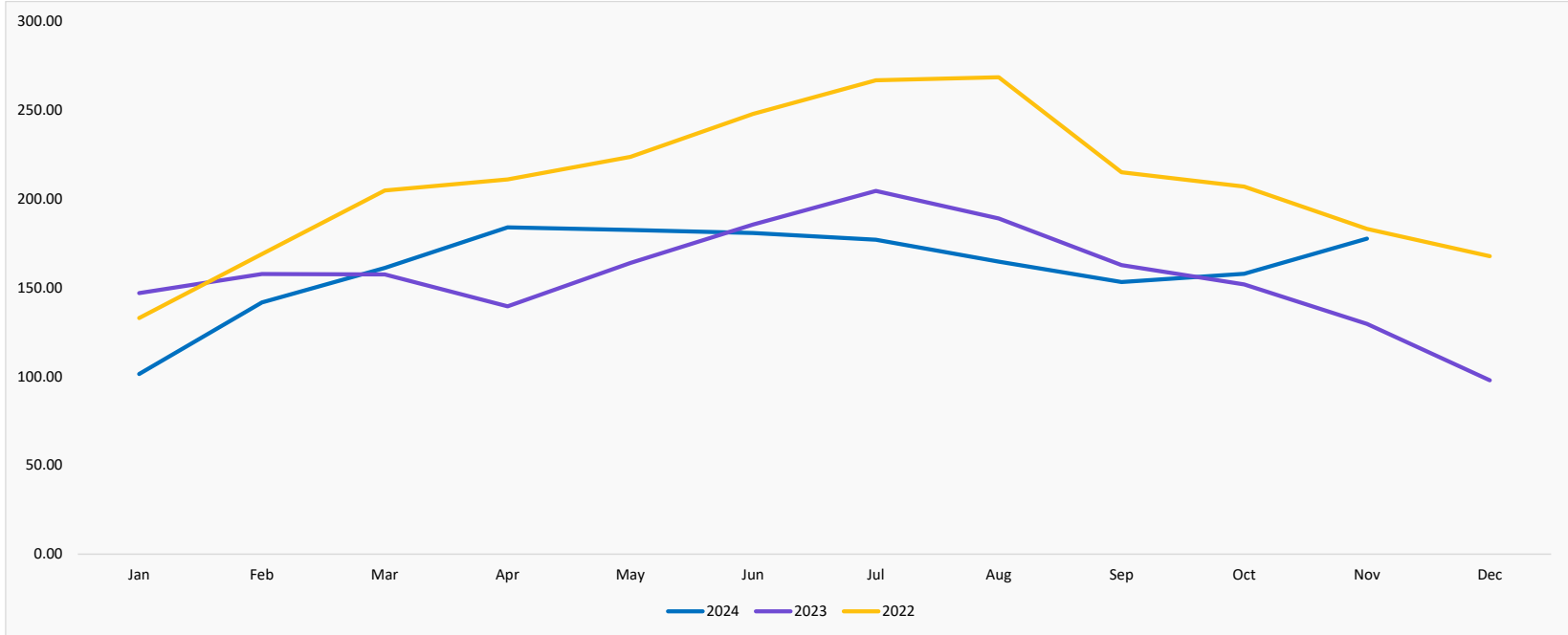
-5.47%

NOTE: For prices in USD, please check the excel sent with the presentation

| Pork - USA

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-30.93%	101.48	146.92	132.98
February	-10.16%	141.68	157.70	169.01
March	2.32%	161.12	157.46	204.81
April	31.85%	184.00	139.55	211.03
May	11.35%	182.53	163.92	223.74
June	-2.58%	180.85	185.63	247.89
July	-13.39%	177.08	204.46	266.76
August	-12.85%	164.71	188.99	268.47
September	-5.86%	153.17	162.71	215.06
October	3.94%	157.90	151.91	206.98
November	37.10%	177.65	129.58	183.19
December			97.93	167.72
Year Average		162.02	157.23	208.14



Monthly Price Variation

12.51%

NOTE: For prices in USD, please check the excel sent with the presentation

SEAFOOD

PRICE UPDATE

| Seafood

Commodity lookup

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Anchovies - Spain	KG	4.10	3.88	4.97	▶ 28.09%	▶ 21.22%
Clams - USA	KG	2.11	2.20	2.26	▶ 2.58%	▶ 7.03%
Cod - Norway	KG	2.63	3.42	3.50	▶ 2.34%	▶ 33.08%
Cod - USA	KG	4.89	4.31	4.42	▶ 2.58%	▶ -9.49%
Hake - Spain	KG	13.69	14.83	14.98	▶ 1.01%	▶ 9.42%
Mussels - Spain	KG	2.95	2.89	2.95	▶ 2.08%	▶ 0.00%
Pollock - USA	KG	4.87	3.41	5.21	▶ 52.79%	▶ 6.98%
Salmon - Europe	KG	6.67	6.04	6.87	▶ 13.74%	▶ 3.00%
Salmon - Norway	KG	6.75	6.08	6.94	▶ 14.14%	▶ 2.81%
Salmon - USA	KG	10.33	11.40	11.69	▶ 2.58%	▶ 13.25%
Sardines - Spain	KG	2.41	2.36	2.32	▶ -1.69%	▶ -3.73%
Shrimp Whiteleg Prawns - Ecuador	KG	2.32	3.21	3.44	▶ 7.17%	▶ 48.28%
Shrimp Whiteleg Prawns - Thailand	KG	3.13	4.04	4.30	▶ 6.44%	▶ 37.38%
Tuna Albacore - Spain	100 KG	588.00	578.00	488.75	▶ -15.44%	▶ -16.88%
Tuna Skipjack - Ecuador	100 KG	169.62	138.15	156.46	▶ 13.25%	▶ -7.76%
Tuna Skipjack (Bangkok) - Thailand	100 KG	146.70	133.55	145.08	▶ 8.63%	▶ -1.10%
Tuna Yellowfin - Ecuador	100 KG	198.05	215.52	221.88	▶ 2.95%	▶ 12.03%

| Seafood

Commodity lookup

Salmon – Norway

Norway exported seafood worth NOK 17.3 billion in November. This is an increase of NOK 1 billion, or 6 per cent, compared with the same month last year. *"We've seen solid growth in seafood exports for several months, and this trend continued in November. Thanks to price growth for salmon, mackerel, cod, haddock and herring, this was the best November ever in terms of value,"* says Christian Chrømer, CEO of the Norwegian Seafood Council.

No currency effect in total - In contrast to previous years, seafood exports have not been helped by a weak Norwegian krone. *"Compared to the same month last year, the Norwegian krone is slightly stronger against the euro, but weaker against the US dollar. In total, there is no currency effect, so the value growth is mainly driven by higher prices and increased volumes for some of our most important species,"* explains Chrømer.

Increased costs and tougher global competition - He emphasizes that although Norwegian seafood exports are increasing in value, this does not mean gold and green forests for industry players. *"On the wild-catch side, many are worried about the consequences of new quota cuts, in the land-based industry the battle for raw materials is intensifying, while many salmon companies are experiencing greater biological challenges as sea temperatures rise. When this is combined with increased cost growth and tougher global competition, many people are facing a more demanding financial situation at the same time as seafood exports are increasing,"* says Christian Chrømer.

Strong growth for shrimp and salmon to China - As usual, the countries in the EU zone bought the most Norwegian seafood. In total, Norway exported seafood worth NOK 10 billion to this market in November. *"Europe is strong and had value growth in November. The USA declined slightly, while Asia is becoming increasingly important. Last month there was strong growth for both shrimp and salmon to China,"* explains Christian Chrømer.

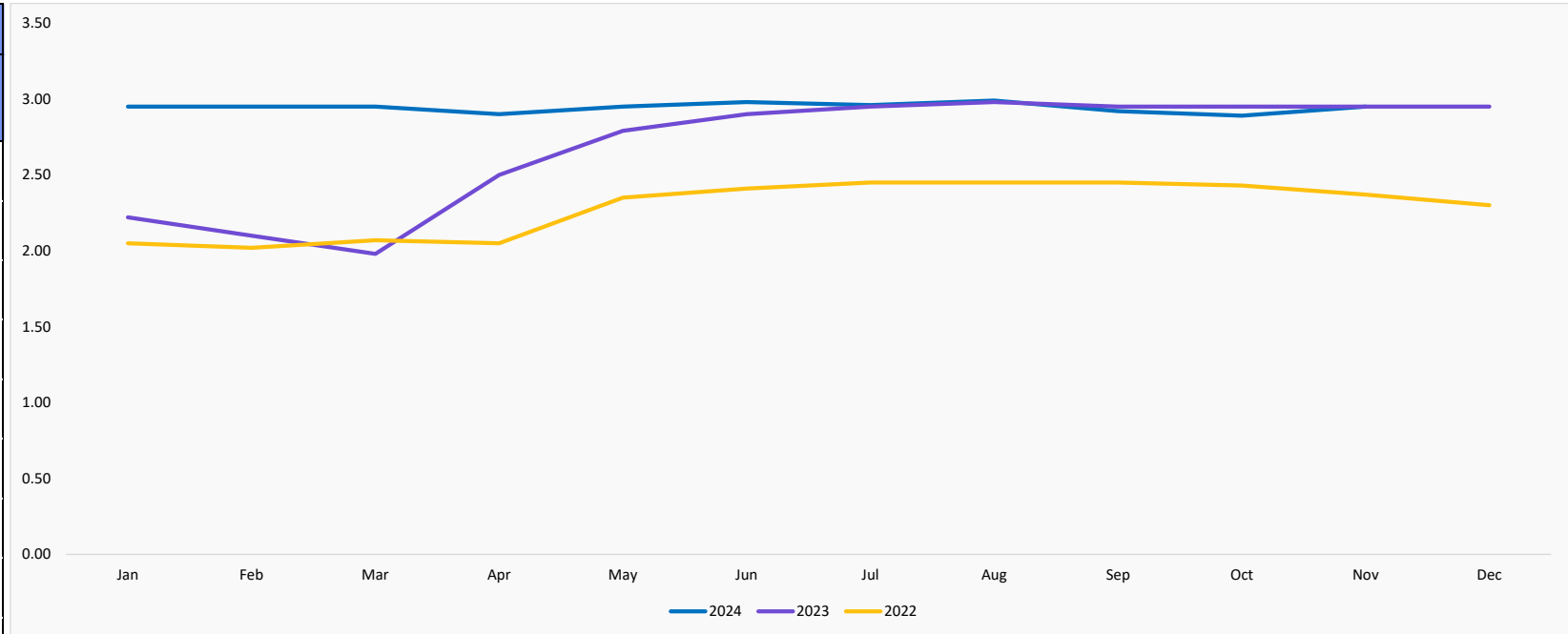
Historically good autumn for herring and mackerel - Salmon, herring and mackerel are three of the species that have contributed to value growth so far this year. *"This autumn has been historically good for mackerel and herring. In the last three months, prices for these species have reached historically high levels, and demand is strong in the most important markets. At the same time, the export value of salmon exceeded NOK 12 billion for the very first time in November, consolidating its position as Norwegian seafood's most important export product,"* explains Christian Chrømer.

Source: Norwegian Seafood Council

Mussels - Spain

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	32.88%	2.95	2.22	2.05
February	40.48%	2.95	2.10	2.02
March	48.99%	2.95	1.98	2.07
April	16.00%	2.90	2.50	2.05
May	5.73%	2.95	2.79	2.35
June	2.76%	2.98	2.90	2.41
July	0.34%	2.96	2.95	2.45
August	0.34%	2.99	2.98	2.45
September	-1.02%	2.92	2.95	2.45
October	-2.03%	2.89	2.95	2.43
November	0.00%	2.95	2.95	2.37
December			2.95	2.30
Year Average		2.94	2.69	2.28



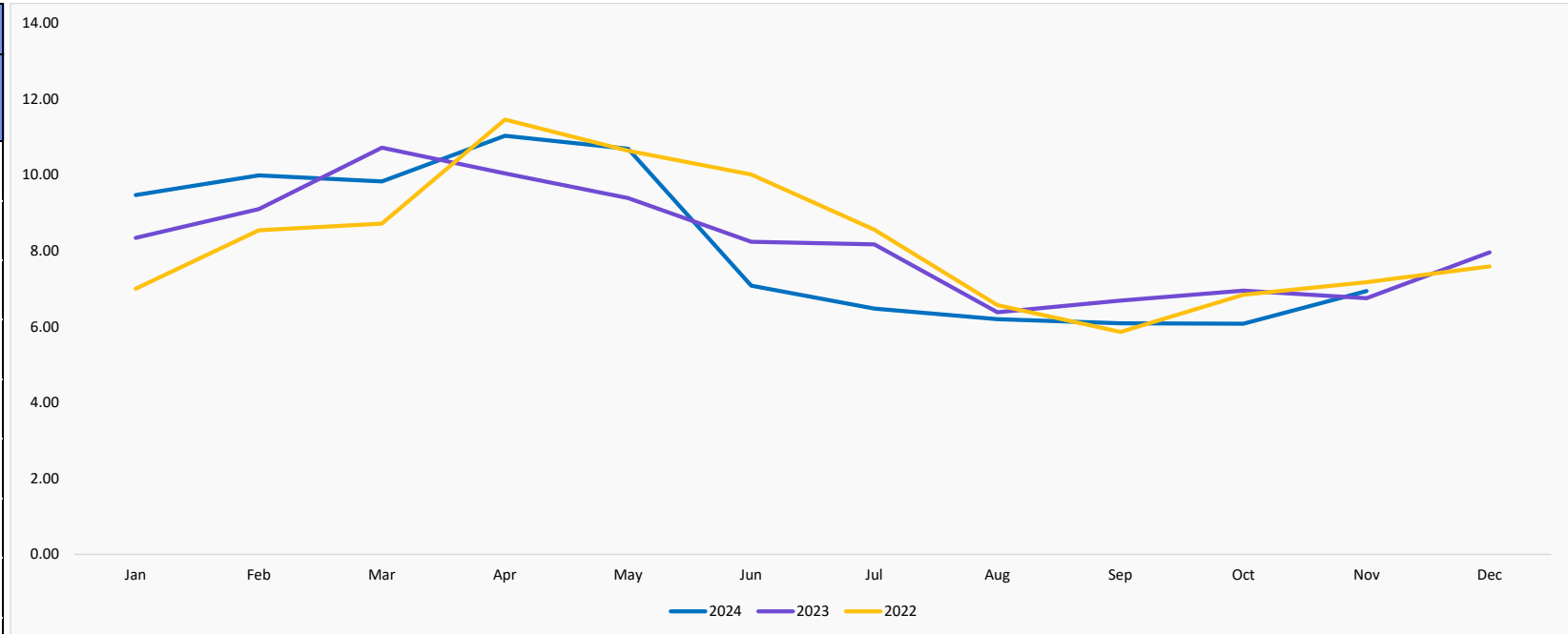
Monthly Price Variation

2.08%

NOTE: For prices in USD, please check the excel sent with the presentation

Salmon - Norway

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	13.55%	9.47	8.34	7.00
February	9.78%	9.99	9.10	8.54
March	-8.30%	9.83	10.72	8.72
April	9.86%	11.03	10.04	11.46
May	13.84%	10.69	9.39	10.64
June	-14.08%	7.08	8.24	10.01
July	-20.69%	6.48	8.17	8.56
August	-2.82%	6.20	6.38	6.57
September	-8.97%	6.09	6.69	5.86
October	-12.52%	6.08	6.95	6.84
November	2.81%	6.94	6.75	7.17
December			7.96	7.59
Year Average		8.17	8.23	8.25



Monthly Price Variation

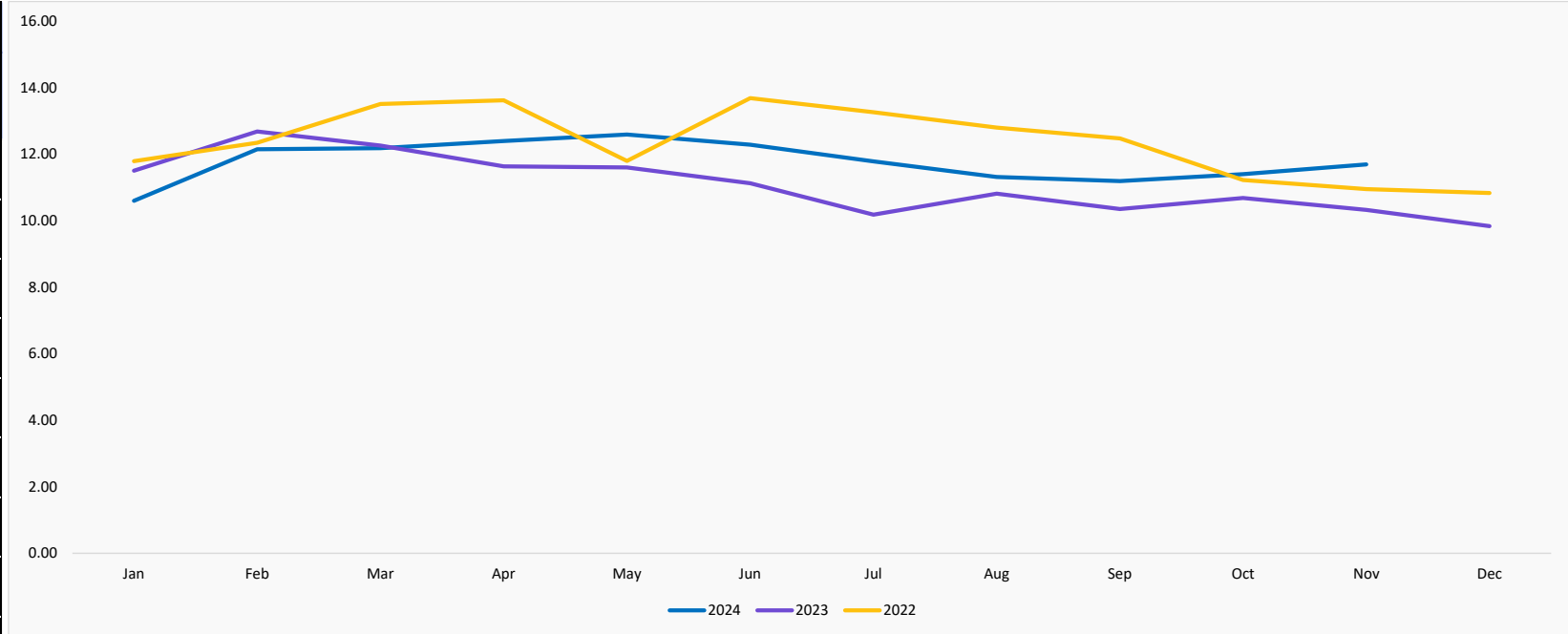
14.14%

NOTE: For prices in USD, please check the excel sent with the presentation

Salmon - USA

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-7.86%	10.60	11.51	11.79
February	-4.17%	12.15	12.68	12.34
March	-0.63%	12.19	12.26	13.51
April	6.56%	12.40	11.63	13.62
May	8.56%	12.60	11.60	11.80
June	10.44%	12.29	11.13	13.69
July	15.74%	11.79	10.18	13.26
August	4.60%	11.31	10.82	12.81
September	8.11%	11.19	10.35	12.48
October	6.65%	11.40	10.69	11.23
November	13.25%	11.69	10.33	10.95
December			9.84	10.83
Year Average		11.78	11.09	12.36



Monthly Price Variation

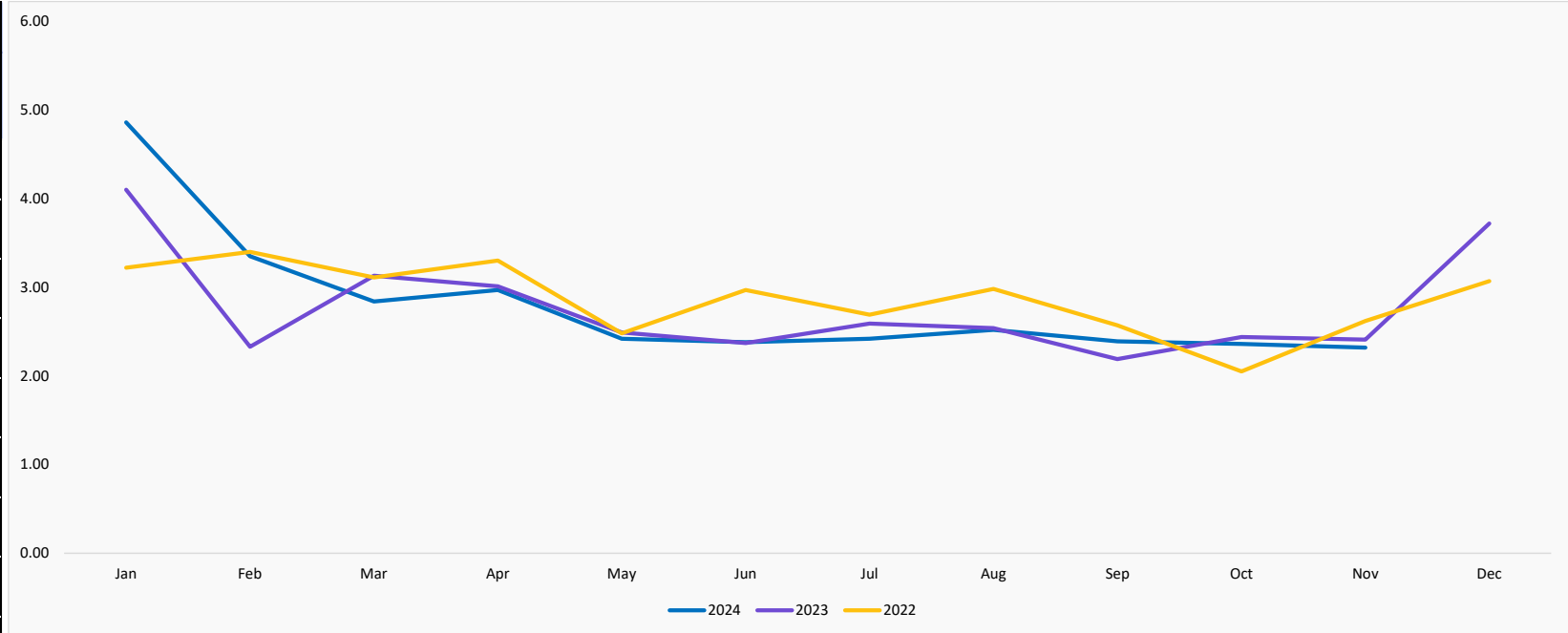
2.58%

NOTE: For prices in USD, please check the excel sent with the presentation

Sardines - Spain

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	18.54%	4.86	4.10	3.22
February	43.78%	3.35	2.33	3.40
March	-9.27%	2.84	3.13	3.11
April	-1.33%	2.97	3.01	3.30
May	-2.81%	2.42	2.49	2.48
June	0.42%	2.38	2.37	2.97
July	-6.56%	2.42	2.59	2.69
August	-0.79%	2.52	2.54	2.98
September	9.13%	2.39	2.19	2.57
October	-3.28%	2.36	2.44	2.05
November	-3.73%	2.32	2.41	2.62
December			3.72	3.07
Year Average		2.80	2.78	2.87



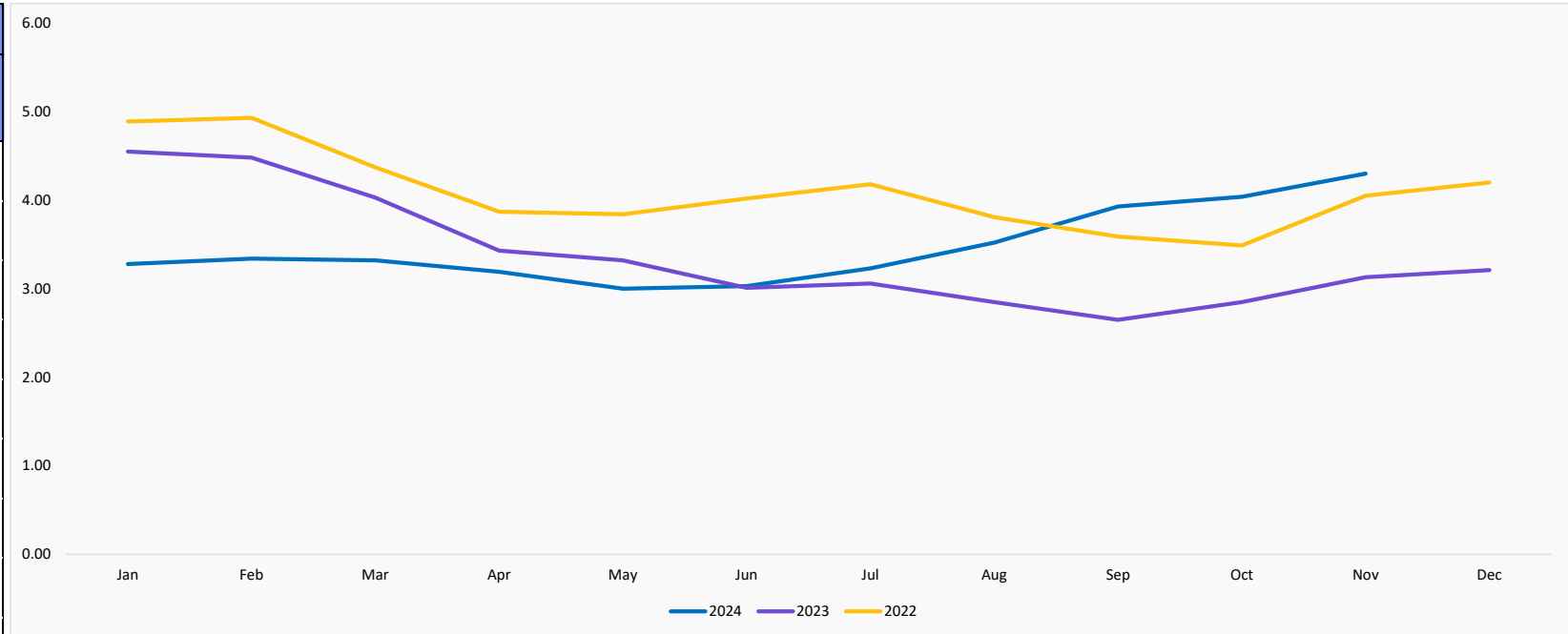
Monthly Price Variation

-1.69%

NOTE: For prices in USD, please check the excel sent with the presentation

Shrimp Whiteleg Prawns - Thailand

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-27.91%	3.28	4.55	4.89
February	-25.45%	3.34	4.48	4.93
March	-17.62%	3.32	4.03	4.37
April	-7.00%	3.19	3.43	3.87
May	-9.64%	3.00	3.32	3.84
June	0.66%	3.03	3.01	4.02
July	5.56%	3.23	3.06	4.18
August	23.51%	3.52	2.85	3.81
September	48.30%	3.93	2.65	3.59
October	41.75%	4.04	2.85	3.49
November	37.38%	4.30	3.13	4.05
December			3.21	4.20
Year Average		3.47	3.38	4.10



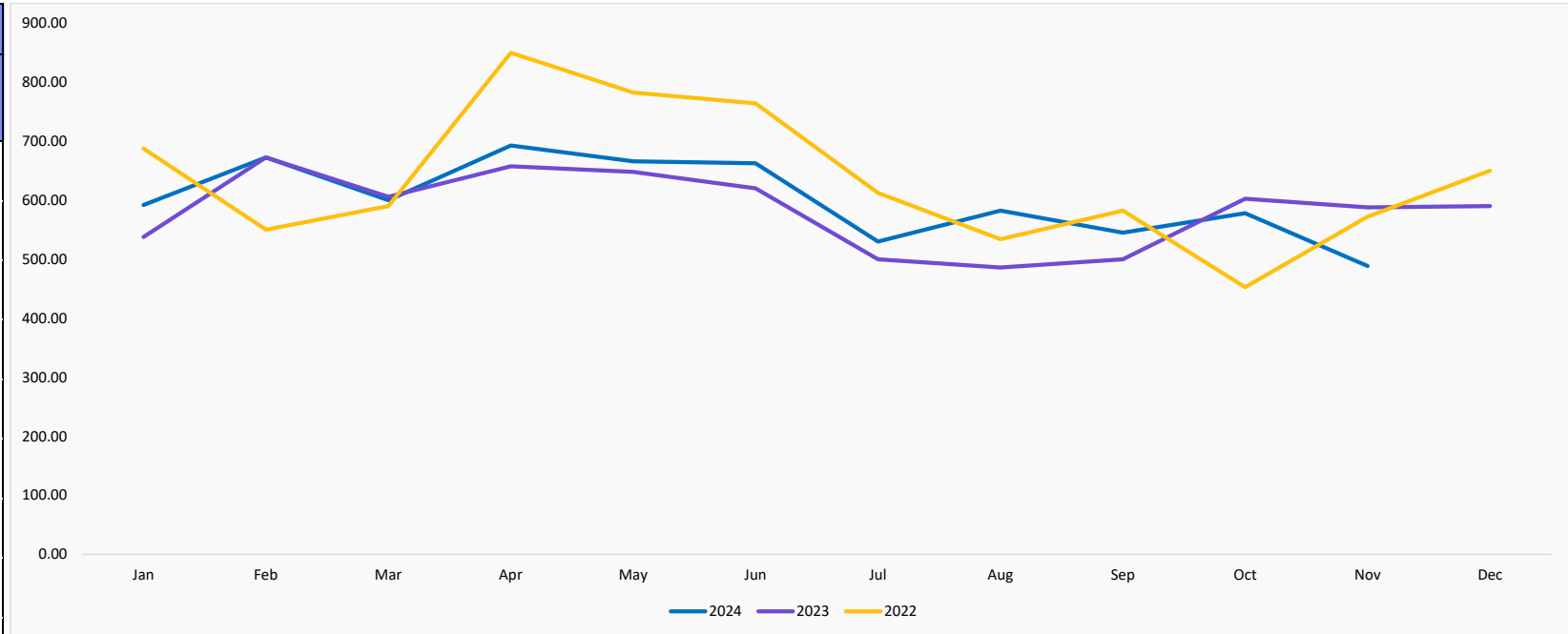
Monthly Price Variation

6.44%

NOTE: For prices in USD, please check the excel sent with the presentation

Tuna Albacore - Spain

Euro/100 KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	10.14%	592.00	537.50	687.50
February	0.00%	672.50	672.50	550.00
March	-0.99%	600.00	606.00	590.00
April	5.32%	692.50	657.50	850.00
May	2.78%	666.00	648.00	782.50
June	6.85%	662.50	620.00	764.00
July	6.00%	530.00	500.00	612.50
August	19.86%	582.50	486.00	534.00
September	9.00%	545.00	500.00	582.50
October	-4.07%	578.00	602.50	452.50
November	-16.88%	488.75	588.00	572.00
December			590.00	650.00
Year Average		600.89	584.00	635.63



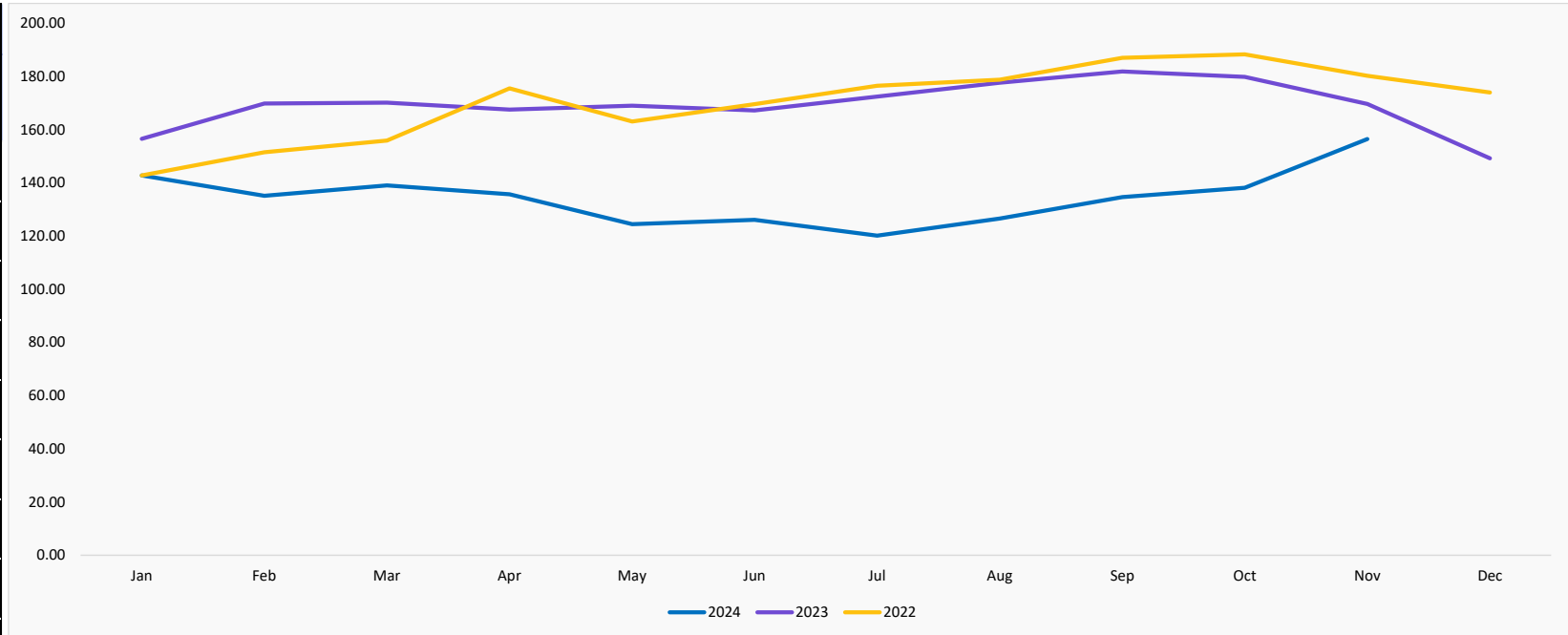
Monthly Price Variation

-15.44%

NOTE: For prices in USD, please check the excel sent with the presentation

Tuna Skipjack - Ecuador

Euro/100 KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-8.80%	142.79	156.57	142.74
February	-20.42%	135.10	169.77	151.47
March	-18.29%	139.04	170.16	155.91
April	-19.00%	135.72	167.56	175.47
May	-26.35%	124.44	168.96	163.06
June	-24.60%	126.04	167.16	169.60
July	-30.34%	120.11	172.43	176.45
August	-28.74%	126.57	177.61	178.80
September	-25.99%	134.61	181.88	186.97
October	-23.18%	138.15	179.83	188.29
November	-7.76%	156.46	169.62	180.23
December			149.19	173.93
Year Average		134.46	169.23	170.24



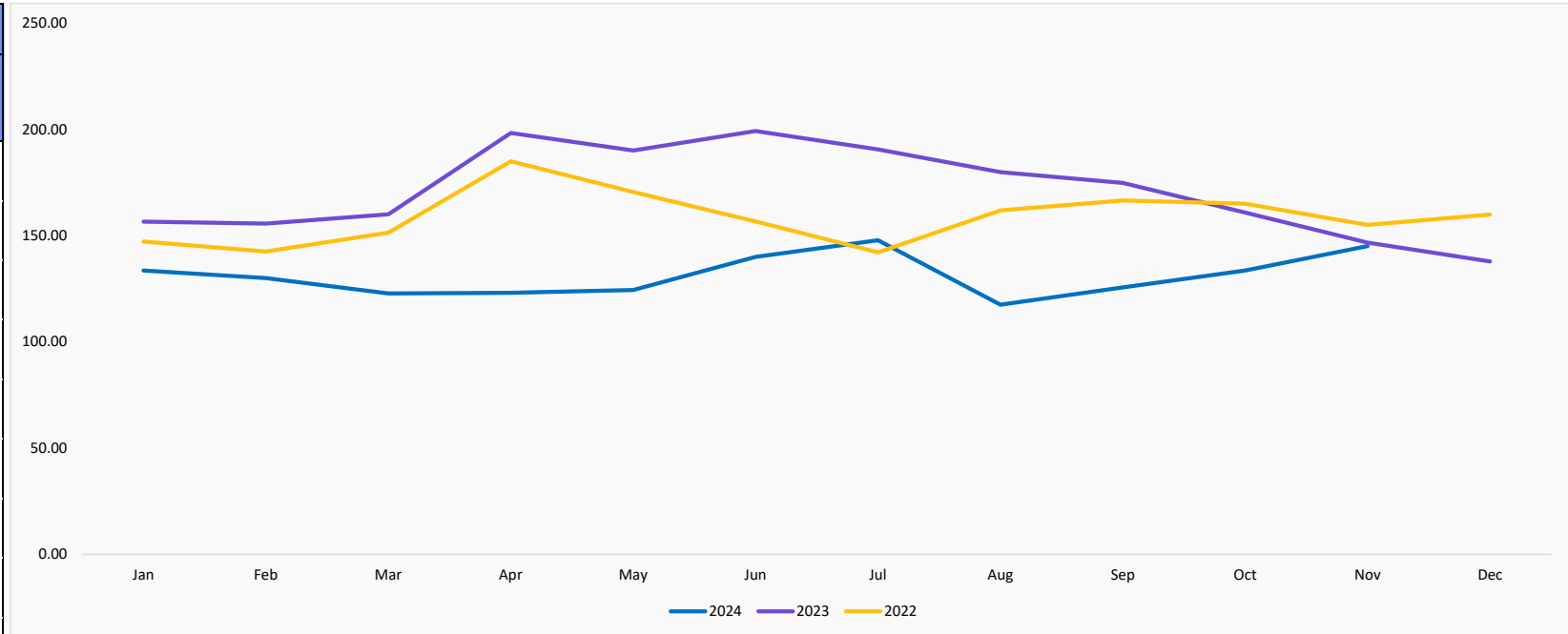
Monthly Price Variation

13.25%

NOTE: For prices in USD, please check the excel sent with the presentation

Tuna Skipjack (Bangkok) - Thailand

Euro/100 KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-14.69%	133.57	156.57	147.20
February	-16.46%	130.01	155.63	142.56
March	-23.26%	122.82	160.04	151.41
April	-37.95%	123.08	198.35	184.96
May	-34.53%	124.44	190.08	170.52
June	-29.71%	140.04	199.22	156.70
July	-22.43%	147.83	190.58	142.14
August	-34.67%	117.53	179.91	161.92
September	-28.12%	125.64	174.79	166.53
October	-17.00%	133.55	160.90	165.01
November	-1.10%	145.08	146.70	155.03
December			137.89	159.90
Year Average		131.24	170.89	158.66



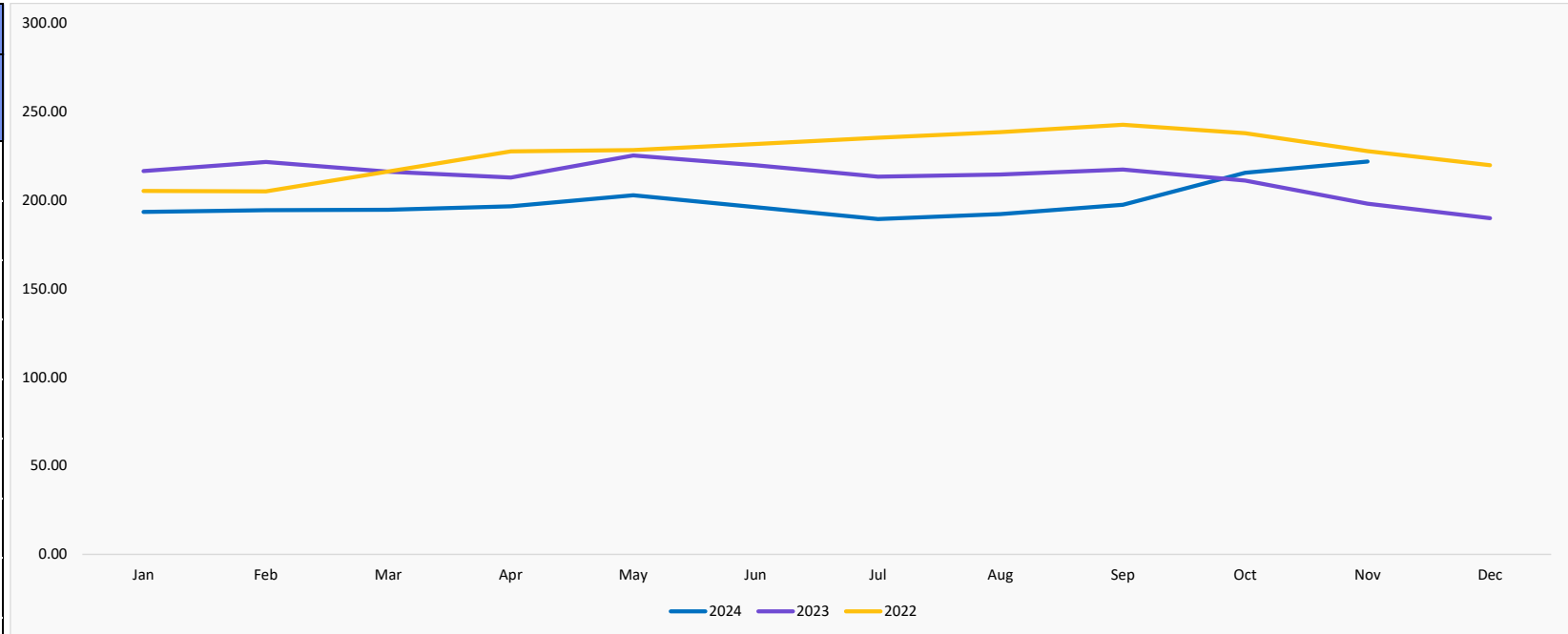
Monthly Price Variation

8.63%

NOTE: For prices in USD, please check the excel sent with the presentation

Tuna Yellowfin - Ecuador

Euro/100 KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-10.62%	193.45	216.43	205.19
February	-12.33%	194.32	221.65	204.94
March	-9.94%	194.66	216.15	216.29
April	-7.66%	196.55	212.85	227.64
May	-9.98%	202.80	225.28	228.29
June	-10.81%	196.06	219.83	231.71
July	-11.19%	189.41	213.27	235.27
August	-10.44%	192.12	214.51	238.41
September	-9.14%	197.44	217.31	242.65
October	2.11%	215.52	211.07	237.89
November	12.03%	221.88	198.05	227.71
December			189.88	219.75
Year Average		199.47	213.02	226.31



Monthly Price Variation

2.95%

NOTE: For prices in USD, please check the excel sent with the presentation

FRUITS & VEGETABLES

PRICE UPDATE

Fruits/Vegetables

Commodity lookup

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Apples - Chile	KG	0.99	0.80	0.82	▶ 2.95%	▶ -16.69%
Apples Elstar - Germany	KG	1.20	1.35	1.31	▶ -2.96%	▶ 9.17%
Apples Gala - Poland	KG	0.63	0.76	0.68	▶ -9.96%	▶ 8.33%
Apples Golden Delicious - Italy	KG	1.52	1.33	1.42	▶ 6.77%	▶ -6.58%
Asparagus - Germany	100 KG	450.00	600.00	600.00	▶ 0.00%	▶ 33.33%
Asparagus - Peru	100 KG	156.07	167.64	173.37	▶ 3.42%	▶ 11.08%
Avocado - Chile	KG	2.45	2.79	2.87	▶ 2.87%	▶ 17.14%
Banana - Brazil	KG	0.74	0.69	0.70	▶ 1.30%	▶ -5.69%
Beans (Green) - Spain	100 KG	555.80	446.00	481.00	▶ 7.85%	▶ -13.46%
Beans Black - Canada	100 KG	90.11	67.66	78.23	▶ 15.62%	▶ -13.18%
Beans Black Eye - Madagascar	100 KG	115.64	101.30	104.30	▶ 2.96%	▶ -9.81%
Beans Borlotti - Argentina	100 KG	137.20	140.92	145.08	▶ 2.95%	▶ 5.74%
Beans Kidney Red - China	100 KG	133.61	136.31	140.34	▶ 2.96%	▶ 5.04%
Beans Kidney White - Argentina	100 KG	132.84	133.55	137.49	▶ 2.95%	▶ 3.50%
Beans Navy (White) - Canada	100 KG	83.74	72.68	82.19	▶ 13.09%	▶ -1.85%
Beans Pinto (Manteiga) - Canada	100 KG	82.87	63.92	66.40	▶ 3.87%	▶ -19.88%
Broccoli - Spain	KG	2.52	2.13	1.56	▶ -26.76%	▶ -38.10%
Carrots - France	KG	0.78	0.80	0.80	▶ 0.00%	▶ 2.04%
Cauliflower - Spain	KG	1.16	1.30	0.58	▶ -55.58%	▶ -50.22%
Cherry - Chile	KG	1.78	6.61	6.81	▶ 3.03%	▶ 282.58%
Chickpeas - Italy	100 KG	190.00	198.00	230.00	▶ 16.16%	▶ 21.05%
Chickpeas - USA	100 KG	81.59	74.81	76.73	▶ 2.58%	▶ -5.95%
Chilli Jalapenos - USA	KG	1.83	1.66	1.79	▶ 7.83%	▶ -2.19%
Coconuts - France	UNIT	0.95	0.98	1.00	▶ 2.04%	▶ 5.26%
Coconuts - Thailand	UNIT	0.41	0.91	1.02	▶ 11.89%	▶ 149.21%
Cucumber - Germany	100 KG	110.00	106.01	95.00	▶ -10.39%	▶ -13.64%
Cucumbers - Spain	100 KG	142.00	115.80	151.25	▶ 30.61%	▶ 6.51%
Grapes - Chile	KG	2.48	5.59	5.76	▶ 3.04%	▶ 132.26%
Kiwi - Chile	KG	2.07	1.09	1.12	▶ 2.75%	▶ -45.89%
Lemons - Portugal	KG	1.01	0.90	0.82	▶ -9.87%	▶ -19.31%
Lemons - Spain	KG	1.01	1.65	0.89	▶ -46.03%	▶ -11.83%
Lentils Green - Europe	100 KG	124.07	106.84	199.99	▶ 87.19%	▶ 61.19%
Mango - India	KG	0.84	0.78	0.54	▶ -31.33%	▶ -35.80%

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Mushrooms - China	100 KG	72.16	141.68	129.12	▶ -8.87%	▶ 78.94%
Mushrooms - France	100 KG	240.00	240.00	240.00	▶ 0.00%	▶ 0.00%
Mushrooms - Germany	100 KG	291.34	283.77	283.92	▶ 0.05%	▶ -2.55%
Mushrooms - Poland	100 KG	172.98	176.10	177.53	▶ 0.81%	▶ 2.63%
Olives Black - Spain	KG	1.28	1.25	1.19	▶ -4.80%	▶ -7.03%
Olives Black - Turkey	KG	1.69	2.28	2.32	▶ 1.75%	▶ 37.28%
Olives Green - Spain	KG	1.42	1.49	1.49	▶ 0.00%	▶ 4.93%
Olives Green - Turkey	KG	1.71	2.02	2.05	▶ 1.49%	▶ 19.88%
Onion - Spain	KG	0.73	0.46	0.45	▶ -2.70%	▶ -37.93%
Orange - Brazil	KG	0.27	0.42	0.42	▶ -0.71%	▶ 54.81%
Orange - European Union	KG	1.89	2.40	2.43	▶ 1.25%	▶ 28.57%
Orange - South Africa	KG	0.53	0.69	0.69	▶ 31.00%	▶ 29.64%
Peach - China	KG	0.90	2.85	2.88	▶ 1.05%	▶ 219.29%
Peach - Greece	KG	1.33	1.65	1.65	▶ 0.00%	▶ 24.06%
Peach - South Africa	KG	1.02	1.89	1.32	▶ -30.16%	▶ 29.41%
Peach - Spain	KG	1.60	1.28	1.28	▶ 0.00%	▶ -20.00%
Pear Conference - Russia	KG	2.57	2.85	2.50	▶ -12.28%	▶ -2.72%
Pears - USA	KG	1.35	1.58	1.63	▶ 3.16%	▶ 20.74%
Pears (Rocha) - Portugal	KG	1.51	1.55	1.54	▶ -0.52%	▶ 1.85%
Peas - China	100 KG	70.23	71.04	74.30	▶ 4.59%	▶ 5.80%
Peas - Hungary	100 KG	229.21	202.14	199.78	▶ -1.17%	▶ -12.84%
Peas - Spain	100 KG	719.33	566.00	580.25	▶ 2.52%	▶ -19.33%
Pineapples - Philippines	KG	0.34	0.37	0.38	▶ 2.43%	▶ 9.54%
Pineapples - Thailand	KG	0.28	0.34	0.32	▶ -4.75%	▶ 14.05%
Pomegranate - India	KG	0.95	0.94	0.85	▶ -9.68%	▶ -10.17%
Potato - Germany	100 KG	39.55	25.00	27.06	▶ 8.24%	▶ -31.58%
Potato - India	100 KG	20.92	33.09	34.49	▶ 4.23%	▶ 64.87%
Potato - Netherlands	100 KG	15.90	14.10	14.62	▶ 3.69%	▶ -8.05%
Potato - Poland	100 KG	29.90	22.00	33.33	▶ 51.50%	▶ 11.47%
Potato - Portugal	100 KG	0.42	0.47	0.50	▶ 5.80%	▶ 17.38%
Red Peppers - Spain	KG	2.17	2.82	2.60	▶ -7.80%	▶ 19.82%
Spinach - Spain	KG	0.69	1.00	1.00	▶ 0.00%	▶ 45.69%
Tomato - China	100 KG	60.28	92.44	75.28	▶ -18.56%	▶ 24.88%
Tomato - Germany	100 KG	183.17	220.43	164.79	▶ -25.24%	▶ -10.03%
Tomato - India	100 KG	19.98	35.14	24.99	▶ -28.88%	▶ 25.08%
Tomato - Spain	100 KG	187.20	185.00	164.79	▶ -10.92%	▶ -11.97%
Tomato Processed - Italy	100 KG	70.00	65.00	65.00	▶ 0.00%	▶ -7.14%

| Fruits and Vegetables

Commodity lookup

Grapes – 13th December 2024

A shortage of table grapes is reported in many key markets, leading to very high prices ahead of the crucial Christmas to New Year's sales period. The earlier finish of the California, Spain, and Italy seasons and the delayed start of South Africa's season are making for a challenging switch over to supply regions. Supermarkets in the UK paid more to airfreight grapes from Namibia and South Africa. Peru and Brazil have also seen increased demand, but logistical delays have caused problems in reaching higher demand sooner. Retailers are transitioning from California storage grapes to Peruvian and Brazilian fruit in North America, where prices are high, too. In the Netherlands, a hot grape market is expected throughout December. Prices are high due to the short supply in Germany, too. Italy's switch to seedless grapes is advancing rapidly. Prices are sky-high in Spain due to the shortage of supply. In France, the last grapes from Spain and Italy are still in the market, with high demand and high prices.

Source: Freshplaza

Tomato – 22nd December 2024

The challenges of growing tomatoes and balancing the markets are ever-present across many growing countries. The European Commission's new monthly tomato price overviews from Spain, Italy, the Netherlands, and France, by way of AI analysis, show that cultivation has declined by 700,000 tons over the past decade. Imports only increased by 400,000 tons. Dutch tomato cultivation is "back to normal." Winter cultivation is also ongoing in Belgium. In Italy, tomatoes fetch high prices due to shortages, with a delayed start caused by excessive heat and drought in Sicily. Germany's tomato prices are rising as supply from multiple countries is decreasing slightly. Since the beginning of the week, the market has turned completely upside down in France, with tomato consumption plummeting at the onset of colder winter temperatures. After their major supplier, Turkey, banned exports, Israel's tomato shortage was somewhat relieved with local supply and imports from the Netherlands and Poland. Spain had smooth demand and prices at the start of the season, and favourable weather was also present in key growing regions.

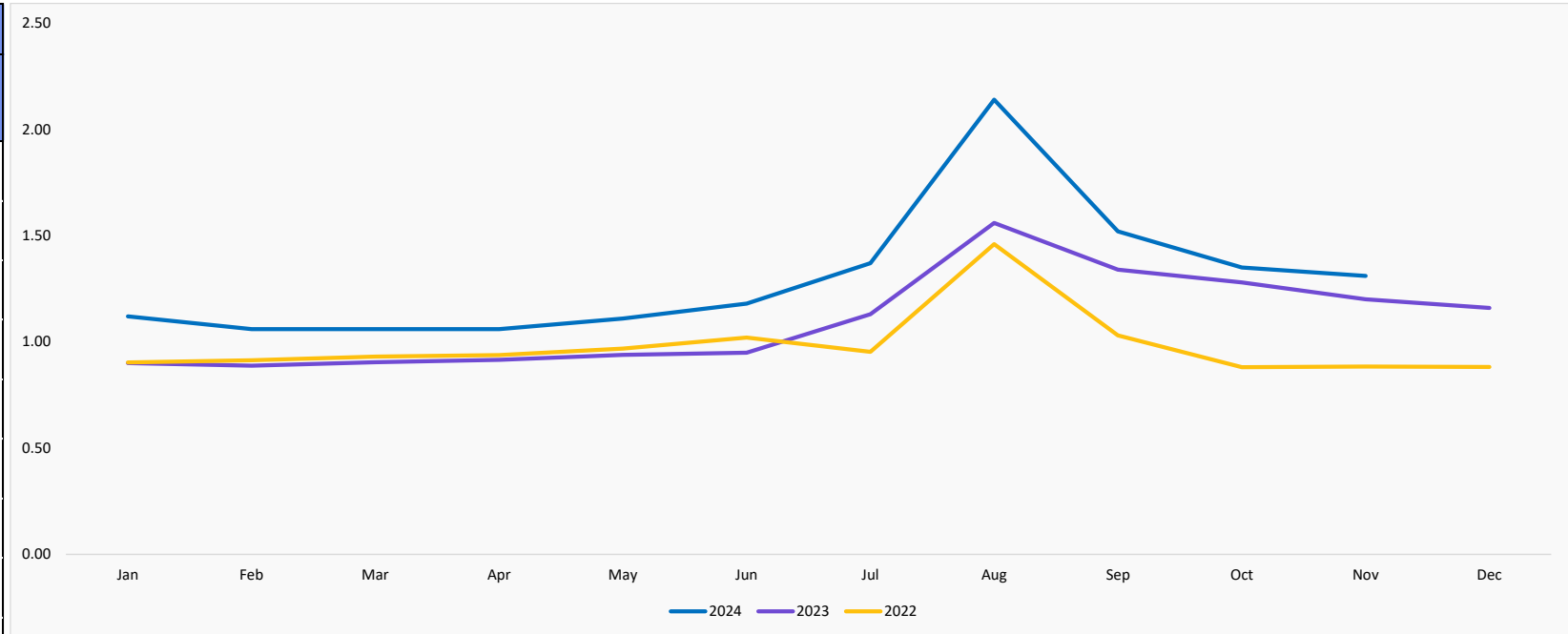
Source: Freshplaza

Apples - According to the importer, the processing industry has been driving up pineapple prices significantly in recent months. "Annual contracts are already being signed by the juice industry at relatively high prices, providing growers with a guaranteed minimum price. This is pushing up prices in Europe and the United States considerably. In the free market, prices currently range between 9 and 13 euros, depending on size. *"I expect prices to rise by another 1-2 euros next week. As we approach Christmas, we traditionally see strong demand, and this year is no exception,"* Mario explains. *"One positive development is the improvement in sizing. In recent weeks, we've had a lot of small fruit and very few large sizes, but that situation is gradually improving."*

Source: Freshplaza

| Apples Elstar - Germany

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	24.43%	1.12	0.90	0.90
February	19.42%	1.06	0.89	0.91
March	17.24%	1.06	0.90	0.93
April	15.81%	1.06	0.92	0.94
May	18.26%	1.11	0.94	0.97
June	24.29%	1.18	0.95	1.02
July	21.24%	1.37	1.13	0.95
August	37.18%	2.14	1.56	1.46
September	13.43%	1.52	1.34	1.03
October	5.47%	1.35	1.28	0.88
November	9.17%	1.31	1.20	0.88
December			1.16	0.88
Year Average		1.30	1.10	0.98



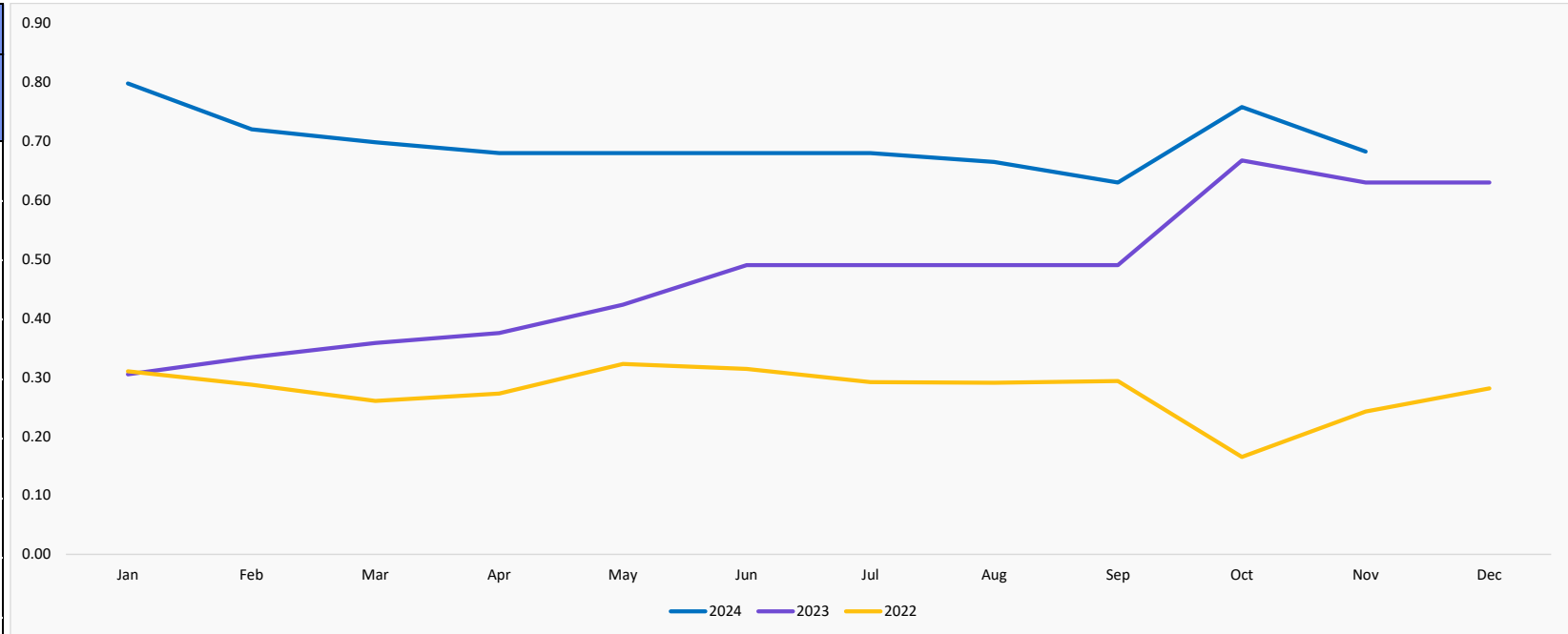
Monthly Price Variation

-2.96%

NOTE: For prices in USD, please check the excel sent with the presentation

| Apples Gala - Poland

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	161.64%	0.80	0.31	0.31
February	115.70%	0.72	0.33	0.29
March	94.97%	0.70	0.36	0.26
April	81.33%	0.68	0.38	0.27
May	60.76%	0.68	0.42	0.32
June	38.78%	0.68	0.49	0.31
July	38.78%	0.68	0.49	0.29
August	35.71%	0.67	0.49	0.29
September	28.57%	0.63	0.49	0.29
October	13.56%	0.76	0.67	0.17
November	8.33%	0.68	0.63	0.24
December			0.63	0.28
Year Average		0.70	0.47	0.28



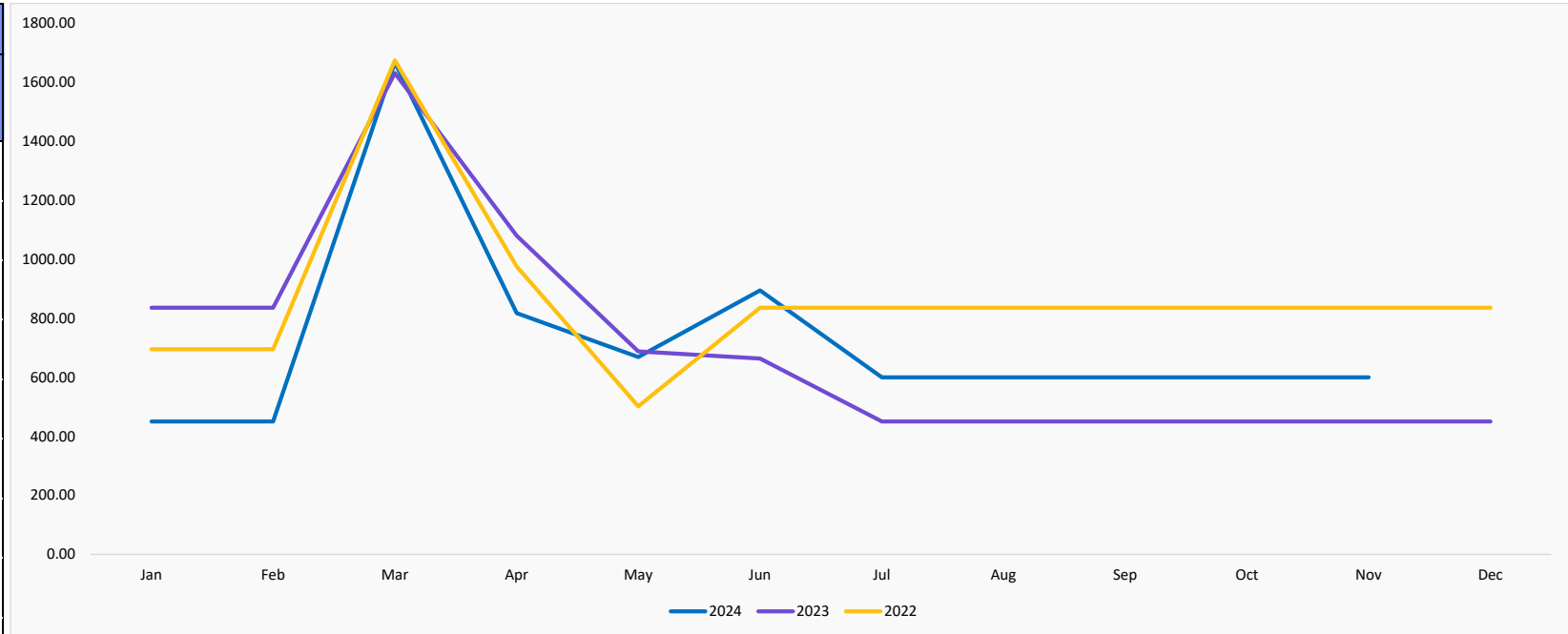
Monthly Price Variation

-9.96%

NOTE: For prices in USD, please check the excel sent with the presentation

Asparagus - Germany

Euro/100 KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-46.17%	450.00	836.03	695.00
February	-46.17%	450.00	836.03	695.00
March	2.22%	1,667.02	1,630.76	1,674.36
April	-24.30%	817.12	1,079.49	975.55
May	-2.73%	668.57	687.35	501.42
June	34.77%	894.45	663.70	836.03
July	33.33%	600.00	450.00	836.03
August	33.33%	600.00	450.00	836.03
September	33.33%	600.00	450.00	836.03
October	33.33%	600.00	450.00	836.03
November	33.33%	600.00	450.00	836.03
December			450.00	836.03
Year Average		722.47	702.78	866.13



Monthly Price Variation

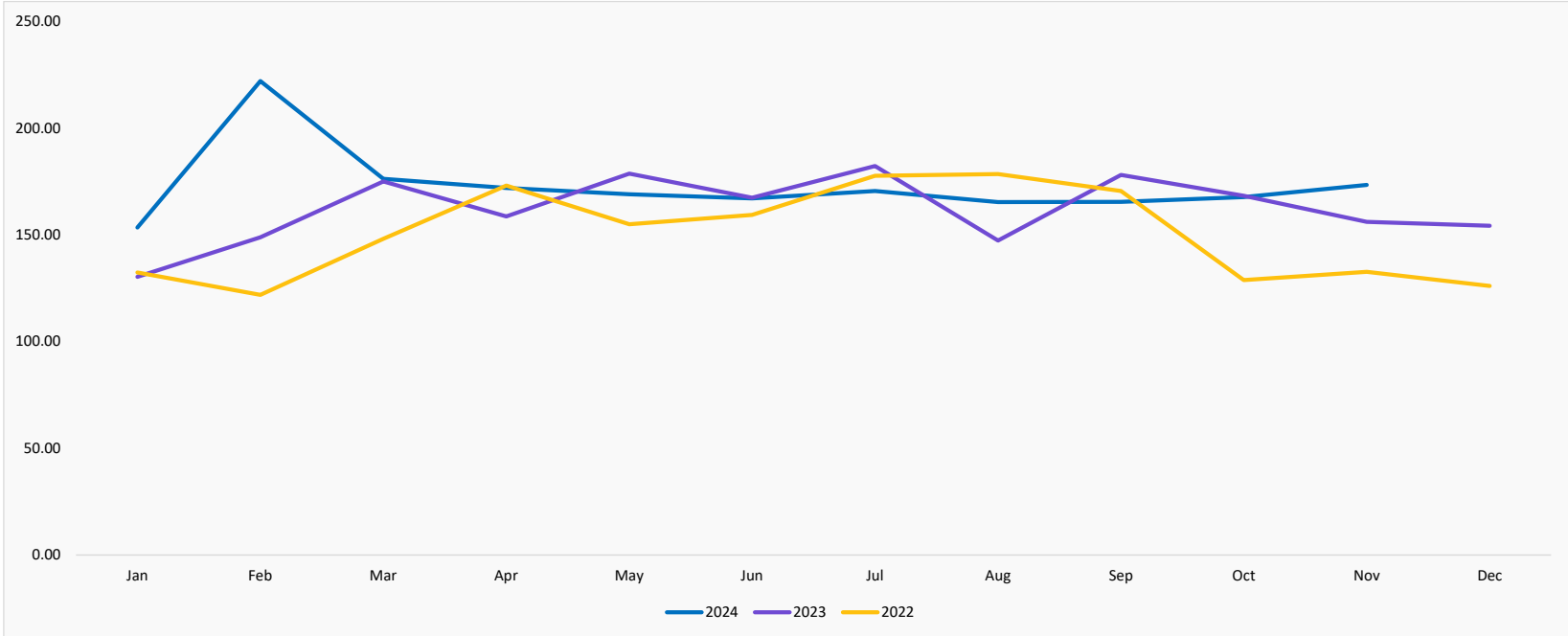
0.00%

NOTE: For prices in USD, please check the excel sent with the presentation

Asparagus - Peru

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	17.77%	153.45	130.30	132.40
February	49.12%	221.98	148.86	121.88
March	0.66%	176.19	175.03	148.14
April	8.40%	171.99	158.66	173.02
May	-5.41%	169.01	178.68	154.96
June	-0.24%	167.02	167.42	159.36
July	-6.45%	170.51	182.27	177.63
August	12.20%	165.31	147.34	178.49
September	-7.10%	165.42	178.06	170.50
October	-0.39%	167.64	168.29	128.78
November	11.08%	173.37	156.07	132.62
December			154.19	126.01
Year Average		172.90	162.10	150.32



Monthly Price Variation

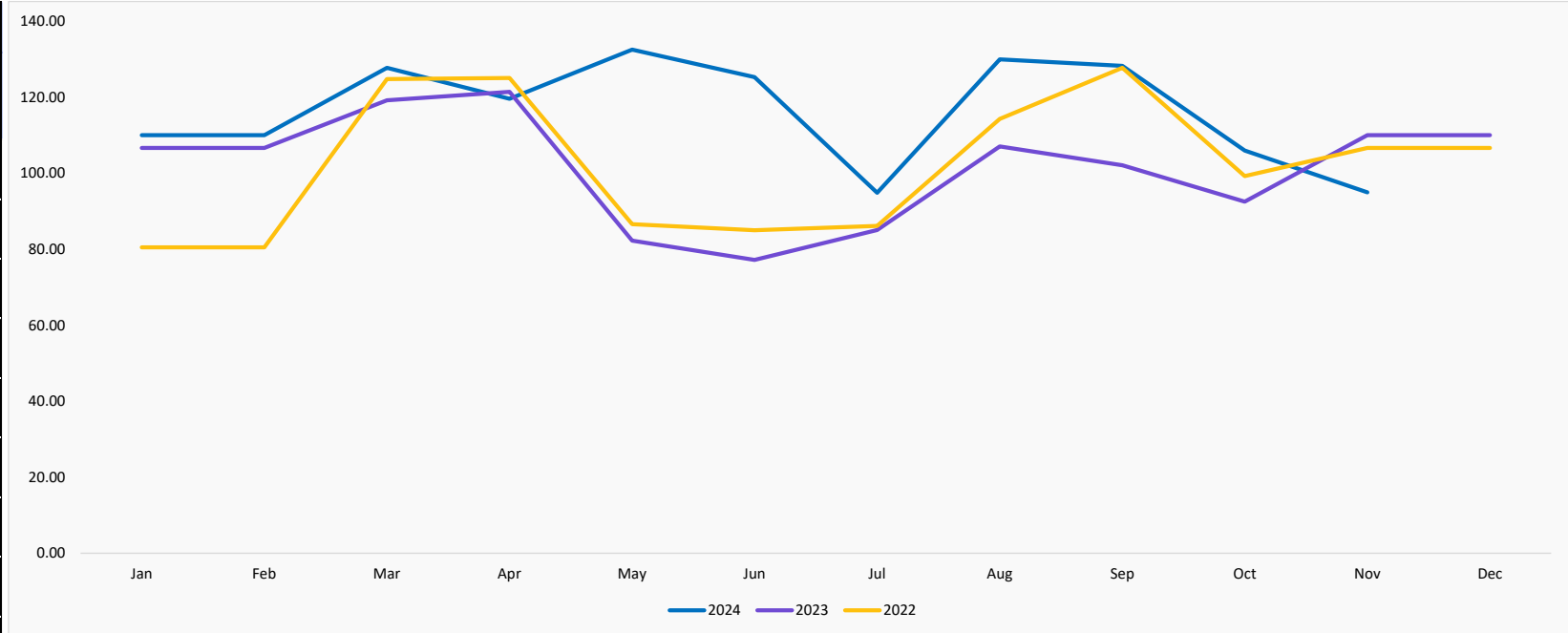
3.42%

NOTE: For prices in USD, please check the excel sent with the presentation

Cucumber - Germany

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	3.13%	110.00	106.66	80.50
February	3.13%	110.00	106.66	80.50
March	7.20%	127.76	119.18	124.80
April	-1.50%	119.61	121.43	125.09
May	61.08%	132.54	82.28	86.61
June	62.32%	125.33	77.21	85.03
July	11.56%	94.89	85.06	86.13
August	21.37%	129.96	107.08	114.32
September	25.64%	128.25	102.08	127.73
October	14.57%	106.01	92.53	99.24
November	-13.64%	95.00	110.00	106.66
December			110.00	106.66
Year Average		116.30	101.68	101.94



Monthly Price Variation

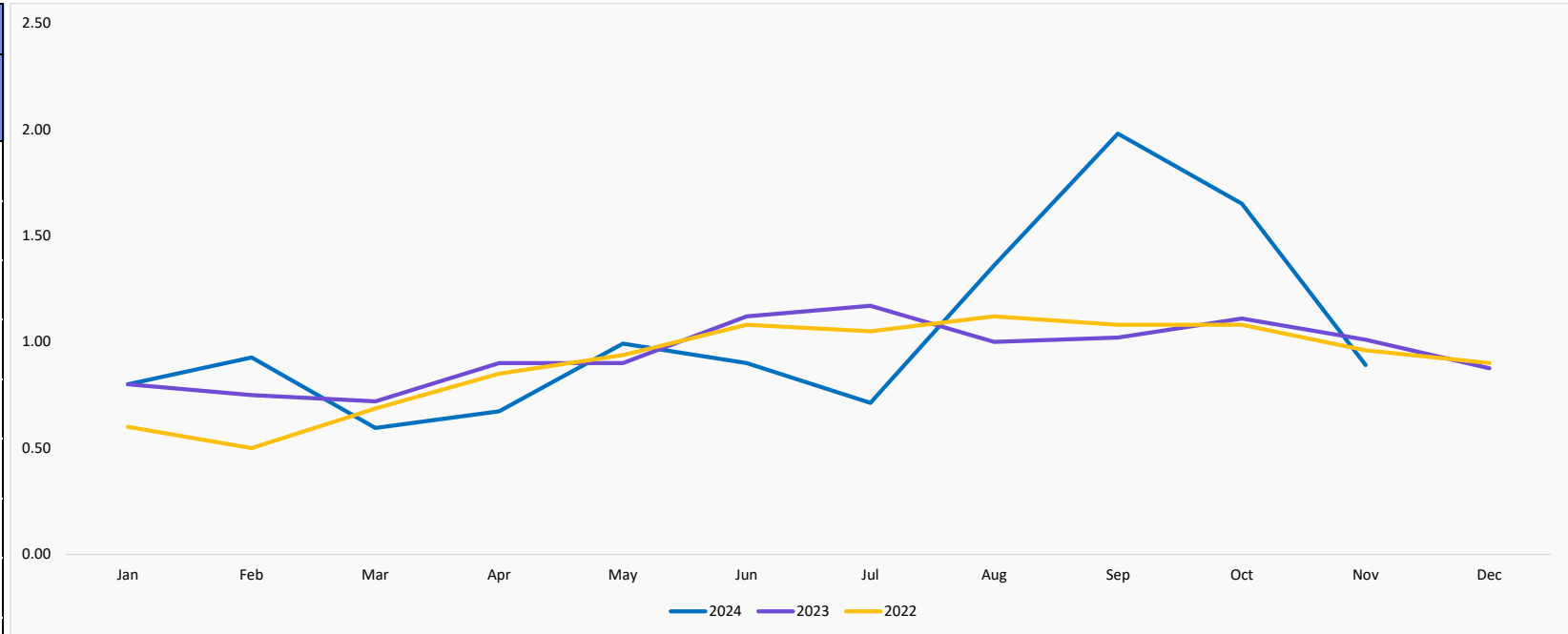
-10.39%

NOTE: For prices in USD, please check the excel sent with the presentation

Lemons - Spain

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	0.00%	0.80	0.80	0.60
February	23.49%	0.93	0.75	0.50
March	-17.33%	0.60	0.72	0.69
April	-25.26%	0.67	0.90	0.85
May	10.14%	0.99	0.90	0.94
June	-19.64%	0.90	1.12	1.08
July	-39.06%	0.71	1.17	1.05
August	36.00%	1.36	1.00	1.12
September	94.12%	1.98	1.02	1.08
October	48.65%	1.65	1.11	1.08
November	-11.83%	0.89	1.01	0.96
December			0.88	0.90
Year Average		1.04	0.95	0.90



Monthly Price Variation

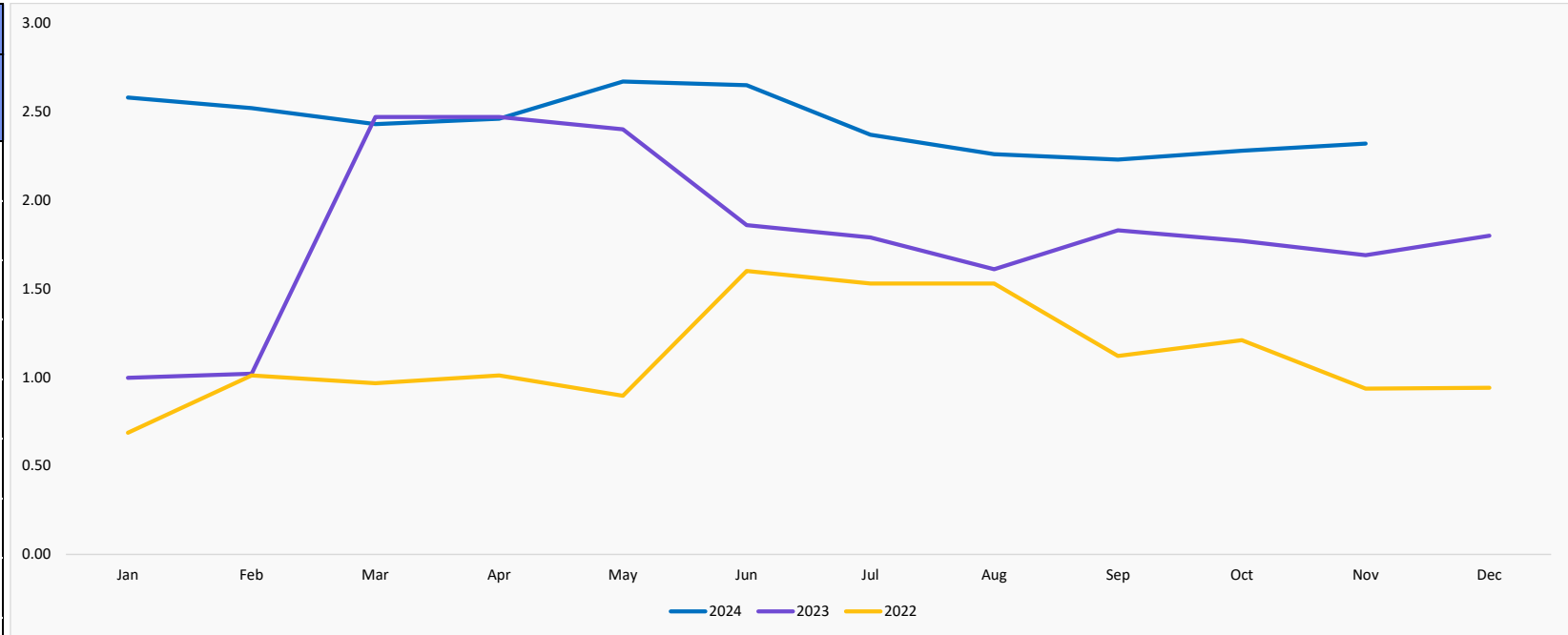
-46.03%

NOTE: For prices in USD, please check the excel sent with the presentation

Olives Black - Turkey

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	158.70%	2.58	1.00	0.69
February	147.06%	2.52	1.02	1.01
March	-1.62%	2.43	2.47	0.97
April	-0.40%	2.46	2.47	1.01
May	11.25%	2.67	2.40	0.90
June	42.47%	2.65	1.86	1.60
July	32.40%	2.37	1.79	1.53
August	40.37%	2.26	1.61	1.53
September	21.86%	2.23	1.83	1.12
October	28.81%	2.28	1.77	1.21
November	37.28%	2.32	1.69	0.94
December			1.80	0.94
Year Average		2.43	1.81	1.12



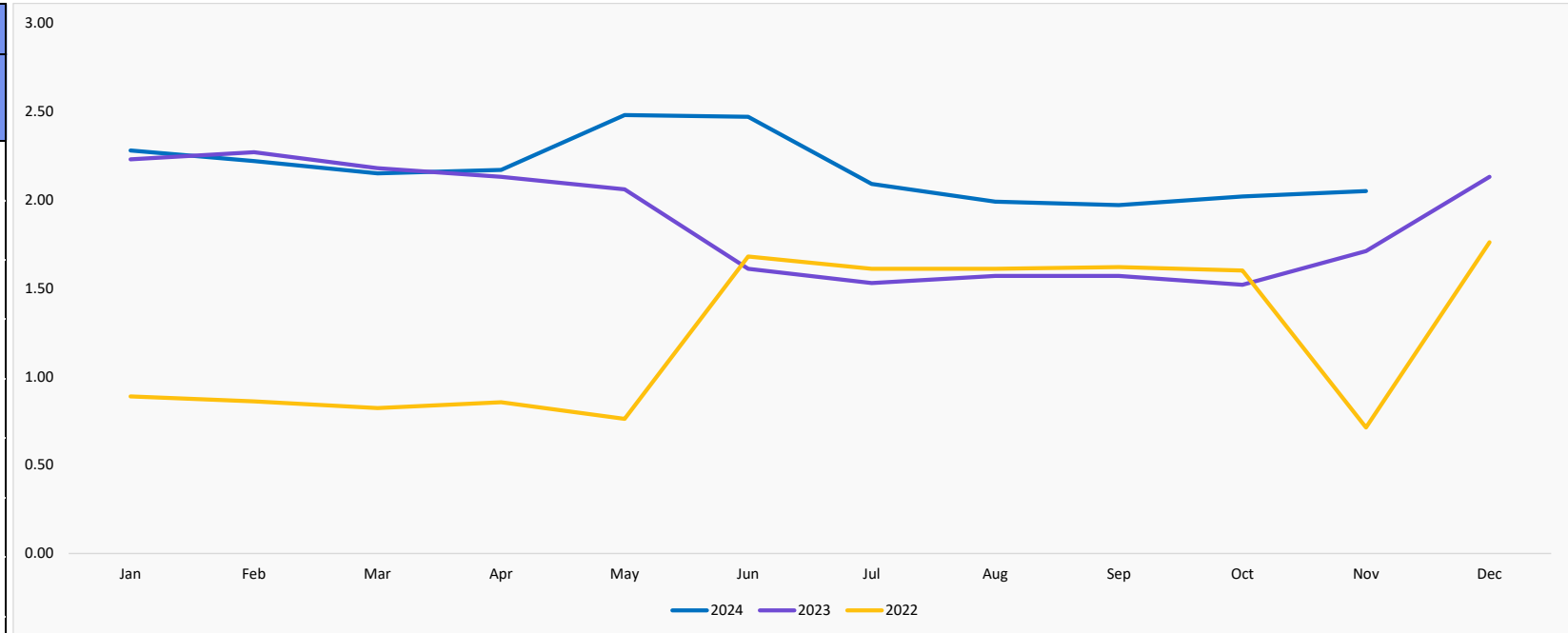
Monthly Price Variation

1.75%

NOTE: For prices in USD, please check the excel sent with the presentation

Olives Green - Turkey

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	2.24%	2.28	2.23	0.89
February	-2.20%	2.22	2.27	0.86
March	-1.38%	2.15	2.18	0.82
April	1.88%	2.17	2.13	0.86
May	20.39%	2.48	2.06	0.76
June	53.42%	2.47	1.61	1.68
July	36.60%	2.09	1.53	1.61
August	26.75%	1.99	1.57	1.61
September	25.48%	1.97	1.57	1.62
October	32.89%	2.02	1.52	1.60
November	19.88%	2.05	1.71	0.71
December			2.13	1.76
Year Average		2.17	1.88	1.23



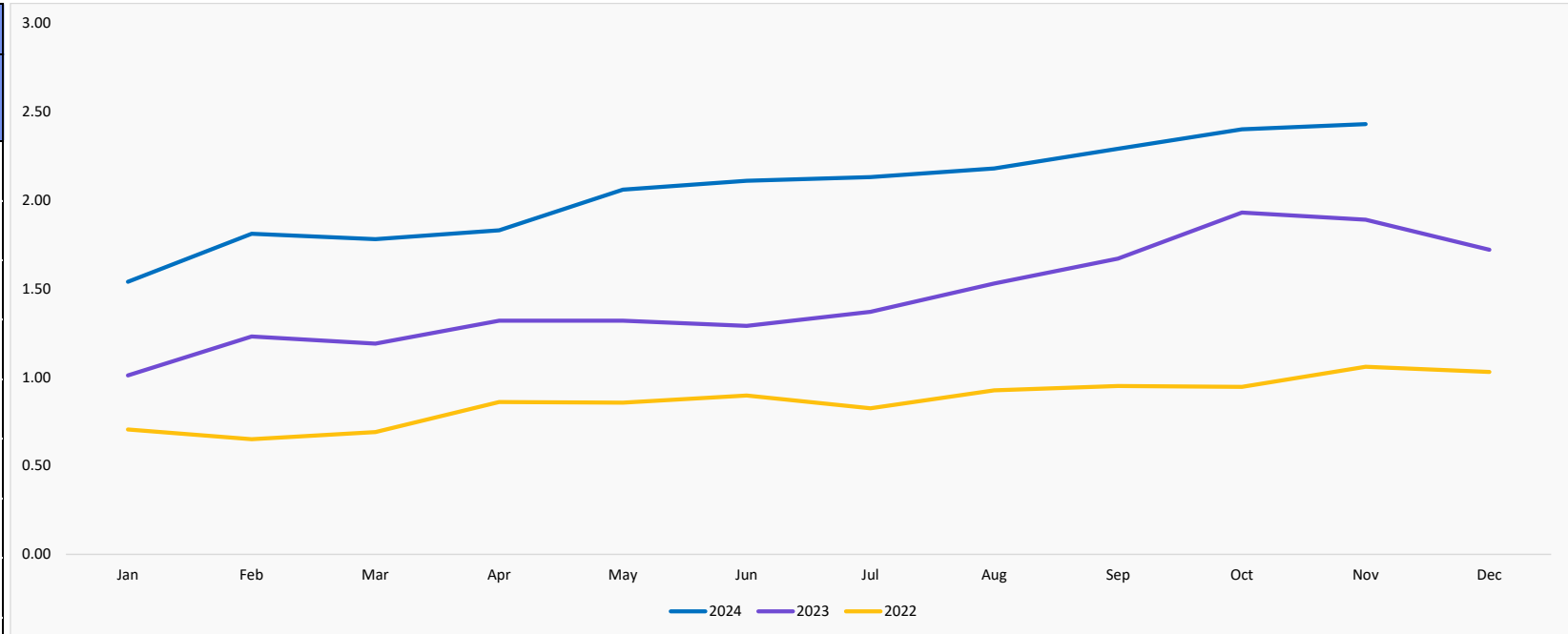
Monthly Price Variation

1.49%

NOTE: For prices in USD, please check the excel sent with the presentation

| Orange - European Union

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	52.48%	1.54	1.01	0.70
February	47.15%	1.81	1.23	0.65
March	49.58%	1.78	1.19	0.69
April	38.64%	1.83	1.32	0.86
May	56.06%	2.06	1.32	0.86
June	63.57%	2.11	1.29	0.90
July	55.47%	2.13	1.37	0.83
August	42.48%	2.18	1.53	0.93
September	37.13%	2.29	1.67	0.95
October	24.35%	2.40	1.93	0.95
November	28.57%	2.43	1.89	1.06
December			1.72	1.03
Year Average		2.05	1.46	0.87



Monthly Price Variation

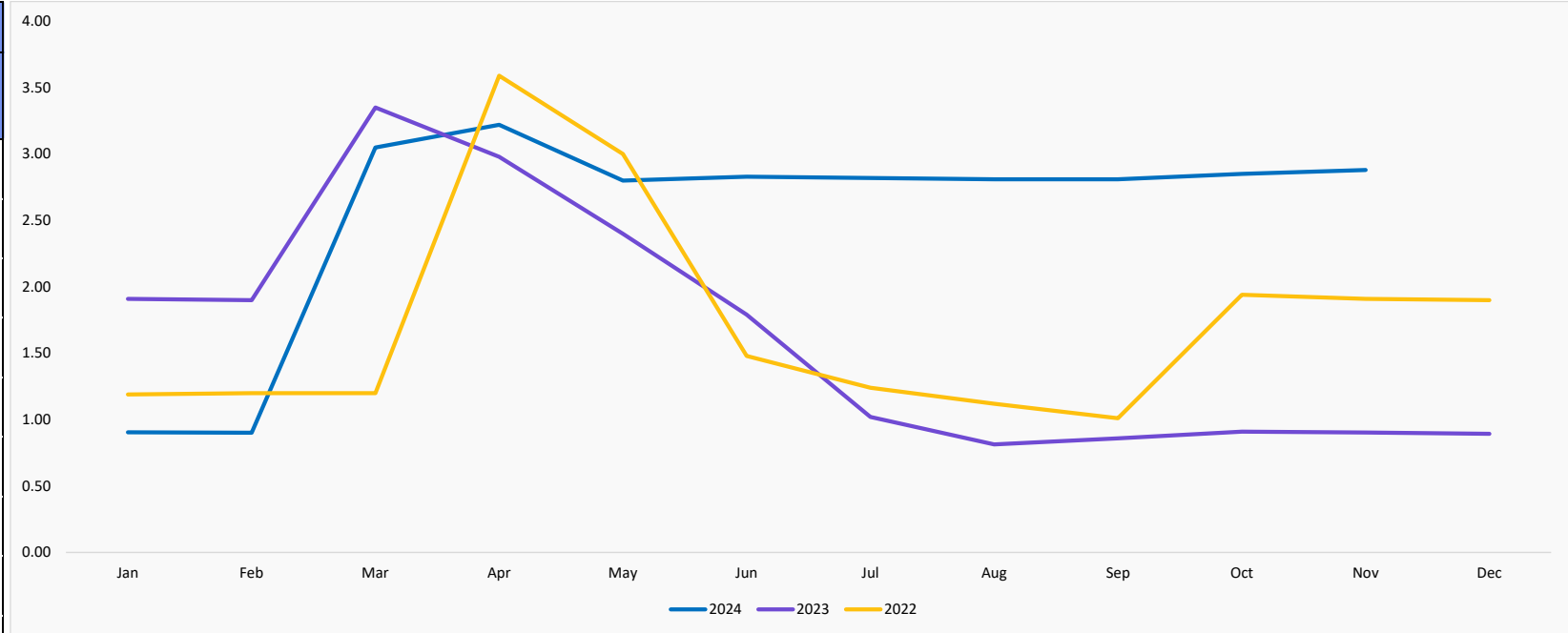
1.25%

NOTE: For prices in USD, please check the excel sent with the presentation

| Peach - China

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-52.64%	0.90	1.91	1.19
February	-52.57%	0.90	1.90	1.20
March	-8.96%	3.05	3.35	1.20
April	8.05%	3.22	2.98	3.59
May	16.67%	2.80	2.40	3.00
June	58.10%	2.83	1.79	1.48
July	176.47%	2.82	1.02	1.24
August	245.21%	2.81	0.81	1.12
September	227.47%	2.81	0.86	1.01
October	213.46%	2.85	0.91	1.94
November	219.29%	2.88	0.90	1.91
December			0.89	1.90
Year Average		2.53	1.64	1.73



Monthly Price Variation

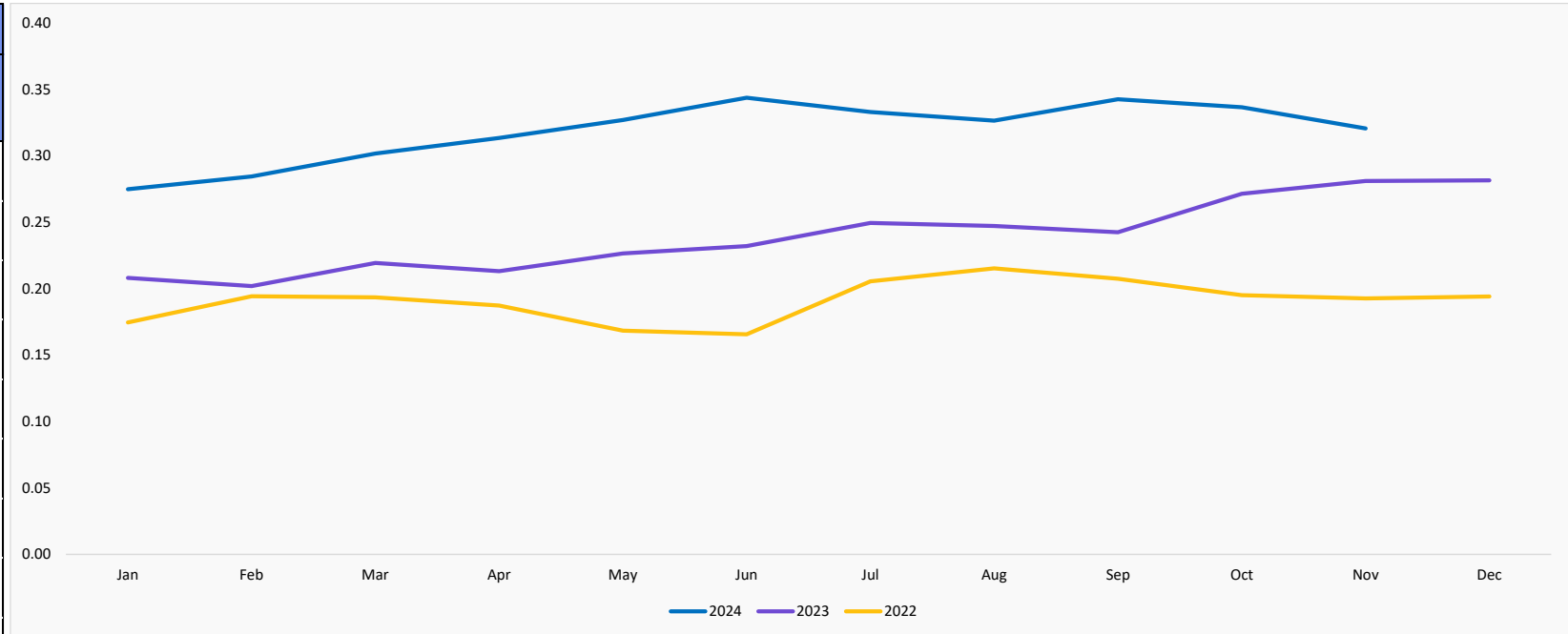
1.05%

NOTE: For prices in USD, please check the excel sent with the presentation

Pineapples - Thailand

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	32.04%	0.27	0.21	0.17
February	40.84%	0.28	0.20	0.19
March	37.56%	0.30	0.22	0.19
April	47.05%	0.31	0.21	0.19
May	44.35%	0.33	0.23	0.17
June	48.11%	0.34	0.23	0.17
July	33.45%	0.33	0.25	0.21
August	32.07%	0.33	0.25	0.22
September	41.32%	0.34	0.24	0.21
October	23.97%	0.34	0.27	0.20
November	14.05%	0.32	0.28	0.19
December			0.28	0.19
Year Average		0.32	0.24	0.19



Monthly Price Variation

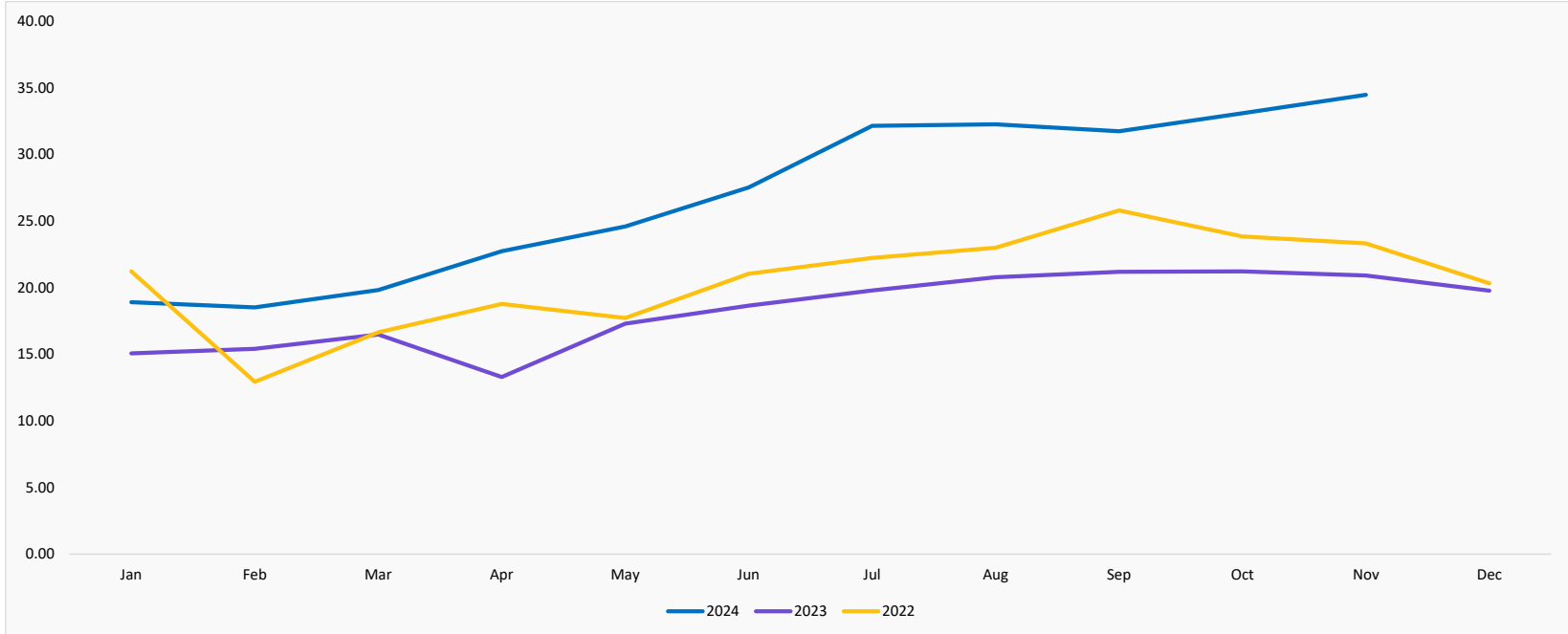
-4.75%

NOTE: For prices in USD, please check the excel sent with the presentation

Potato - India

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	25.55%	18.92	15.07	21.22
February	20.18%	18.52	15.41	12.94
March	20.27%	19.82	16.48	16.65
April	71.11%	22.74	13.29	18.79
May	42.20%	24.60	17.30	17.73
June	47.61%	27.53	18.65	21.04
July	62.51%	32.16	19.79	22.24
August	55.17%	32.26	20.79	23.00
September	49.72%	31.74	21.20	25.81
October	55.86%	33.09	21.23	23.84
November	64.87%	34.49	20.92	23.32
December			19.77	20.33
Year Average		26.90	18.33	20.58



Monthly Price Variation

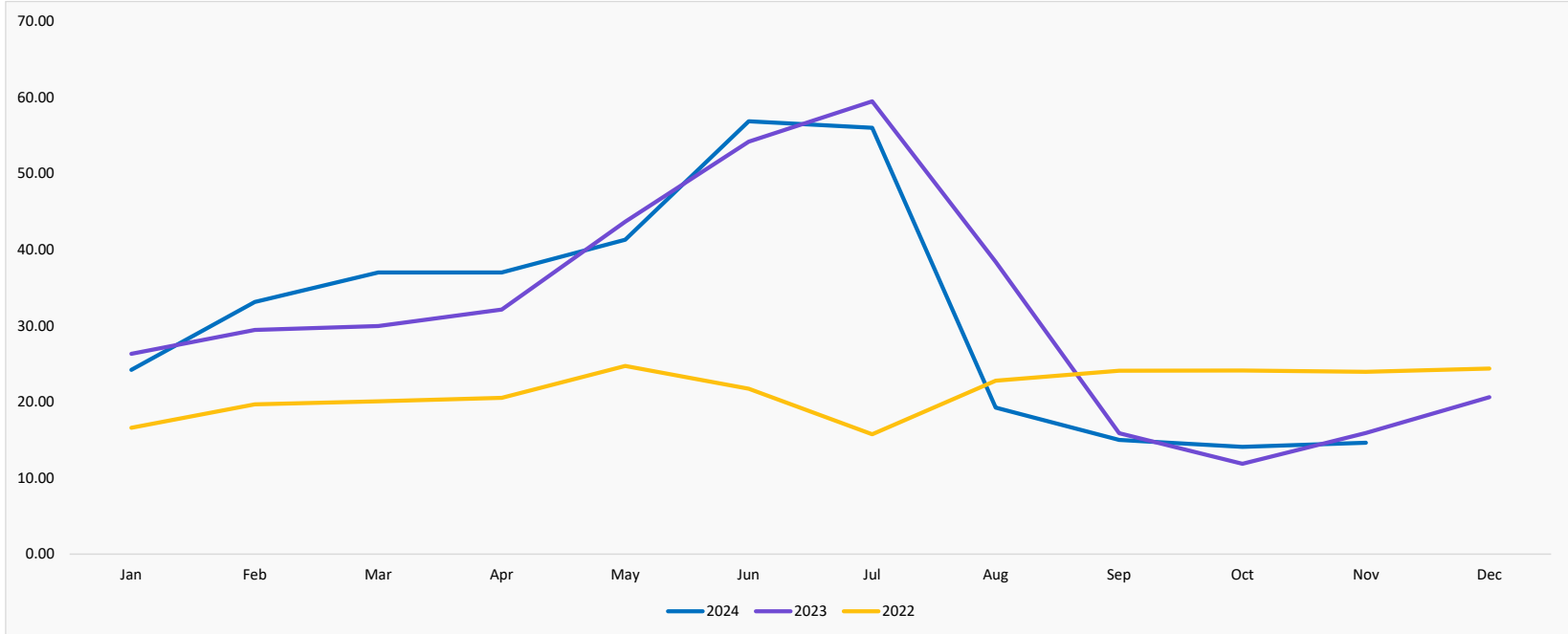
4.23%

NOTE: For prices in USD, please check the excel sent with the presentation

Potato - Netherlands

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-8.02%	24.20	26.31	16.61
February	12.50%	33.12	29.44	19.68
March	23.54%	37.00	29.95	20.08
April	15.19%	37.00	32.12	20.52
May	-5.41%	41.30	43.66	24.72
June	4.94%	56.88	54.20	21.74
July	-5.88%	56.00	59.50	15.75
August	-49.87%	19.25	38.40	22.79
September	-5.54%	15.00	15.88	24.10
October	18.69%	14.10	11.88	24.12
November	-8.05%	14.62	15.90	23.96
December			20.62	24.38
Year Average		31.68	31.49	21.54



Monthly Price Variation

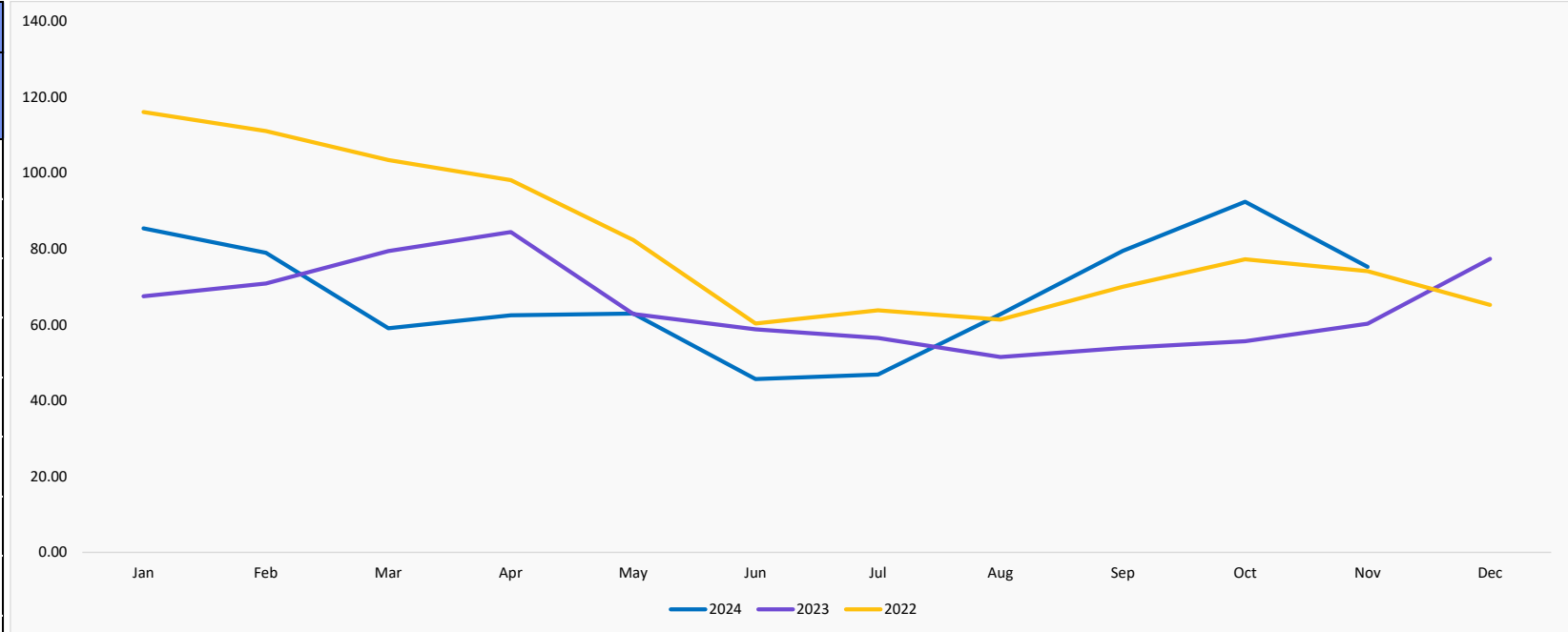
3.69%

NOTE: For prices in USD, please check the excel sent with the presentation

Tomato - China

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	26.48%	85.41	67.53	116.09
February	11.37%	78.95	70.89	111.08
March	-25.65%	59.06	79.43	103.44
April	-25.96%	62.50	84.41	98.09
May	0.21%	62.94	62.81	82.30
June	-22.30%	45.67	58.78	60.33
July	-17.01%	46.89	56.50	63.81
August	21.97%	62.80	51.49	61.33
September	47.49%	79.47	53.88	70.03
October	66.11%	92.44	55.65	77.24
November	24.88%	75.28	60.28	74.10
December			77.38	65.21
Year Average		68.31	64.92	81.92



Monthly Price Variation

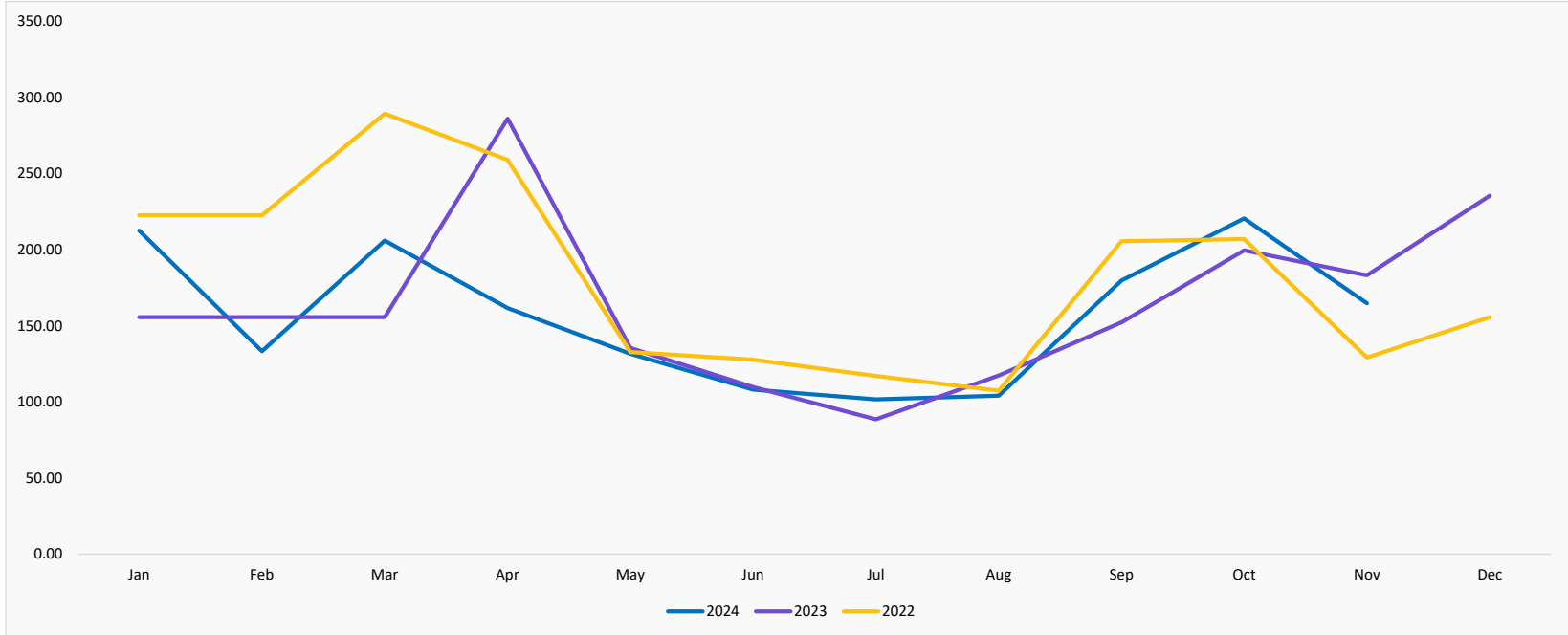
-18.56%

NOTE: For prices in USD, please check the excel sent with the presentation

Tomato - Germany

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	36.48%	212.46	155.67	222.67
February	-14.35%	133.33	155.67	222.67
March	32.28%	205.92	155.67	289.39
April	-43.48%	161.69	286.06	259.00
May	-2.81%	131.60	135.40	132.75
June	-1.56%	108.00	109.71	127.80
July	14.81%	101.68	88.56	117.08
August	-11.31%	104.08	117.35	107.33
September	18.09%	179.77	152.23	205.58
October	10.48%	220.43	199.52	207.00
November	-10.03%	164.79	183.17	129.13
December			235.50	155.67
Year Average		156.70	164.54	181.34



Monthly Price Variation

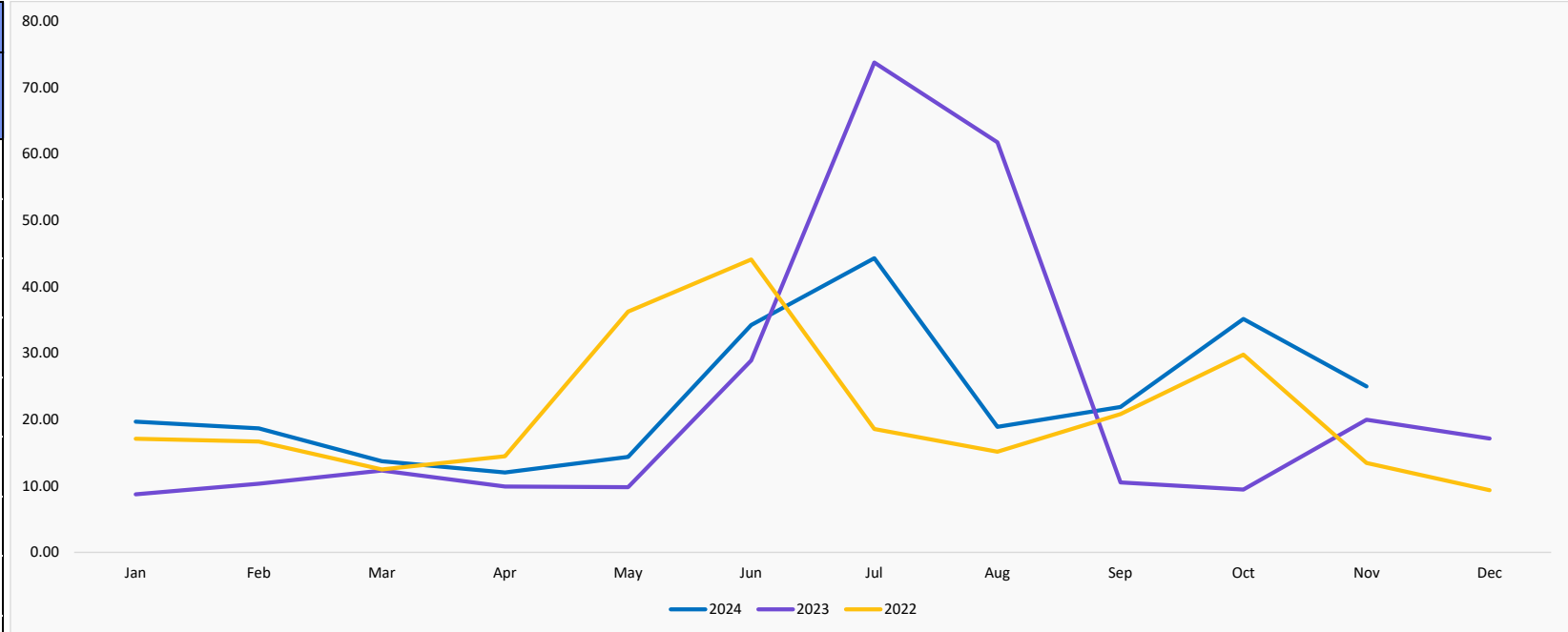
-25.24%

NOTE: For prices in USD, please check the excel sent with the presentation

Tomato - India

Euro/100 KG*

MONTH	YoY GROWTH	2024	2023	2022
January	125.06%	19.67	8.74	17.11
February	80.56%	18.67	10.34	16.69
March	11.53%	13.74	12.32	12.50
April	21.62%	12.04	9.90	14.46
May	46.69%	14.39	9.81	36.27
June	18.59%	34.26	28.89	44.12
July	-39.92%	44.32	73.77	18.58
August	-69.42%	18.89	61.78	15.15
September	108.08%	21.89	10.52	20.82
October	271.46%	35.14	9.46	29.78
November	25.08%	24.99	19.98	13.47
December			17.15	9.35
Year Average		23.45	22.72	20.69



Monthly Price Variation

-28.88%

NOTE: For prices in USD, please check the excel sent with the presentation

Tomato - Spain

Euro/100 KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	27.10%	175.40	138.00	150.00
February	-55.69%	109.00	246.00	187.25
March	-38.04%	142.25	229.60	209.00
April	-48.19%	118.00	227.75	213.50
May	-38.13%	97.00	156.78	143.25
June	-10.26%	94.00	104.75	128.80
July	50.23%	116.80	77.75	116.00
August	-5.75%	117.25	124.40	101.40
September	14.75%	167.25	145.75	156.50
October	-1.86%	185.00	188.50	194.75
November	-11.97%	164.79	187.20	129.40
December			220.50	140.22
Year Average		135.16	170.58	155.84



Monthly Price Variation

-10.92%

NOTE: For prices in USD, please check the excel sent with the presentation

GROCERIES & INGREDIENTS

PRICE UPDATE

| Groceries & Ingredients

Commodity lookup

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Citric Acid - China	KG	0.72	0.71	0.72	▶ 1.19%	▶ -0.21%
Corn (Maize) Starch - China	KG	0.39	0.35	0.35	▶ 1.20%	▶ -8.82%
Corn (Maize) Starch - Europe	KG	0.68	0.47	0.47	▶ 0.00%	▶ -30.88%
Garlic - China	KG	1.39	1.53	1.56	▶ 1.96%	▶ 12.23%
Garlic - Spain	KG	4.00	4.00	4.00	▶ 0.00%	▶ 0.00%
Gelatine - China	KG	7.73	6.21	6.02	▶ -3.06%	▶ -22.12%
Herbs Laurel - USA	UNIT	3.64	4.14	4.39	▶ 6.04%	▶ 20.60%
Herbs Oregano - USA	KG	3.62	3.45	3.76	▶ 8.99%	▶ 3.87%
Herbs Parsley - France	KG	1.07	1.11	1.12	▶ 0.90%	▶ 4.67%
Pumpkin Seed - Germany	KG	3.27	3.02	3.14	▶ 3.97%	▶ -3.98%
Sesame Seed - Europe	KG	1.99	1.80	1.85	▶ 2.78%	▶ -7.04%
Spice Black Pepper - Vietnam	KG	3.99	7.09	6.97	▶ -1.69%	▶ 74.69%
Spice Chilli Peppers - France	KG	1.34	1.42	1.42	▶ 0.00%	▶ 5.97%
Spice Cinnamon - Sri Lanka	KG	13.95	12.69	13.07	▶ 2.99%	▶ -6.31%
Spice Coriander - India	KG	0.85	0.79	0.83	▶ 5.16%	▶ -1.92%
Spice Cumin - India	KG	6.89	3.68	3.85	▶ 4.62%	▶ -44.12%
Spice Nutmeg - Indonesia	KG	8.44	7.55	7.68	▶ 1.72%	▶ -9.00%
Spice Saffron - Spain	KG	1485.69	2741.17	2822.09	▶ 2.95%	▶ 89.95%
Spice Turmeric - India	KG	1.45	1.46	1.51	▶ 3.42%	▶ 4.14%
Spice White Pepper - Vietnam	KG	4.20	9.78	9.61	▶ -1.74%	▶ 128.81%
Vanilla - Madagascar	KG	100.86	49.00	50.73	▶ 3.53%	▶ -49.70%
Wheat Starch - Europe	KG	0.82	0.53	0.53	▶ 0.00%	▶ -35.37%

| Groceries & Ingredients

Commodity lookup

Sesame Seeds – Indian sesame seed farmers have now harvested about 80% of their crop. In the current tender, India and Nigeria were each able to secure the largest single position and a further tender has reportedly already been announced for next week.

Source: Mundus Agri

Pumpkin Seeds – Demand for Chinese shine skins is weak, and the large crop volume is putting additional downward pressure on prices. Meanwhile, suppliers of GWS kernels have completely different problems.

Source: Mundus Agri

Coriander - Cooler Weather Ignites Coriander Planting: Snowfall in northern hilly states like Jammu and Kashmir, Himachal Pradesh, and Uttarakhand has caused a dip in temperatures across Gujarat. This change has provided ideal conditions for coriander planting, dramatically increasing sowing activity over the past week. However, the total area sown remains significantly behind last year's levels.

Source: Commodity Board

Cardamom - The new big cardamom crop has started arriving in markets, but the volume is much lower than usual. This reduced availability has pushed prices up, with auctions reporting higher values. Flooding and heavy rains in Assam and other northeastern states, such as Meghalaya, have severely impacted big cardamom crops. The losses are estimated at 60-70% for the first crop, with similar challenges affecting the second crop. High temperatures and pest infestations during critical growth phases have further reduced yields.

Source: Commodity Board

Cumin – The current price of cumin is at a two-year low, driven by sluggish global demand. Exports to China, one of the largest buyers, remain limited as purchases are now based on necessity rather than speculation. China has cumin reserves but faces a smaller crop and increased spoilage. Cumin prices are expected to remain rangebound in the near term, with limited fluctuations due to stable export demand and delayed planting in key producing regions. As global markets adjust to current price levels, trading activity may gradually increase, particularly if prices stabilize at attractive levels for buyers.

Source: Commodity Board

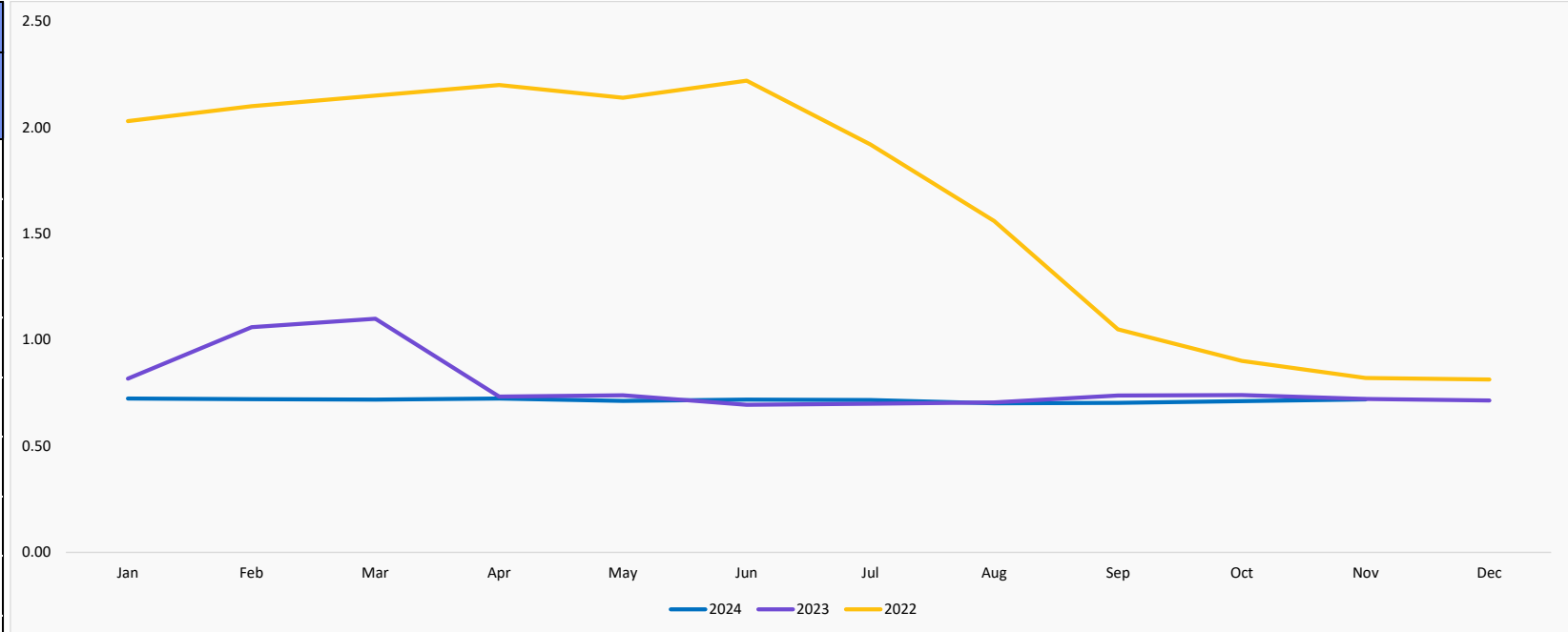
Garlic – The garlic supply chain faces a few challenges with lower and slower stock movement from major producers like China and Spain. This deficit has driven prices up, with importers emphasizing quality as a key market differentiator. South American supply comes from Peru, Argentina and Chile.

Source: Freshplaza

Citric Acid - China

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-11.55%	0.72	0.82	2.03
February	-31.98%	0.72	1.06	2.10
March	-34.65%	0.72	1.10	2.15
April	-1.34%	0.72	0.73	2.20
May	-3.56%	0.71	0.74	2.14
June	3.59%	0.72	0.69	2.22
July	2.46%	0.72	0.70	1.92
August	-0.64%	0.70	0.71	1.56
September	-4.74%	0.70	0.74	1.05
October	-3.88%	0.71	0.74	0.90
November	-0.21%	0.72	0.72	0.82
December			0.71	0.81
Year Average		0.72	0.79	1.66



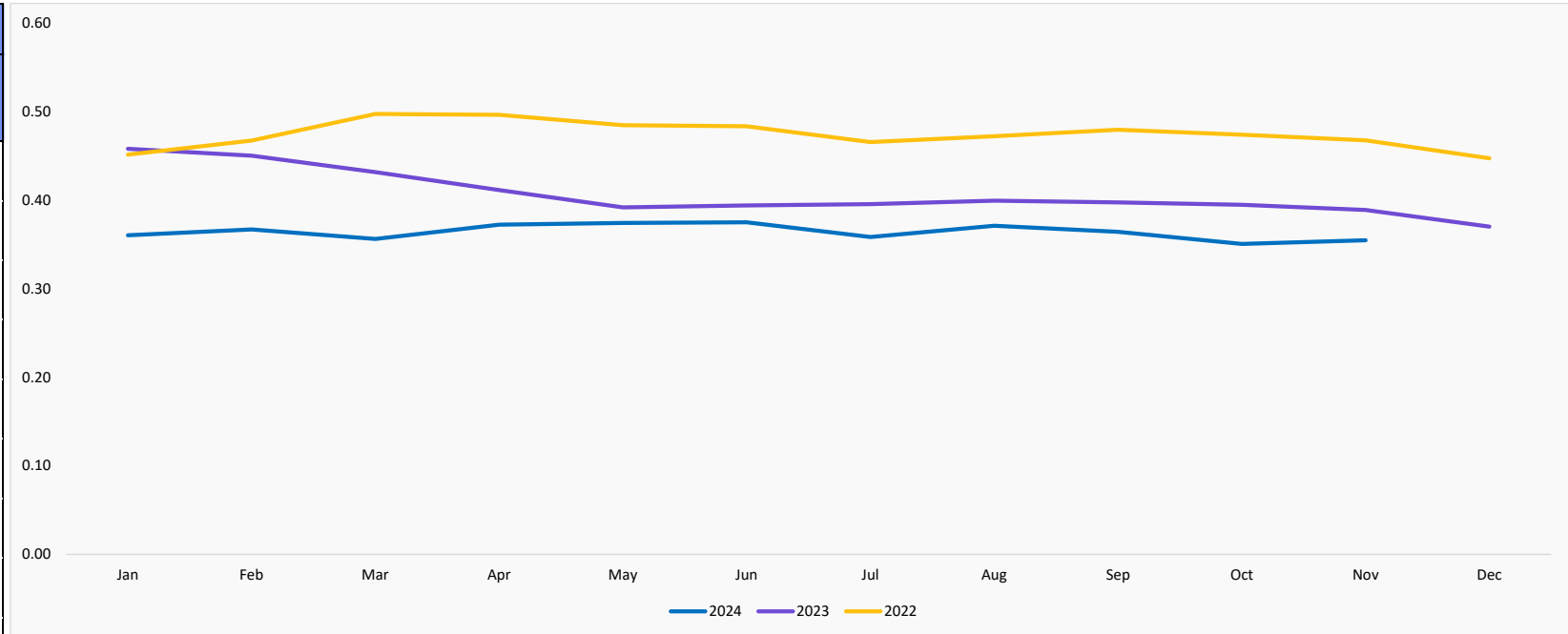
Monthly Price Variation

1.19%

NOTE: For prices in USD, please check the excel sent with the presentation

Corn (Maize) Starch - China

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	-21.31%	0.36	0.46	0.45
February	-18.50%	0.37	0.45	0.47
March	-17.47%	0.36	0.43	0.50
April	-9.50%	0.37	0.41	0.50
May	-4.52%	0.37	0.39	0.48
June	-4.80%	0.38	0.39	0.48
July	-9.38%	0.36	0.40	0.47
August	-7.09%	0.37	0.40	0.47
September	-8.35%	0.36	0.40	0.48
October	-11.20%	0.35	0.39	0.47
November	-8.82%	0.35	0.39	0.47
December			0.37	0.45
Year Average		0.36	0.41	0.47



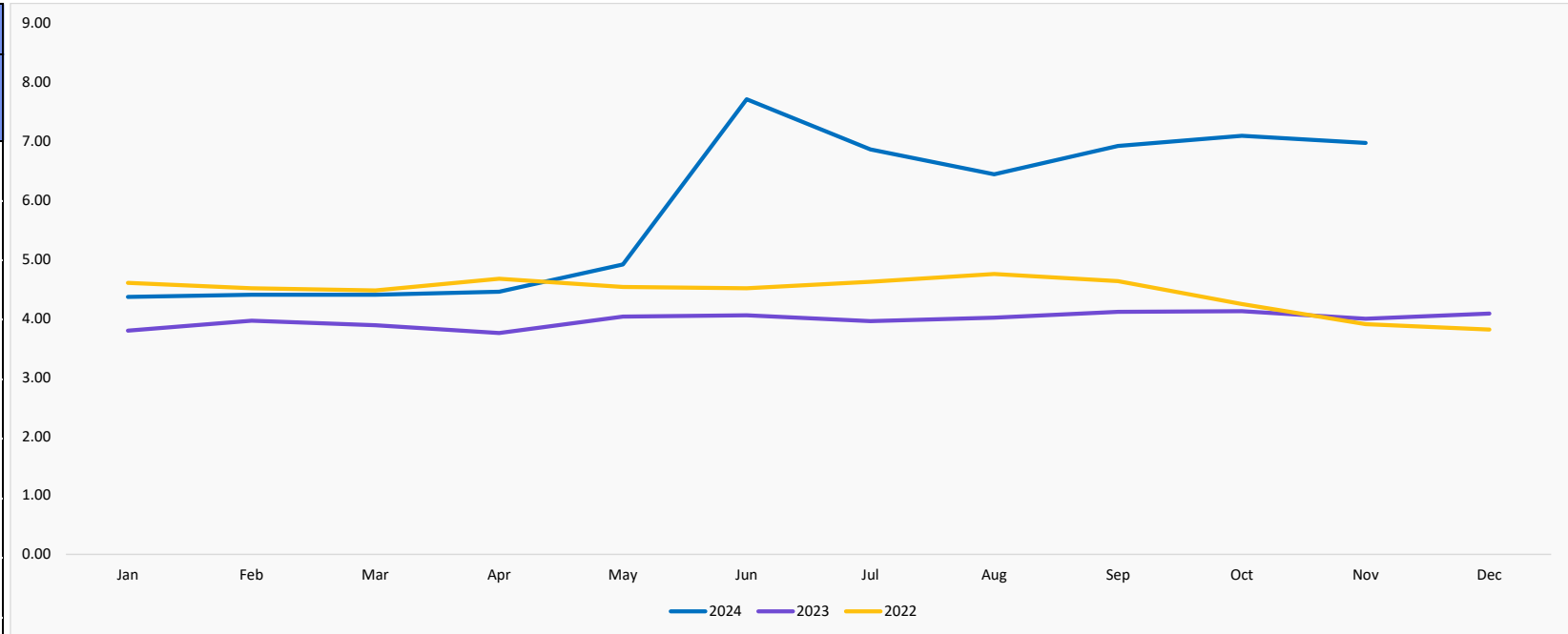
Monthly Price Variation

1.20%

NOTE: For prices in USD, please check the excel sent with the presentation

Spice Black Pepper - Vietnam

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	15.04%	4.36	3.79	4.60
February	11.11%	4.40	3.96	4.51
March	13.40%	4.40	3.88	4.47
April	18.67%	4.45	3.75	4.67
May	21.84%	4.91	4.03	4.53
June	90.37%	7.71	4.05	4.51
July	73.67%	6.86	3.95	4.62
August	60.60%	6.44	4.01	4.75
September	68.37%	6.92	4.11	4.63
October	72.09%	7.09	4.12	4.24
November	74.69%	6.97	3.99	3.90
December			4.08	3.81
Year Average		5.86	3.98	4.44



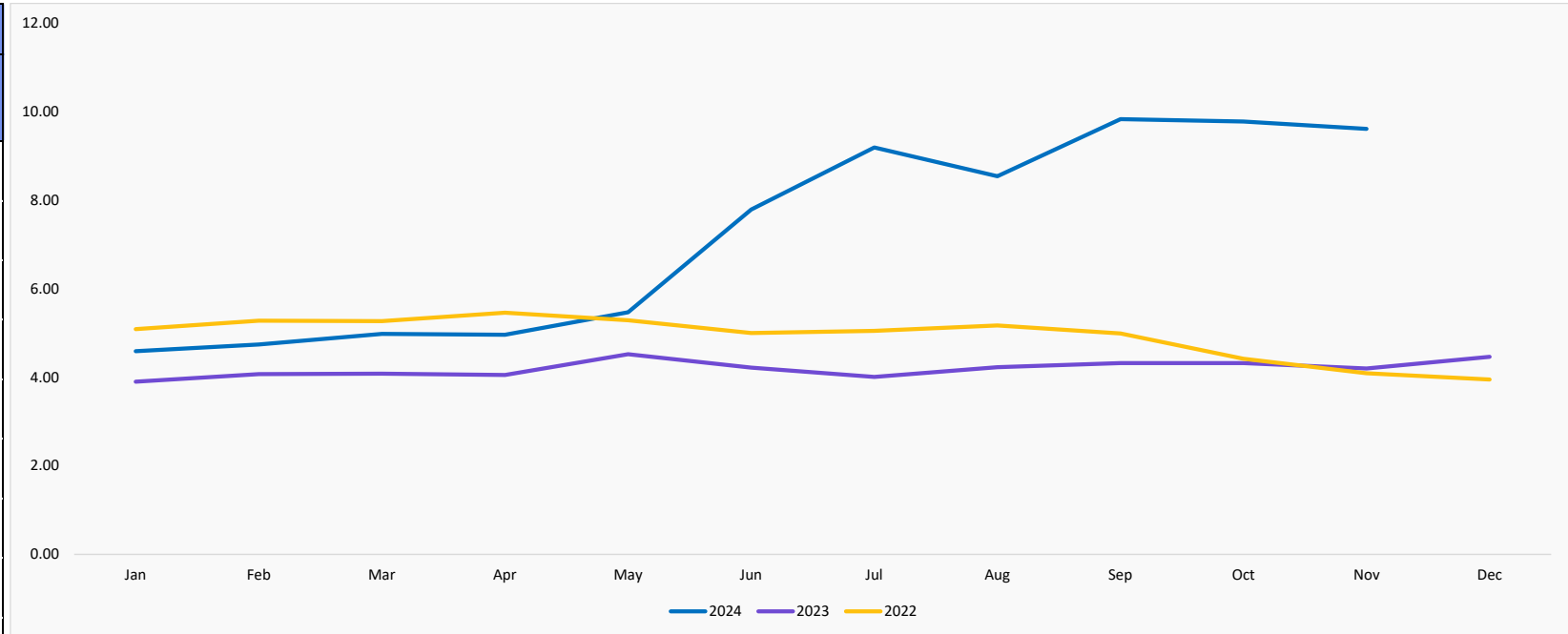
Monthly Price Variation

-1.69%

NOTE: For prices in USD, please check the excel sent with the presentation

Spice White Pepper - Vietnam

Euro/KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	17.69%	4.59	3.90	5.09
February	16.46%	4.74	4.07	5.28
March	22.06%	4.98	4.08	5.27
April	22.47%	4.96	4.05	5.46
May	21.02%	5.47	4.52	5.29
June	84.60%	7.79	4.22	5.00
July	129.18%	9.19	4.01	5.05
August	101.89%	8.54	4.23	5.17
September	127.55%	9.83	4.32	4.99
October	126.39%	9.78	4.32	4.42
November	128.81%	9.61	4.20	4.09
December			4.46	3.95
Year Average		7.23	4.20	4.92



Monthly Price Variation

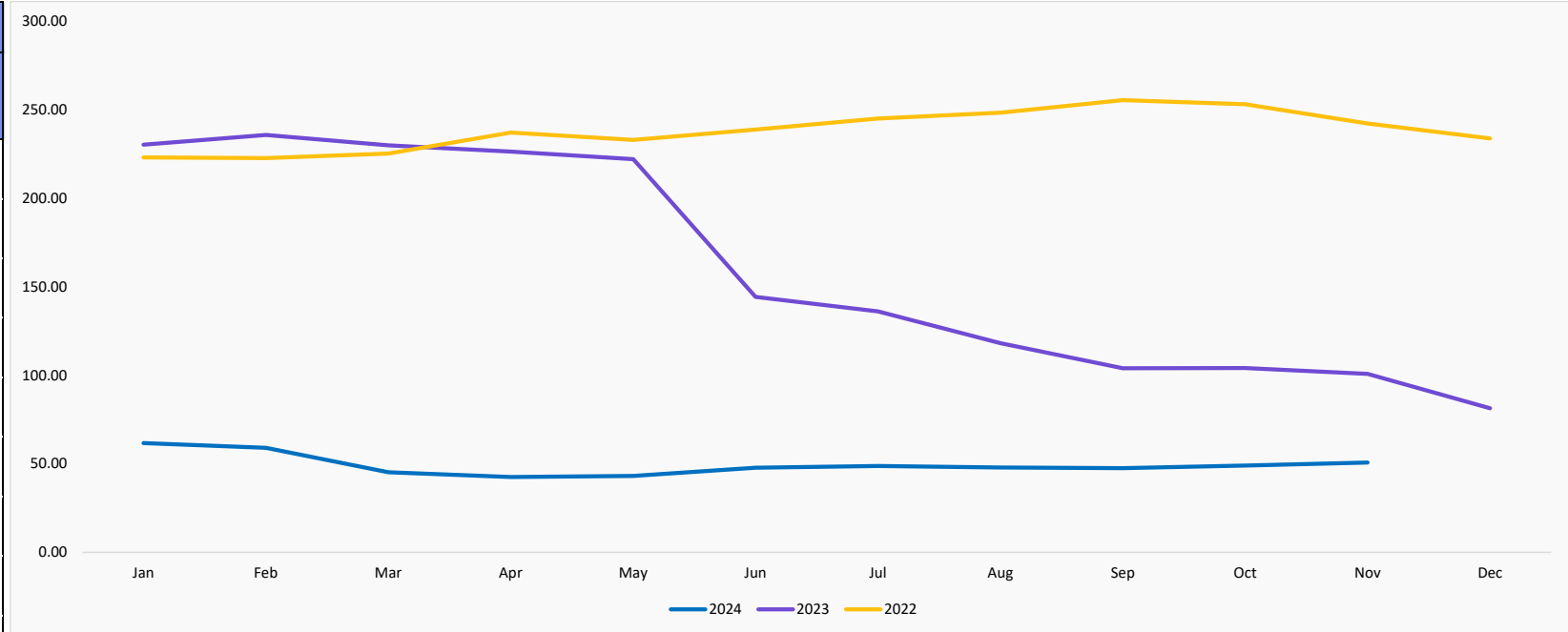
-1.74%

NOTE: For prices in USD, please check the excel sent with the presentation

Vanilla - Madagascar

Euro/KG*

MONTH	YoY GROWTH	2024	2023	2022
January	-73.19%	61.72	230.24	223.04
February	-74.98%	58.99	235.80	222.76
March	-80.35%	45.19	229.94	225.31
April	-81.19%	42.59	226.43	237.12
May	-80.58%	43.14	222.09	232.95
June	-66.83%	47.85	144.26	238.87
July	-64.17%	48.78	136.13	245.07
August	-59.42%	47.92	118.10	248.34
September	-54.24%	47.56	103.93	255.42
October	-52.93%	49.00	104.11	253.08
November	-49.70%	50.73	100.86	242.24
December			81.38	233.77
Year Average		49.41	161.11	238.16



Monthly Price Variation

3.53%

NOTE: For prices in USD, please check the excel sent with the presentation

ENERGY & CHEMICALS

PRICE UPDATE

Energy & Chemicals

Commodity lookup

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Ammonium Nitrate - Ukraine	MT	227.39	256.05	271.82	▶ 6.16%	▶ 19.54%
Ammonium Sulphate - Europe	MT	188.85	148.65	148.65	▶ 0.00%	▶ -21.29%
Benzoic Acid - Europe	MT	847.84	842.61	833.37	▶ -1.10%	▶ -1.71%
Biodiesel - Germany	LT	1.62	1.70	1.72	▶ 1.18%	▶ 6.17%
Coal - Europe	MT	111.90	109.95	114.60	▶ 4.23%	▶ 2.41%
Crude Oil - Brent	BARREL	75.90	69.31	69.05	▶ -0.38%	▶ -9.02%
Crude Oil - WTI	BARREL	71.87	66.01	65.80	▶ -0.31%	▶ -8.44%
Diammonium Phosphate - Baltic Sea	MT	435.06	501.50	534.95	▶ 6.67%	▶ 22.96%
Diesel - Netherlands	LT	1.84	1.69	1.77	▶ 4.78%	▶ -3.48%
Diesel - Portugal	LT	1.66	1.56	1.58	▶ 0.96%	▶ -4.83%
Electricity - France	MWH	86.43	59.23	101.28	▶ 70.99%	▶ 17.18%
Electricity - Germany	MWH	97.76	91.00	128.55	▶ 41.26%	▶ 31.50%
Electricity - Netherlands	MWH	101.24	92.45	103.45	▶ 11.90%	▶ 2.18%
Electricity - Portugal	MWH	67.99	74.67	111.09	▶ 48.77%	▶ 63.39%
Electricity - Spain	MWH	68.25	73.88	110.86	▶ 50.05%	▶ 62.43%
Electricity - UK	MWH	113.62	103.13	110.88	▶ 7.51%	▶ -2.41%
Ethanol - Brazil	LT	0.41	0.41	0.42	▶ 2.73%	▶ 4.72%
Ethanol - US (CME)	LT	0.41	0.34	0.35	▶ 5.01%	▶ -13.82%
Ethylene Glycol - Europe	MT	569.54	632.77	625.94	▶ -1.08%	▶ 9.90%
Isopropanol - Europe	MT	1303.13	1259.16	1259.16	▶ 0.00%	▶ -3.37%
Kerosene (Jet Fuel) - USA	LT	0.66	0.50	0.52	▶ 2.82%	▶ -21.91%
Methanol - Europe	MT	375.00	570.00	570.00	▶ 0.00%	▶ 52.00%
Monoammonium Phosphate - Ukraine	MT	653.62	830.73	848.59	▶ 2.15%	▶ 29.83%
Natural Gas - Europe	10 THERM	13.82	11.17	11.96	▶ 7.07%	▶ -13.46%
Natural Gas - NYMEX US	10 THERM	2.83	2.38	2.80	▶ 17.57%	▶ -0.98%
Petrol - Netherlands	LT	1.99	1.94	1.99	▶ 2.27%	▶ -0.05%
Petrol - Portugal	LT	1.73	1.69	1.70	▶ 0.12%	▶ -1.97%
Phenol - China	MT	1030.83	1035.12	994.99	▶ -3.88%	▶ -3.48%
Propane - USA	LT	0.20	0.22	0.24	▶ 8.34%	▶ 15.89%
Propylene - Europe	MT	755.49	771.37	726.23	▶ -5.85%	▶ -3.87%
Urea - Black Sea	MT	303.03	297.03	297.86	▶ 0.28%	▶ -1.71%

| Energy & Chemicals

Commodity lookup

Crude Oil Report – December 2024

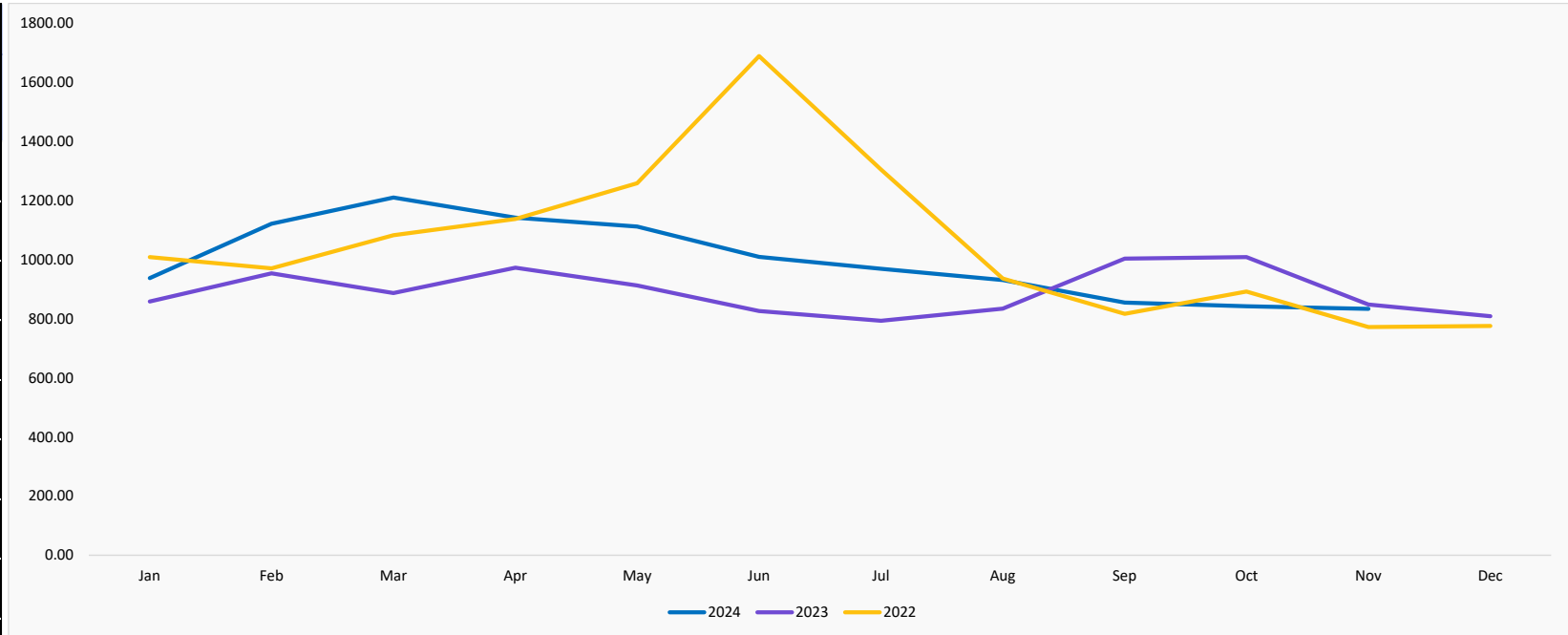
The decision by OPEC+ to delay the unwinding of its additional voluntary production cuts by another three months and extend the ramp-up period by nine months through September 2026 has materially reduced the potential supply overhang that was set to emerge next year. Even so, **persistent overproduction from some OPEC+ members, robust supply growth from non-OPEC+ countries and relatively modest global oil demand growth leaves the market looking comfortably supplied in 2025.** Ministers of the eight OPEC+ countries that had agreed extra output reductions of 2.2 mb/d in November 2023 confirmed at last week's meeting a further delay in restoring these volumes to the market. The postponement was the third since September and came against a backdrop of heightened geopolitical tensions that have raised potential supply risks and slowing global oil demand growth led by China. The cuts will now, at the earliest, be phased out from the end of March 2025 through September 2026. Yet the latest OPEC+ decision does not remove the uncertainty about when the unwinding of the cuts will actually start. In this context, our forecasts exclude a return to higher production quotas until a final phase-out timeline is confirmed. On that basis, our current market balances still indicate a 950 kb/d supply overhang in 2025. If OPEC+ does begin unwinding the voluntary cuts from the end of March 2025, this overhang would rise to 1.4 mb/d. A key uncertainty for the trajectory of OPEC+ crude supply remains the level of compliance with agreed targets, with our estimates showing collective output 680 kb/d above targets in November.

OPEC+ crude oil production may still rise next year if Libya, South Sudan and Sudan can sustain production and as Kazakhstan's 260 kb/d Tengiz expansion comes online. Globally, the bulk of supply growth will continue to be dominated by non-OPEC+ countries, with the US, Brazil, Canada, Guyana and Argentina adding more than 1.1 mb/d of crude oil and NGL output between them. The start-up of Saudi Aramco's Jafurah gas project next year will also boost Saudi Arabia's NGL supply. While the market is closely assessing ongoing geopolitical tensions and evolving OPEC+ supply dynamics, global oil demand remains the bigger question for 2025. The abrupt halt to Chinese oil demand growth this year – along with sharply lower increases in other notable emerging and developing economies such as Nigeria, Pakistan, Indonesia, South Africa and Argentina – has tilted consensus towards a softer outlook. In a break from recent trends, non-OECD oil demand in 3Q24 was up only 320 kb/d y-o-y, its lowest quarterly growth rate since the height of the pandemic, while OECD countries posted an increase of 190 kb/d y-o-y in the same quarter. The relatively subdued pace of global oil demand growth is set to continue in 2025, accelerating only modestly from 840 kb/d in 2024 to 1.1 mb/d, with overall consumption reaching 103.9 mb/d. Additional demand for crude or refined products could come from discretionary inventory builds to bring industry stocks back in line with historical averages and as governments replenish strategic reserves. As the year draws to a close, oil markets appear relatively calm, with crude oil trading in a \$70-75/bbl range. But, as recent years have shown, market shocks can arrive with little or no warning, making close attention to oil security as important as ever.

Source: IEA

Benzoic Acid - Europe

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	9.28%	937.79	858.12	1,008.34
February	17.59%	1,121.62	953.80	970.55
March	36.50%	1,210.26	886.66	1,082.55
April	17.37%	1,141.98	972.98	1,137.48
May	21.83%	1,111.76	912.58	1,258.85
June	22.20%	1,009.62	826.18	1,688.56
July	22.19%	969.22	793.18	1,304.75
August	11.57%	931.14	834.60	936.14
September	-14.88%	854.41	1,003.81	816.83
October	-16.46%	842.61	1,008.58	891.84
November	-1.71%	833.37	847.84	771.88
December			808.38	775.43
Year Average		996.71	892.23	1,053.60



Monthly Price Variation

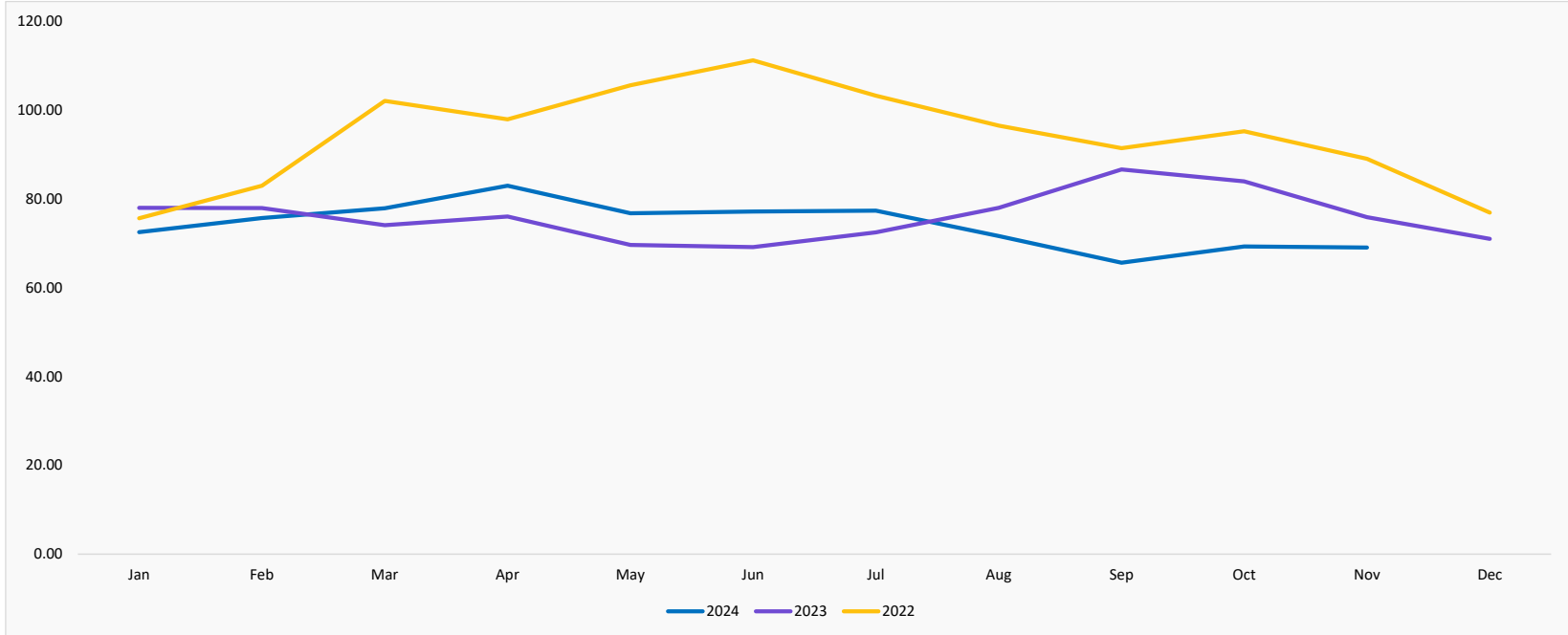
-1.10%

NOTE: For prices in USD, please check the excel sent with the presentation

Crude Oil - Brent

Euro/BARREL*

MONTH	YoY GROWTH	2024	2023	2022
January	-7.06%	72.50	78.00	75.63
February	-2.90%	75.70	77.96	82.97
March	5.15%	77.88	74.06	102.06
April	9.14%	82.96	76.01	97.90
May	10.19%	76.75	69.65	105.62
June	11.53%	77.14	69.17	111.21
July	6.71%	77.35	72.49	103.27
August	-8.16%	71.65	78.01	96.50
September	-24.29%	65.61	86.66	91.45
October	-17.46%	69.31	83.98	95.25
November	-9.02%	69.05	75.90	89.06
December			71.00	76.93
Year Average		74.17	76.07	93.99



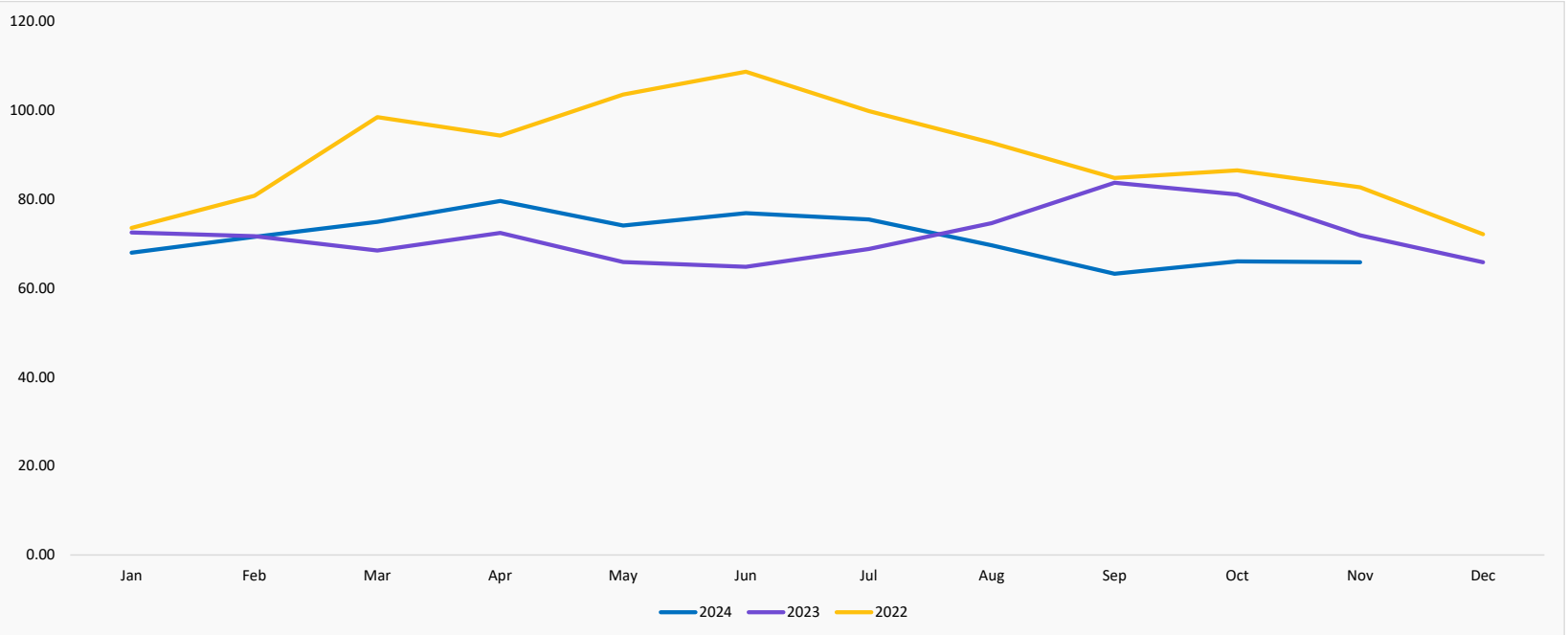
Monthly Price Variation

-0.38%

NOTE: For prices in USD, please check the excel sent with the presentation

| Crude Oil - WTI

Euro/BARREL*				
MONTH	YoY GROWTH	2024	2023	2022
January	-6.27%	68.00	72.54	73.55
February	-0.19%	71.56	71.70	80.80
March	9.42%	74.90	68.45	98.47
April	9.88%	79.60	72.44	94.30
May	12.49%	74.10	65.88	103.56
June	18.59%	76.86	64.81	108.69
July	9.66%	75.43	68.79	99.83
August	-6.68%	69.63	74.62	92.72
September	-24.44%	63.25	83.71	84.77
October	-18.59%	66.01	81.08	86.51
November	-8.44%	65.80	71.87	82.71
December			65.82	72.12
Year Average		71.38	71.81	89.84



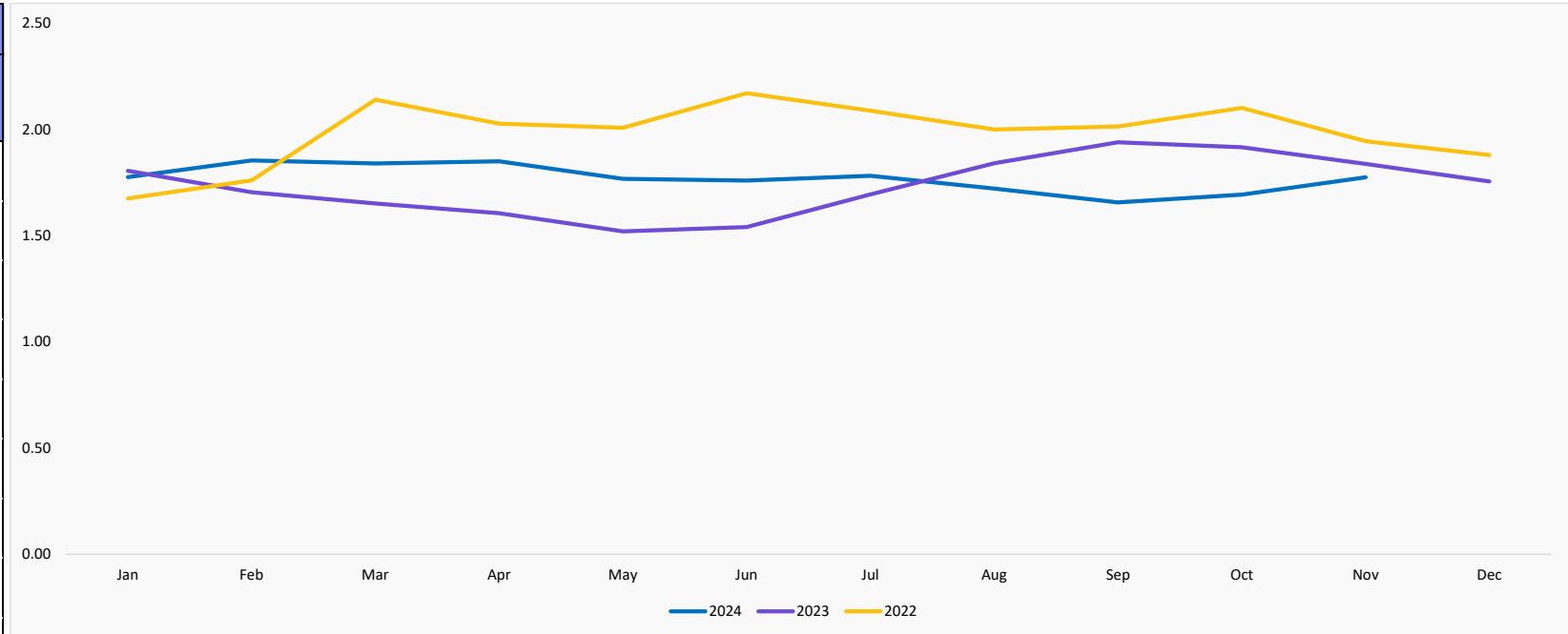
Monthly Price Variation

-0.31%

NOTE: For prices in USD, please check the excel sent with the presentation

Diesel - Netherlands

Euro/LT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-1.66%	1.78	1.81	1.68
February	8.80%	1.85	1.70	1.76
March	11.45%	1.84	1.65	2.14
April	15.19%	1.85	1.61	2.03
May	16.25%	1.77	1.52	2.01
June	14.22%	1.76	1.54	2.17
July	5.19%	1.78	1.69	2.09
August	-6.46%	1.72	1.84	2.00
September	-14.60%	1.66	1.94	2.01
October	-11.64%	1.69	1.92	2.10
November	-3.48%	1.77	1.84	1.94
December			1.76	1.88
Year Average		1.77	1.73	1.98



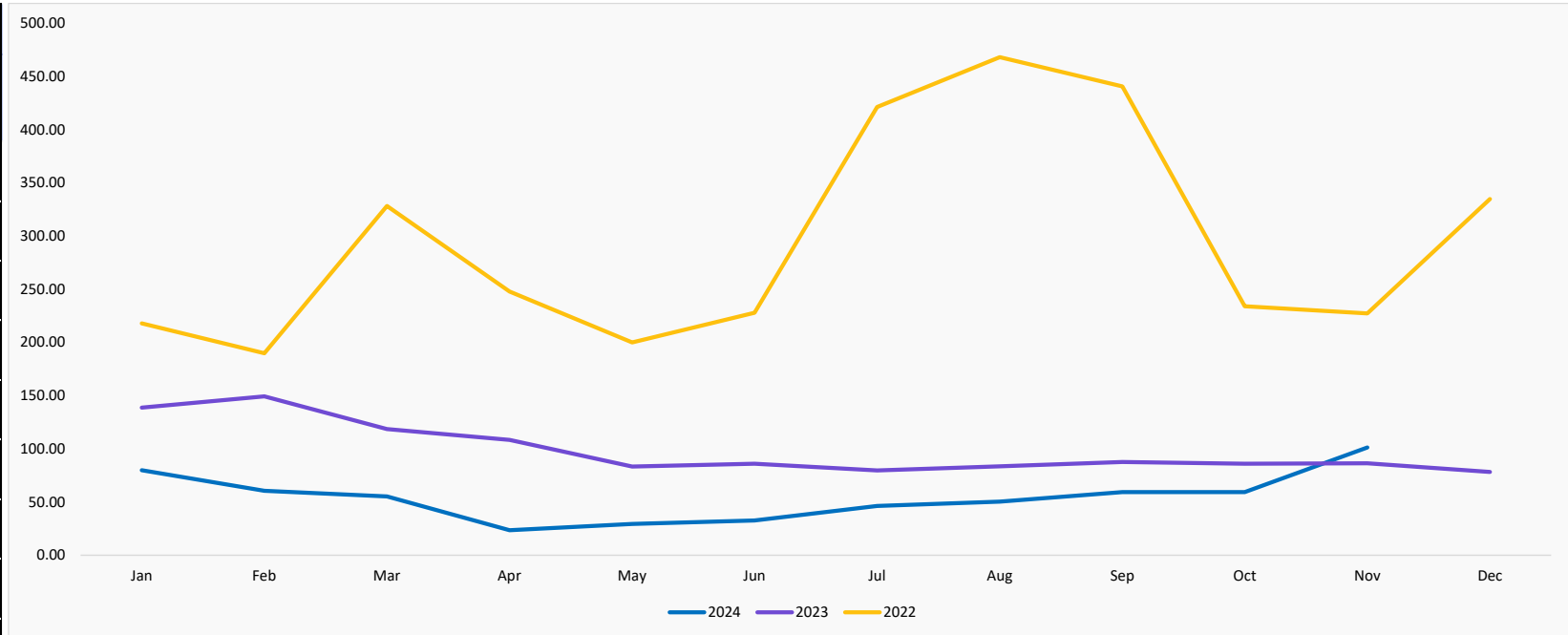
Monthly Price Variation

4.78%

NOTE: For prices in USD, please check the excel sent with the presentation

Electricity - France

Euro/MWH*				
MONTH	YoY GROWTH	2024	2023	2022
January	-42.43%	79.82	138.66	217.81
February	-59.48%	60.47	149.25	189.85
March	-53.42%	55.26	118.64	328.19
April	-78.30%	23.53	108.42	247.76
May	-64.72%	29.39	83.30	199.90
June	-62.04%	32.66	86.04	227.96
July	-41.85%	46.33	79.68	421.19
August	-39.85%	50.29	83.61	468.08
September	-32.31%	59.35	87.68	440.63
October	-31.11%	59.23	85.98	233.90
November	17.18%	101.28	86.43	227.17
December			78.15	334.70
Year Average		54.33	98.82	294.76



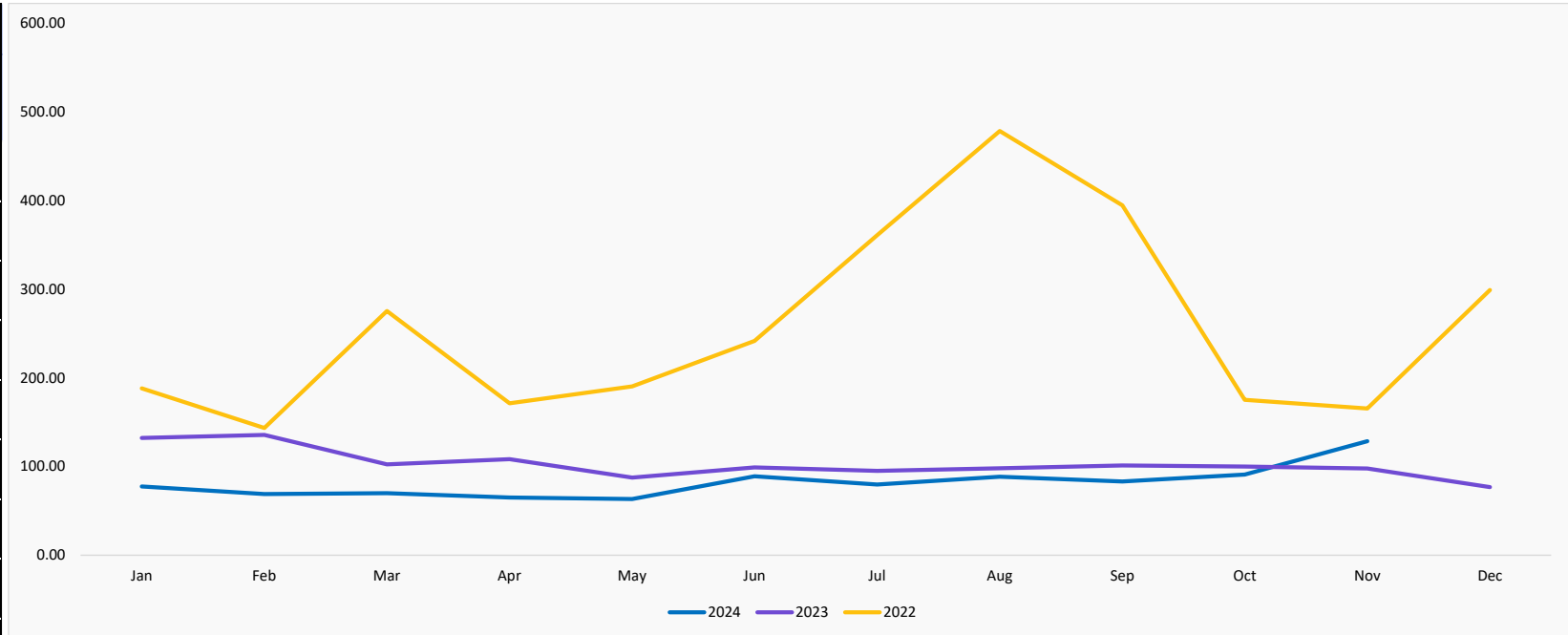
Monthly Price Variation

70.99%

NOTE: For prices in USD, please check the excel sent with the presentation

Electricity - Germany

Euro/MWH*				
MONTH	YoY GROWTH	2024	2023	2022
January	-41.37%	77.55	132.27	188.10
February	-49.20%	68.91	135.65	143.44
March	-31.57%	70.07	102.40	275.40
April	-39.87%	65.11	108.28	171.23
May	-27.51%	63.41	87.48	190.48
June	-10.23%	88.95	99.09	241.60
July	-16.26%	79.67	95.14	360.96
August	-9.82%	88.41	98.04	478.51
September	-17.86%	83.19	101.28	394.54
October	-8.89%	91.00	99.88	175.23
November	31.50%	128.55	97.76	165.44
December			76.81	299.03
Year Average		82.26	102.84	257.00



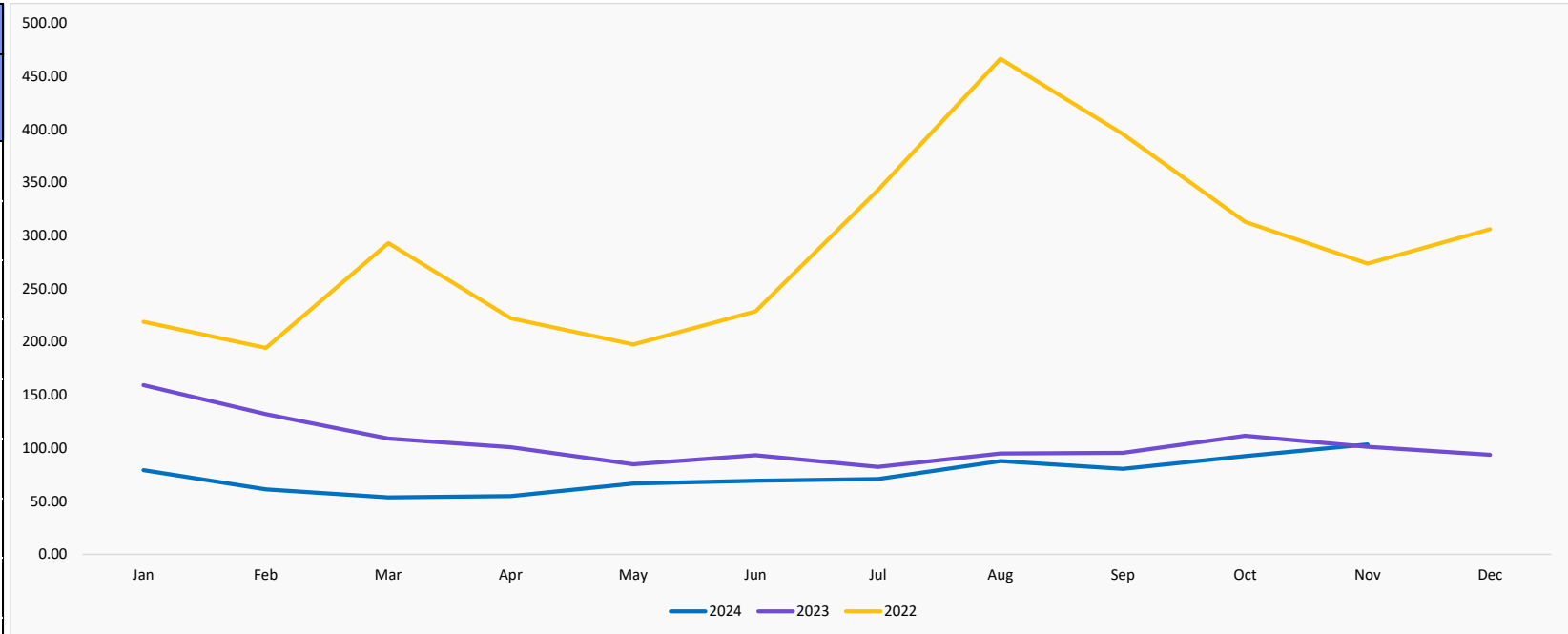
Monthly Price Variation

41.26%

NOTE: For prices in USD, please check the excel sent with the presentation

Electricity - Netherlands

Euro/MWH*				
MONTH	YoY GROWTH	2024	2023	2022
January	-50.22%	79.28	159.25	218.88
February	-53.71%	61.07	131.93	194.23
March	-50.80%	53.63	109.01	293.03
April	-45.56%	54.92	100.88	222.24
May	-21.54%	66.56	84.83	197.52
June	-25.82%	69.22	93.31	228.63
July	-13.80%	70.94	82.30	342.85
August	-7.48%	87.86	94.96	466.52
September	-15.72%	80.53	95.55	395.53
October	-17.11%	92.45	111.54	313.05
November	2.18%	103.45	101.24	273.68
December			93.67	305.99
Year Average		74.54	104.87	287.68



Monthly Price Variation

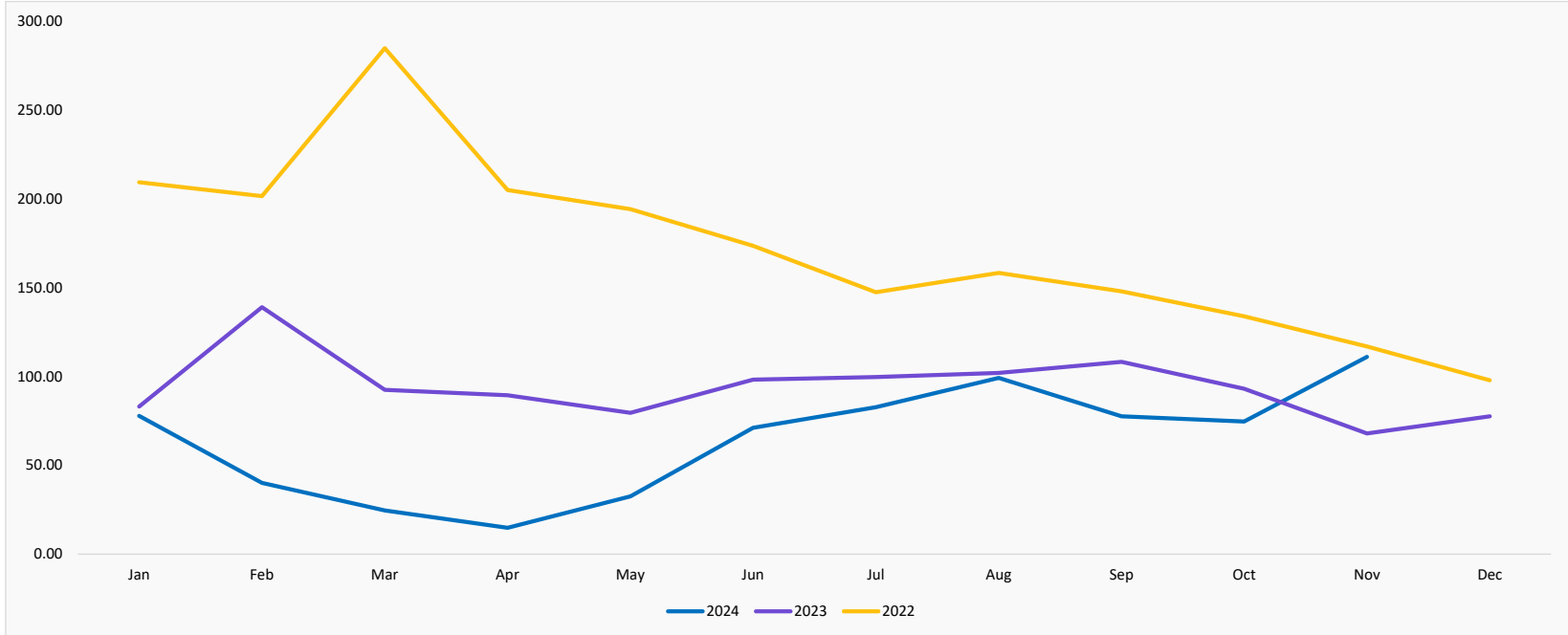
11.90%

NOTE: For prices in USD, please check the excel sent with the presentation

Electricity - Portugal

Euro/MWH*

MONTH	YoY GROWTH	2024	2023	2022
January	-6.24%	77.89	83.07	209.37
February	-71.14%	40.14	139.10	201.61
March	-73.45%	24.56	92.49	284.92
April	-83.37%	14.88	89.48	204.99
May	-59.09%	32.56	79.59	194.22
June	-27.66%	71.11	98.30	173.59
July	-17.00%	82.72	99.66	147.48
August	-2.72%	99.26	102.04	158.35
September	-28.32%	77.63	108.30	148.00
October	-19.86%	74.67	93.17	133.89
November	63.39%	111.09	67.99	116.96
December			77.63	97.84
Year Average		64.23	94.24	172.60



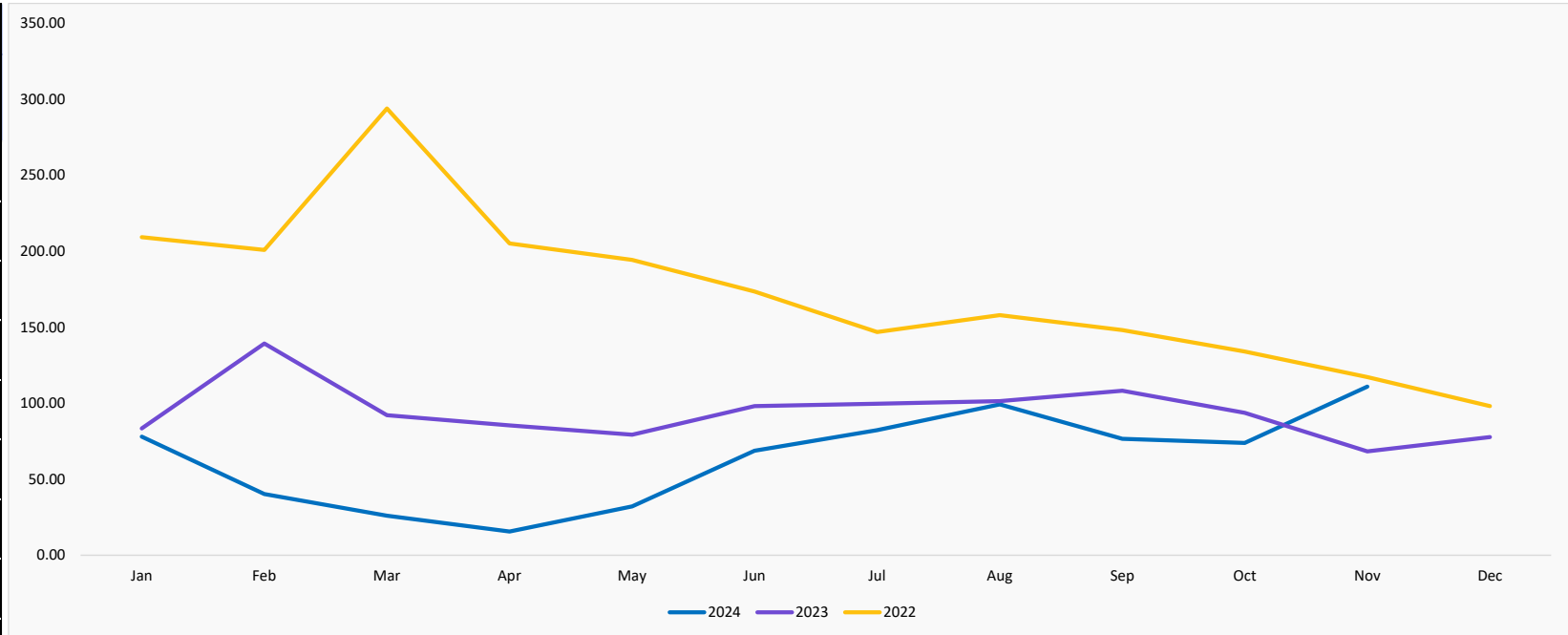
Monthly Price Variation

48.77%

NOTE: For prices in USD, please check the excel sent with the presentation

Electricity - Spain

Euro/MWH*				
MONTH	YoY GROWTH	2024	2023	2022
January	-6.47%	77.97	83.36	209.21
February	-71.08%	40.28	139.30	200.76
March	-71.80%	25.99	92.17	293.89
April	-81.82%	15.53	85.43	205.16
May	-59.49%	32.14	79.33	194.26
June	-29.92%	68.73	98.07	173.54
July	-17.38%	82.31	99.63	146.85
August	-2.19%	99.18	101.40	157.90
September	-29.17%	76.60	108.15	148.04
October	-21.12%	73.88	93.66	133.97
November	62.43%	110.86	68.25	117.24
December			77.68	98.15
Year Average		63.95	93.87	173.25



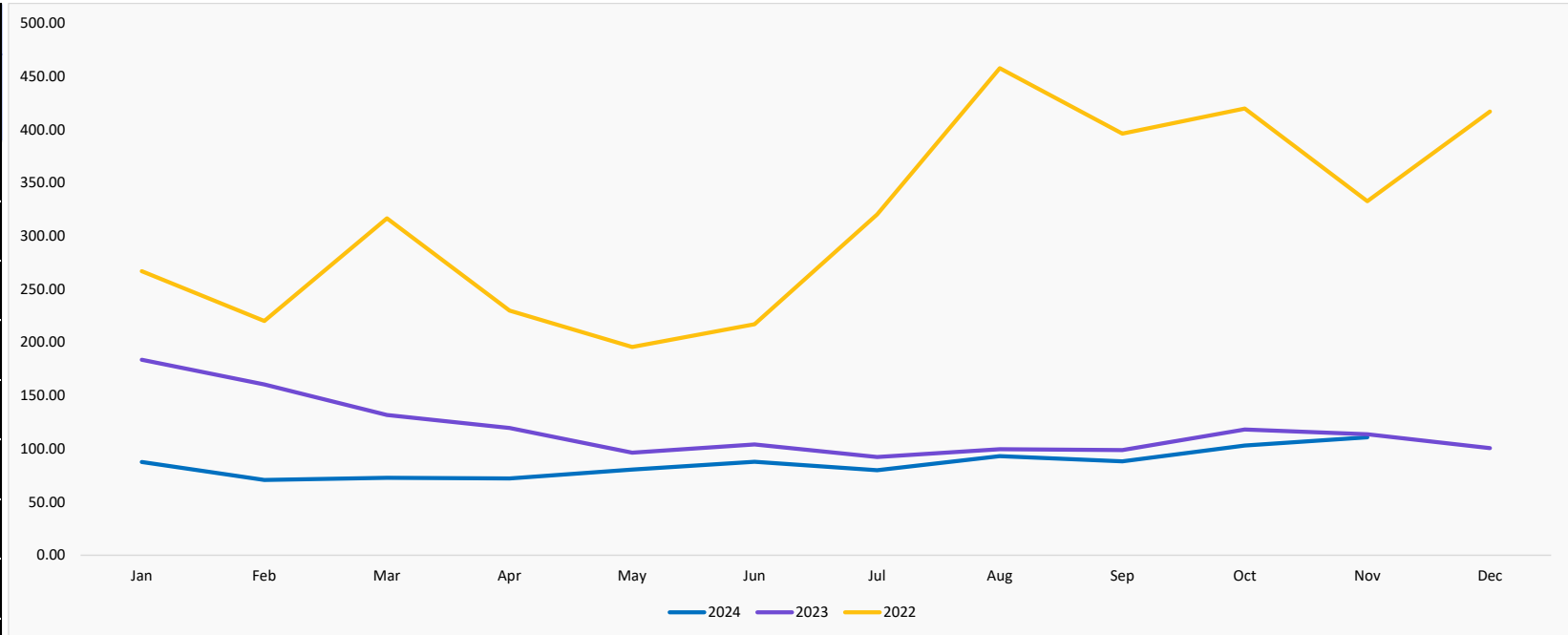
Monthly Price Variation

50.05%

NOTE: For prices in USD, please check the excel sent with the presentation

Electricity - UK

Euro/MWH*				
MONTH	YoY GROWTH	2024	2023	2022
January	-52.29%	87.64	183.70	266.94
February	-55.89%	70.77	160.43	220.22
March	-44.80%	72.72	131.73	316.57
April	-39.68%	72.09	119.52	229.97
May	-16.51%	80.44	96.35	195.70
June	-15.68%	87.84	104.18	217.06
July	-13.54%	79.85	92.36	320.27
August	-6.46%	93.17	99.60	457.76
September	-10.58%	88.32	98.77	396.17
October	-12.71%	103.13	118.14	419.83
November	-2.41%	110.88	113.62	332.74
December			100.68	416.91
Year Average		86.08	118.26	315.85



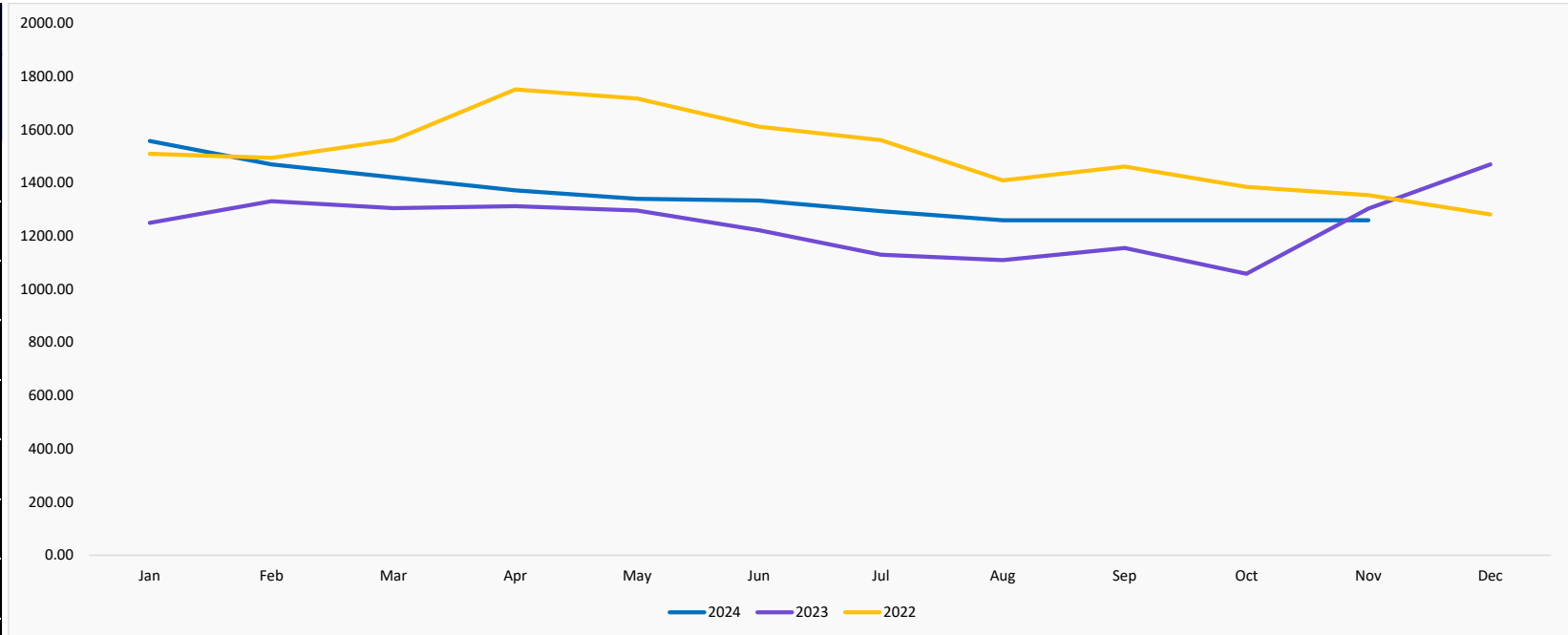
Monthly Price Variation

7.51%

NOTE: For prices in USD, please check the excel sent with the presentation

| Isopropanol - Europe

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	24.67%	1,557.44	1,249.21	1,508.97
February	10.40%	1,469.31	1,330.94	1,493.64
March	8.85%	1,420.37	1,304.83	1,560.25
April	4.54%	1,371.49	1,311.91	1,750.84
May	3.41%	1,339.89	1,295.70	1,716.48
June	9.09%	1,332.88	1,221.85	1,610.85
July	14.49%	1,293.74	1,130.01	1,560.32
August	13.54%	1,259.16	1,109.01	1,408.63
September	9.01%	1,259.16	1,155.08	1,461.30
October	19.02%	1,259.16	1,057.90	1,384.62
November	-3.37%	1,259.16	1,303.13	1,353.76
December			1,469.61	1,280.82
Year Average		1,347.43	1,244.93	1,507.54



Monthly Price Variation

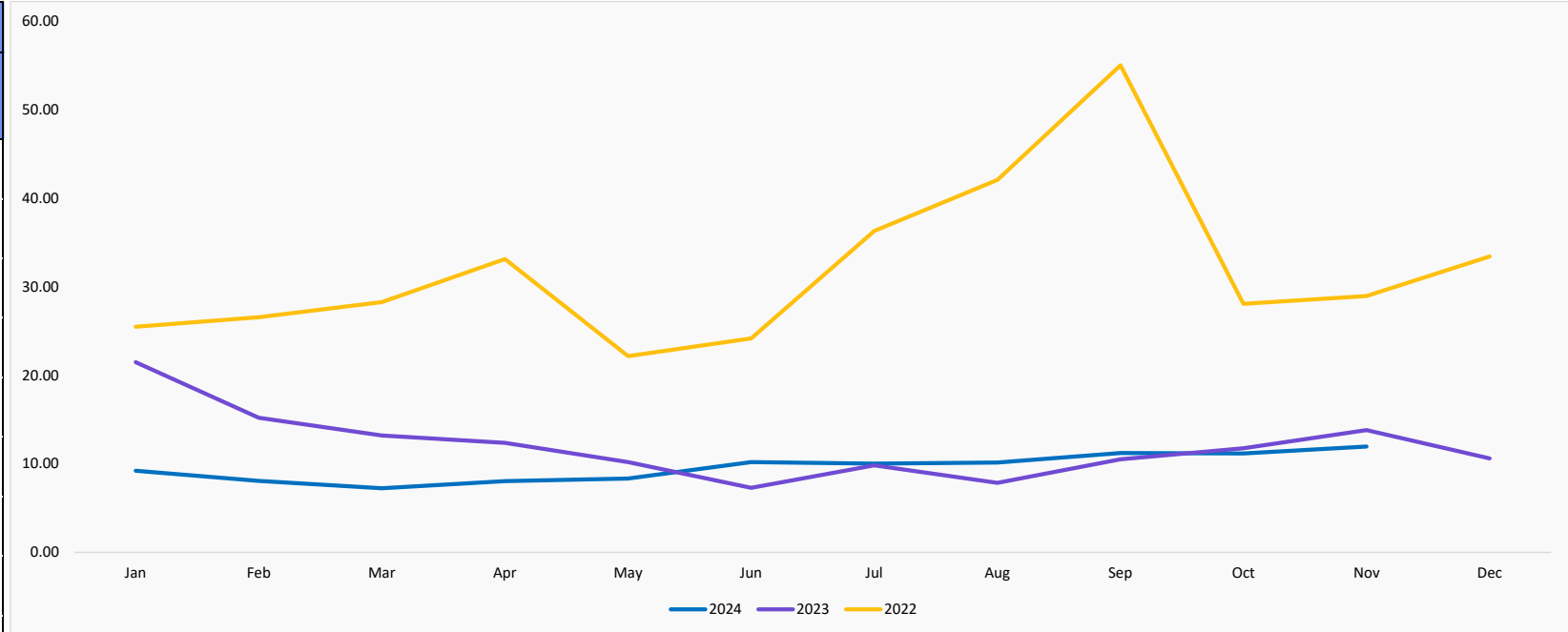
0.00%

NOTE: For prices in USD, please check the excel sent with the presentation

Natural Gas - Europe

Euro/10 THERM*

MONTH	YoY GROWTH	2024	2023	2022
January	-57.01%	9.23	21.47	25.49
February	-46.97%	8.06	15.20	26.57
March	-45.12%	7.25	13.21	28.28
April	-34.98%	8.05	12.38	33.14
May	-18.14%	8.35	10.20	22.17
June	39.78%	10.19	7.29	24.17
July	1.93%	10.03	9.84	36.31
August	29.34%	10.14	7.84	42.07
September	6.66%	11.21	10.51	55.01
October	-5.10%	11.17	11.77	28.08
November	-13.46%	11.96	13.82	28.95
December			10.61	33.42
Year Average		9.60	12.01	31.97



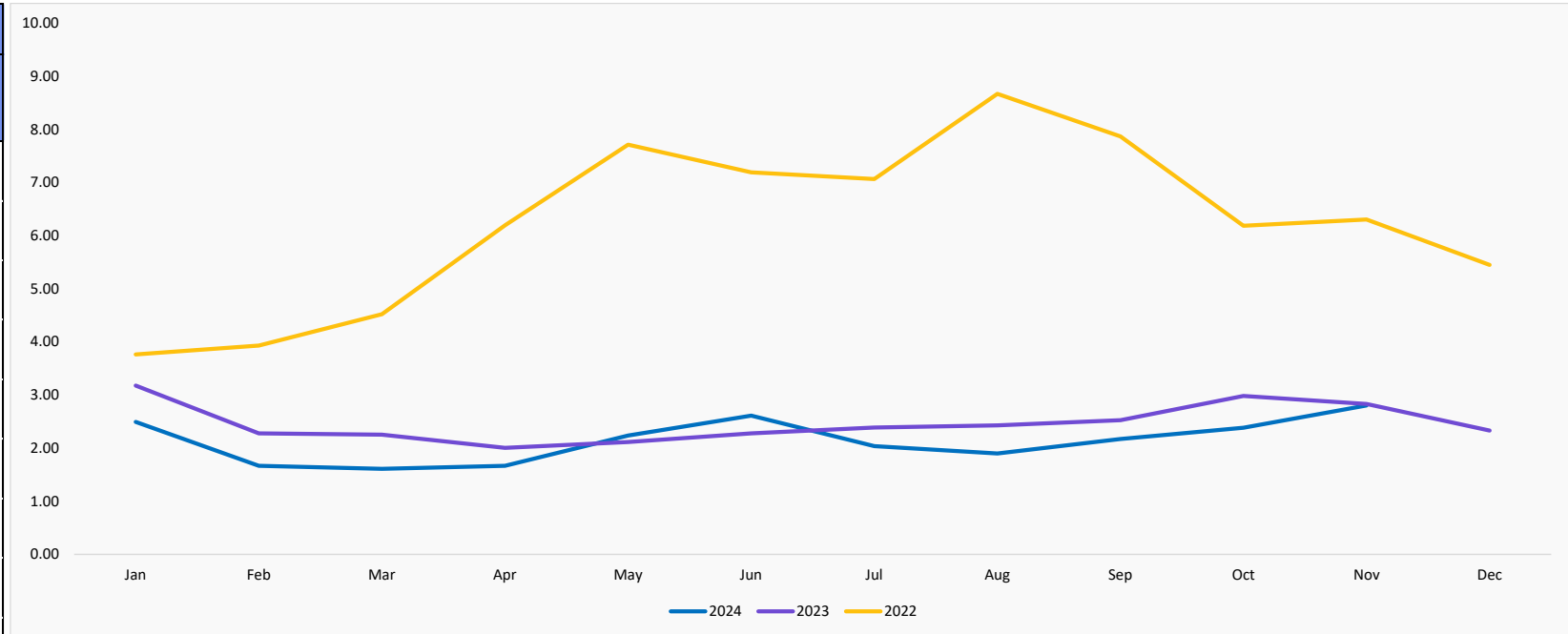
Monthly Price Variation

7.07%

NOTE: For prices in USD, please check the excel sent with the presentation

Natural Gas - NYMEX US

Euro/10 THERM*				
MONTH	YoY GROWTH	2024	2023	2022
January	-21.46%	2.49	3.18	3.77
February	-26.77%	1.67	2.28	3.93
March	-28.50%	1.61	2.25	4.52
April	-16.82%	1.67	2.01	6.19
May	5.76%	2.24	2.12	7.71
June	14.62%	2.61	2.28	7.19
July	-14.64%	2.04	2.39	7.06
August	-21.87%	1.90	2.43	8.67
September	-14.13%	2.17	2.53	7.87
October	-20.05%	2.38	2.98	6.19
November	-0.98%	2.80	2.83	6.30
December			2.33	5.45
Year Average		2.14	2.47	6.24



Monthly Price Variation

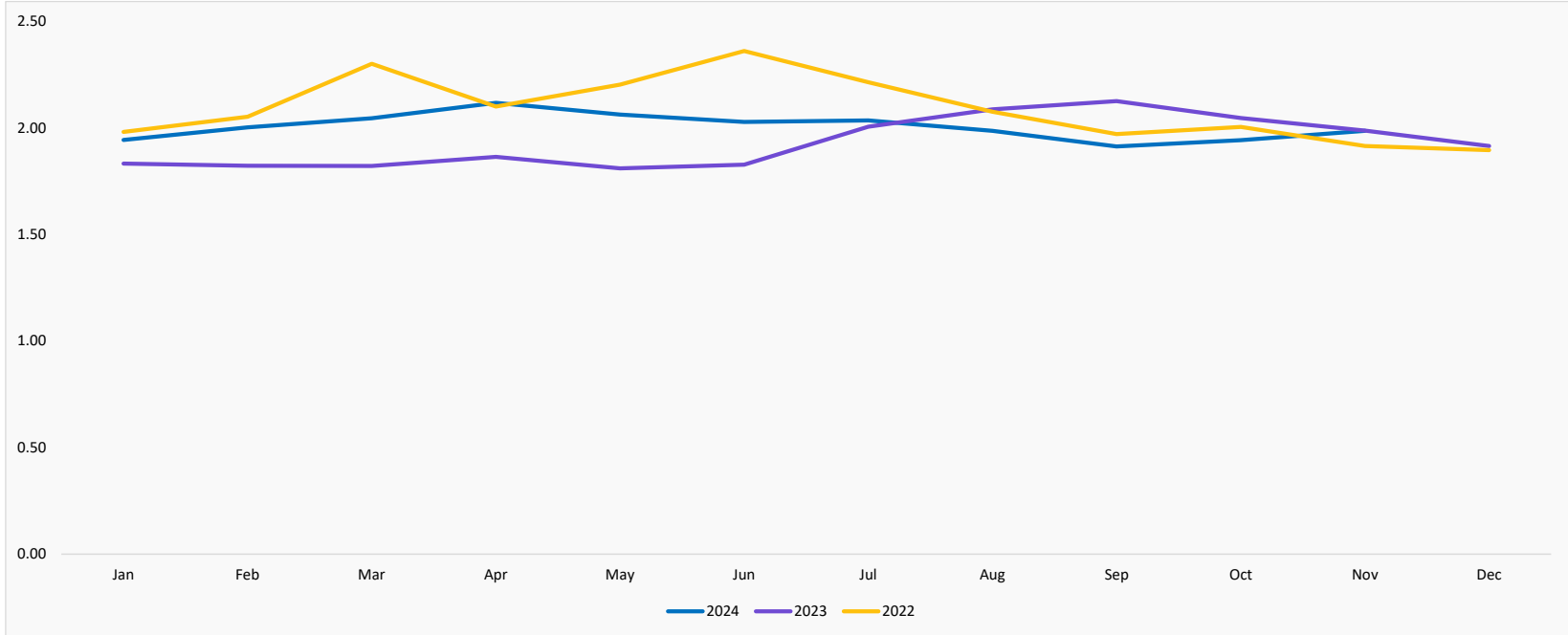
17.57%

NOTE: For prices in USD, please check the excel sent with the presentation

| Petrol - Netherlands

Euro/LT*

MONTH	YoY GROWTH	2024	2023	2022
January	6.06%	1.94	1.83	1.98
February	9.88%	2.00	1.82	2.05
March	12.30%	2.05	1.82	2.30
April	13.57%	2.12	1.86	2.10
May	13.98%	2.06	1.81	2.20
June	11.00%	2.03	1.83	2.36
July	1.45%	2.04	2.01	2.21
August	-4.84%	1.99	2.09	2.08
September	-10.02%	1.91	2.13	1.97
October	-5.08%	1.94	2.05	2.00
November	-0.05%	1.99	1.99	1.92
December			1.92	1.90
Year Average		2.01	1.93	2.09



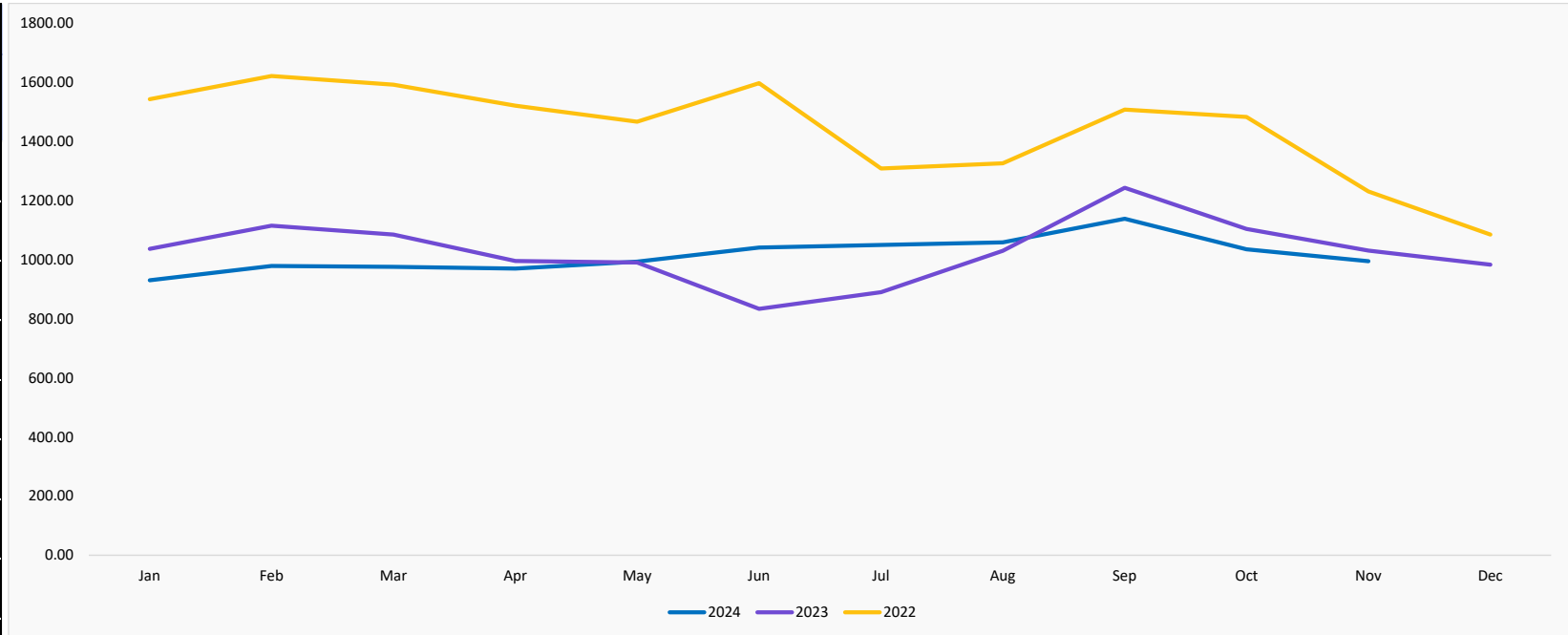
Monthly Price Variation

2.27%

NOTE: For prices in USD, please check the excel sent with the presentation

Phenol - China

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-10.22%	930.38	1,036.25	1,542.69
February	-12.26%	978.49	1,115.23	1,621.30
March	-10.04%	975.71	1,084.62	1,591.78
April	-2.64%	969.49	995.75	1,521.18
May	0.30%	992.97	990.02	1,466.60
June	24.87%	1,040.63	833.40	1,597.38
July	17.89%	1,049.46	890.23	1,308.17
August	2.73%	1,058.41	1,030.26	1,326.34
September	-8.47%	1,138.07	1,243.39	1,507.55
October	-6.24%	1,035.12	1,103.99	1,483.17
November	-3.48%	994.99	1,030.83	1,230.44
December			982.75	1,084.55
Year Average		1,014.88	1,028.06	1,440.10



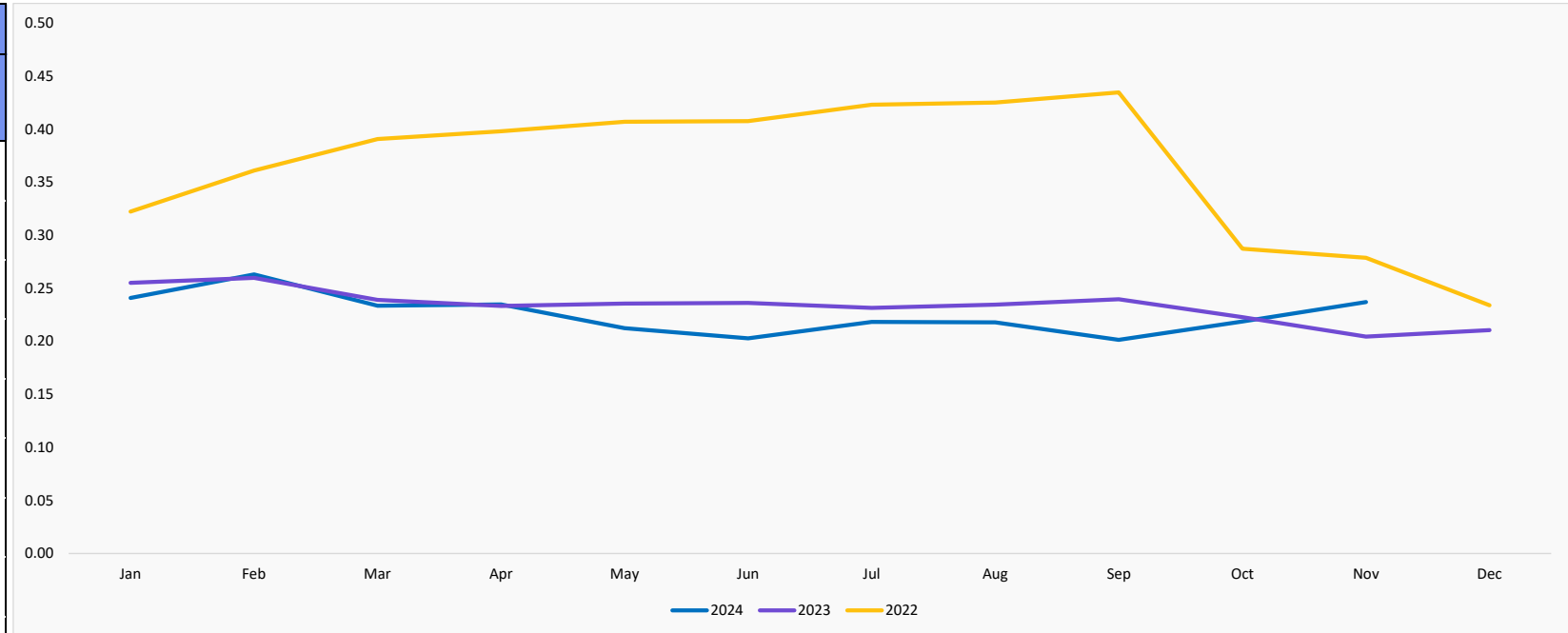
Monthly Price Variation

-3.88%

NOTE: For prices in USD, please check the excel sent with the presentation

Propane – USA

Euro/LT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-5.60%	0.24	0.26	0.32
February	1.19%	0.26	0.26	0.36
March	-2.30%	0.23	0.24	0.39
April	0.60%	0.23	0.23	0.40
May	-9.81%	0.21	0.24	0.41
June	-14.09%	0.20	0.24	0.41
July	-5.67%	0.22	0.23	0.42
August	-7.17%	0.22	0.23	0.43
September	-15.98%	0.20	0.24	0.43
October	-1.82%	0.22	0.22	0.29
November	15.89%	0.24	0.20	0.28
December			0.21	0.23
Year Average		0.23	0.23	0.36



Monthly Price Variation

8.34%

NOTE: For prices in USD, please check the excel sent with the presentation

METALS

PRICE UPDATE

| Metals

Commodity lookup

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Aluminium - LME	MT	2064.33	2403.31	2457.39	▶ 2.25%	▶ 19.04%
Aluminium Alloy - LME	MT	1553.24	2061.82	2138.23	▶ 3.71%	▶ 37.66%
Copper - LME	MT	7648.11	8877.85	8657.01	▶ -2.49%	▶ 13.19%
Gold - USA (NYMEX)	GR	59.06	79.28	80.14	▶ 1.08%	▶ 35.70%
Iron Ore - China	MT	128.13	100.24	101.56	▶ 1.31%	▶ -20.74%
Lead - LME	MT	2009.72	1914.33	1920.66	▶ 0.33%	▶ -4.43%
Nickel - LME	MT	15949.97	15656.30	15056.91	▶ -3.83%	▶ -5.60%
Palladium - USA	KG	31378.98	31533.72	30345.76	▶ -3.77%	▶ -3.29%
Silver (CME) - USA	KG	699.68	955.87	940.12	▶ -1.65%	▶ 34.36%
Steel Billet - China	MT	470.70	407.73	403.20	▶ -1.11%	▶ -14.34%
Steel Stainless - Southern Europe	MT	2547.98	2499.20	2405.83	▶ -3.74%	▶ -5.58%
Steel Tinplate - China	MT	1036.98	947.28	956.96	▶ 1.02%	▶ -7.72%
Tin - LME	MT	22641.63	29650.92	28154.21	▶ -5.05%	▶ 24.35%
Titanium Dioxide - China	MT	2123.38	2105.12	2163.66	▶ 2.78%	▶ 1.90%
Zinc SHG - LME	MT	2359.86	2847.79	2828.10	▶ -0.69%	▶ 19.84%

| Metals

Commodity lookup

Aluminium: Aluminium prices have risen lately, driven by record high alumina prices. Alumina prices jumped to a record this year, squeezing profitability for smelters. Prices for the raw material doubled this year, driven by a series of supply chain disruptions from Australia to Jamaica amid a steady increase in demand driven by record aluminium production in China. The cost of alumina now accounts for more than half of the cost of making aluminium, compared with a usual level of between 30% and 35%, according to some producers. The tightness in the alumina market is likely to continue into early 2025 – although new capacity ramp-ups in Indonesia and China are expected to ease pressure later in the year. Supply worries have helped to mitigate the impact of the stronger dollar for aluminium following Donald Trump’s win in the US presidential election. **The surplus in the global market is tightening this year, and we see the market returning to a small deficit next year.** We see consumption slowly starting to recover as interest rates fall, while production restarts will be subdued. This will give support to a higher aluminium price. In China, aluminium output is hitting record highs. The production rate is closing in on Beijing’s 45 million tonnes annual capacity cap (currently running at around 43 million tonnes) following ample rainfall this year, which has enabled full capacity operations in the hydro-powered Yunnan province after a few consecutive years of output cuts. This leaves limited further growth potential for Chinese production. China’s capacity cap also means that the country remains a net importer of aluminium.

Nickel: A surge in output in Indonesia has dragged nickel lower over recent years, and demand from the stainless steel and electric vehicle batteries sectors continues to disappoint. Nickel prices recently hit their lowest point since 2020. Nickel smelting has expanded in Indonesia since the government imposed a permanent ban on nickel ore exports in January 2020 in a drive to attract foreign investors, encourage domestic processing and further downstream use of its materials. The ban has enticed foreign investors, mainly from China, to build local smelters and has helped to boost the value of Indonesia’s exports. Indonesia now accounts for more than half of global nickel output. **We forecast nickel prices to remain under pressure next year as the surplus in the global market continues.** We see prices averaging \$15,700/t in 2025, with the main upside revolving around stronger stainless steel output and/or restricted ore supply from Indonesia. The main downside risk to our view would be a slower uptake of EVs and a potential of a reversal of some of the EV incentives in the US during Trump’s second presidential term.

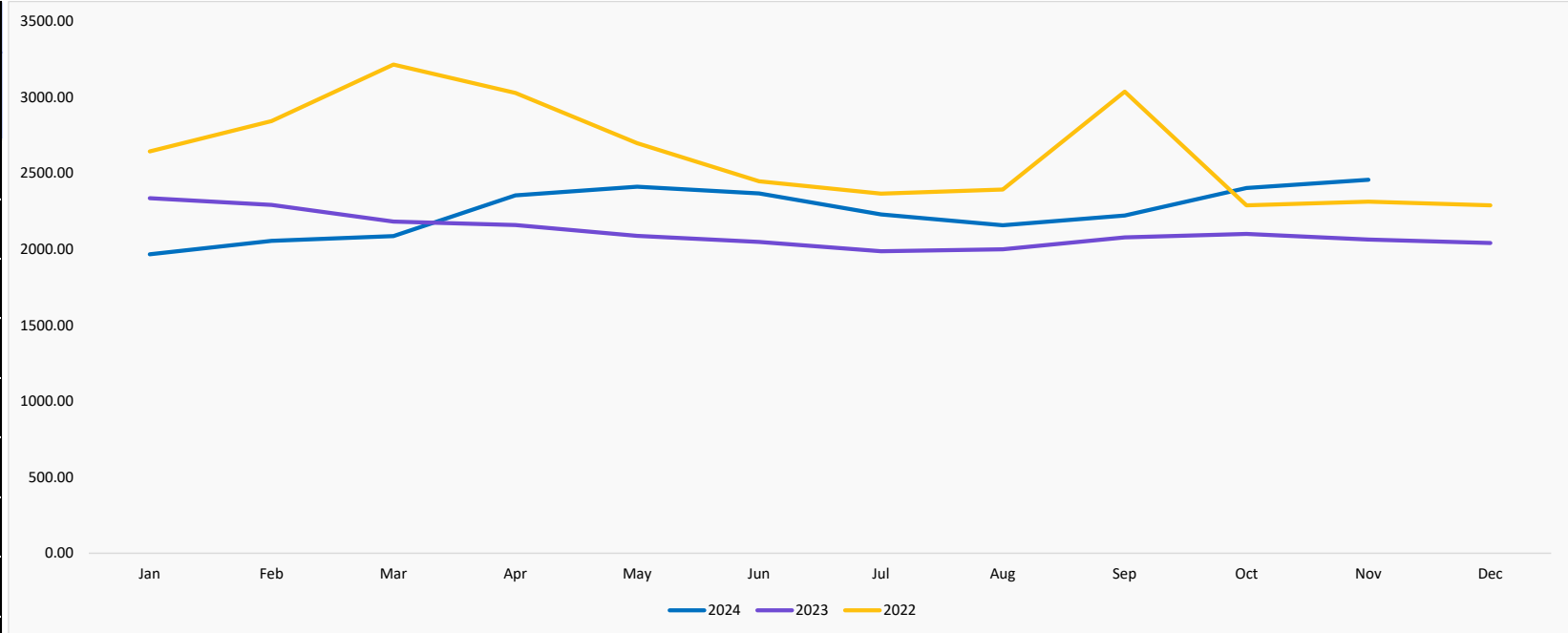
Iron Ore: Iron ore is among the most vulnerable to China's slowdown risks, as the country's property market constitutes the bulk of steel demand. **China, the world’s biggest consumer of iron ore, has continued to act as a drag on demand this year.** A broad economic slowdown and, in particular, the crisis in the property sector have weighed on iron ore and other industrial metals. The property sector accounts for about 40% of demand for iron ore. We've seen plenty of property support measures this year but so far, they have failed to provide any meaningful impact on metals demand.

Source: Ingthink

Aluminium - LME

Euro/MT*

MONTH	YoY GROWTH	2024	2023	2022
January	-15.84%	1,966.30	2,336.25	2,643.56
February	-10.35%	2,054.93	2,292.23	2,842.73
March	-4.36%	2,087.30	2,182.56	3,215.33
April	9.08%	2,355.01	2,159.04	3,028.18
May	15.49%	2,412.07	2,088.50	2,698.64
June	15.58%	2,367.79	2,048.67	2,446.57
July	12.14%	2,228.88	1,987.61	2,365.61
August	7.92%	2,158.41	2,000.08	2,393.37
September	6.95%	2,222.74	2,078.20	3,036.72
October	14.42%	2,403.31	2,100.36	2,289.53
November	19.04%	2,457.39	2,064.33	2,312.65
December			2,041.68	2,289.55
Year Average		2,246.74	2,114.96	2,630.20



Monthly Price Variation

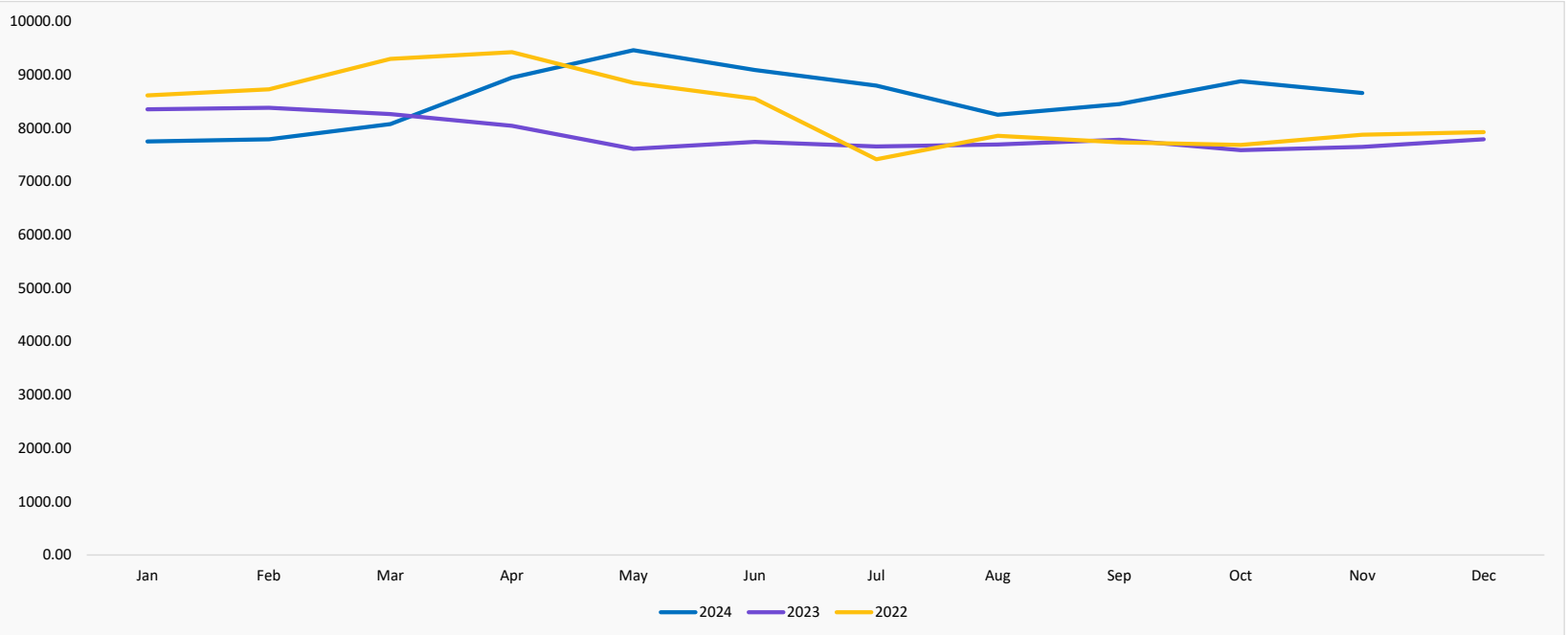
2.25%

NOTE: For prices in USD, please check the excel sent with the presentation

Copper - LME

Euro/MT*

MONTH	YoY GROWTH	2024	2023	2022
January	-7.21%	7,747.74	8,350.04	8,613.01
February	-7.06%	7,790.29	8,381.68	8,724.46
March	-2.29%	8,073.71	8,262.95	9,298.17
April	11.21%	8,945.08	8,043.63	9,423.12
May	24.27%	9,458.13	7,611.15	8,847.37
June	17.37%	9,087.46	7,742.59	8,552.01
July	14.85%	8,794.04	7,657.21	7,415.05
August	7.24%	8,250.64	7,693.28	7,853.34
September	8.60%	8,450.26	7,781.20	7,732.41
October	16.99%	8,877.85	7,588.32	7,683.25
November	13.19%	8,657.01	7,648.11	7,877.34
December			7,791.46	7,924.36
Year Average		8,557.47	7,879.30	8,328.66



Monthly Price Variation

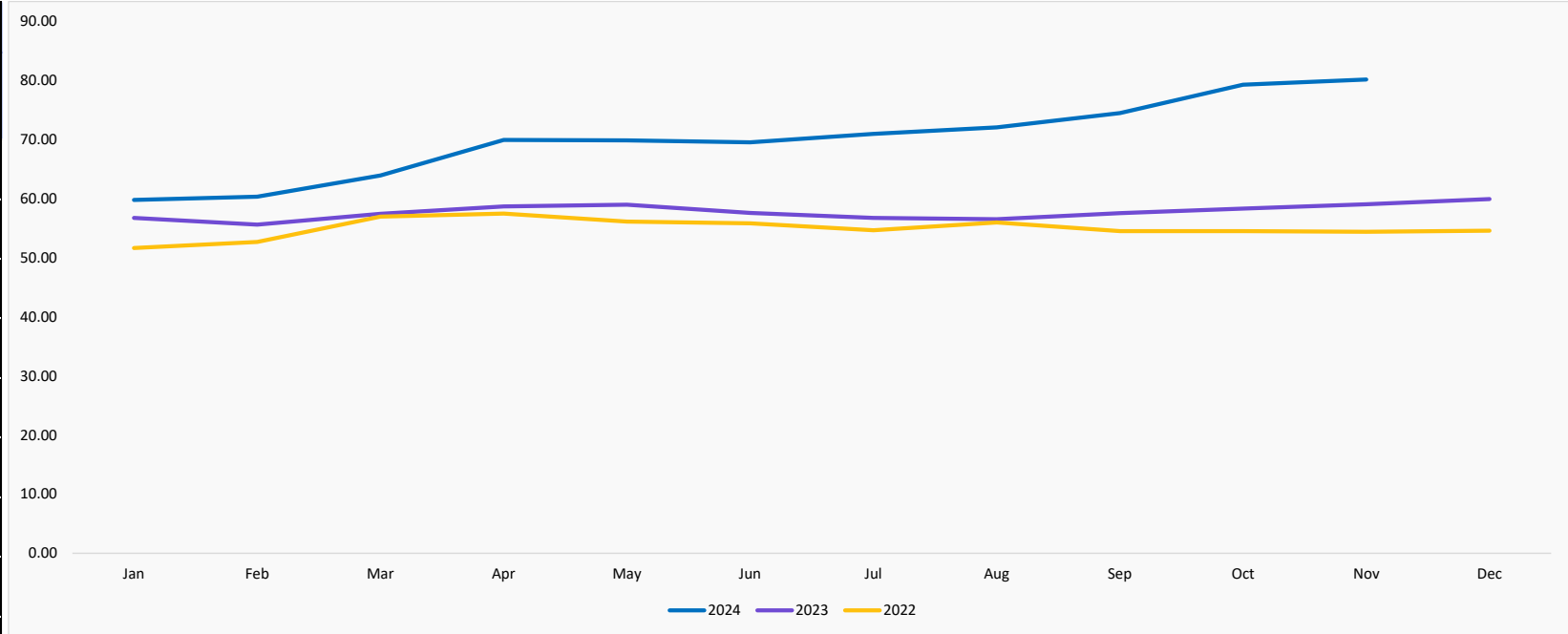
-2.49%

NOTE: For prices in USD, please check the excel sent with the presentation

| Gold - USA (NYMEX)

Euro/GR*

MONTH	YoY GROWTH	2024	2023	2022
January	5.41%	59.79	56.72	51.62
February	8.48%	60.32	55.60	52.66
March	11.29%	63.93	57.45	56.96
April	19.18%	69.91	58.66	57.48
May	18.47%	69.87	58.97	56.12
June	20.70%	69.51	57.59	55.82
July	25.11%	70.96	56.72	54.64
August	27.47%	72.04	56.51	55.95
September	29.41%	74.48	57.55	54.49
October	35.96%	79.28	58.31	54.51
November	35.70%	80.14	59.06	54.40
December			59.91	54.57
Year Average		70.02	57.76	54.94



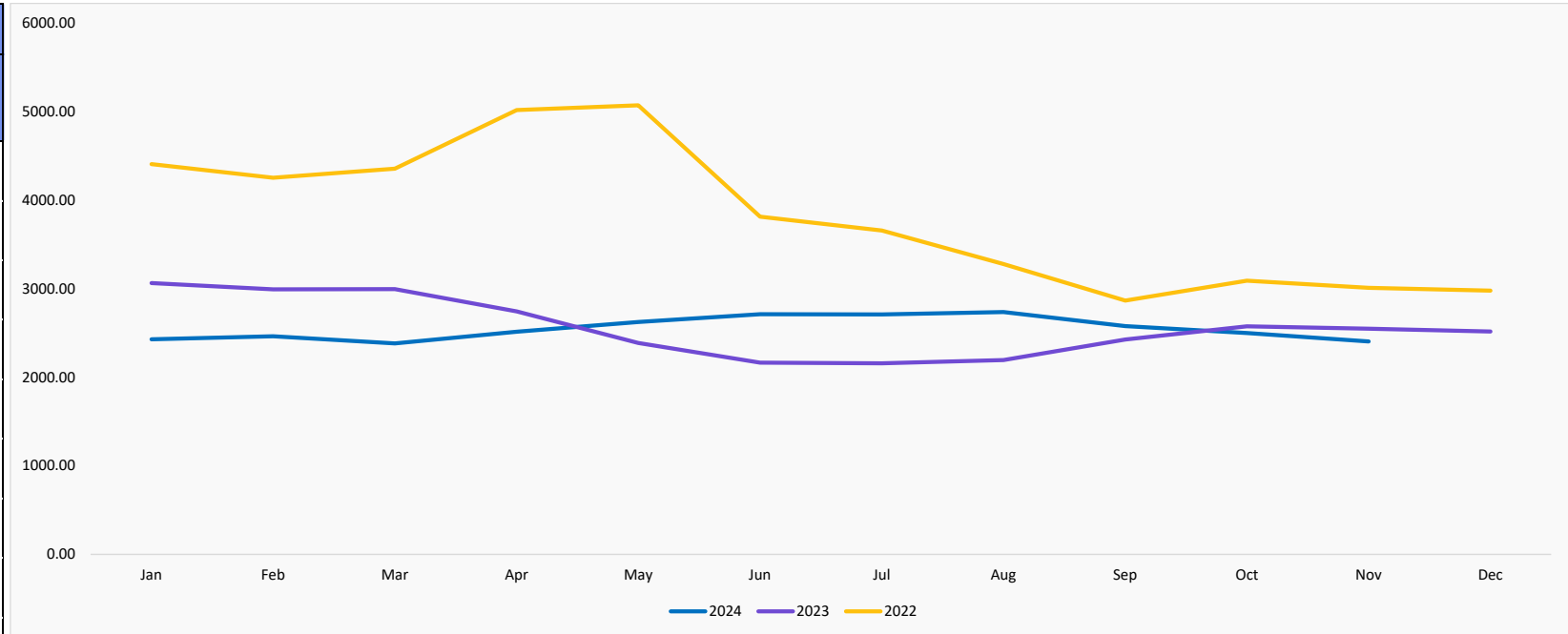
Monthly Price Variation

1.08%

NOTE: For prices in USD, please check the excel sent with the presentation

Steel Stainless - Southern Europe

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-20.76%	2,428.86	3,065.13	4,408.51
February	-17.72%	2,462.74	2,993.17	4,254.92
March	-20.51%	2,381.42	2,995.87	4,355.24
April	-8.33%	2,514.74	2,743.17	5,018.74
May	9.92%	2,623.71	2,387.00	5,072.55
June	25.28%	2,712.82	2,165.45	3,813.53
July	25.61%	2,709.80	2,157.32	3,657.98
August	24.65%	2,737.01	2,195.75	3,279.93
September	6.24%	2,578.54	2,427.14	2,866.05
October	-2.97%	2,499.20	2,575.69	3,091.53
November	-5.58%	2,405.83	2,547.98	3,009.70
December			2,516.50	2,979.32
Year Average		2,550.43	2,564.18	3,817.33



Monthly Price Variation

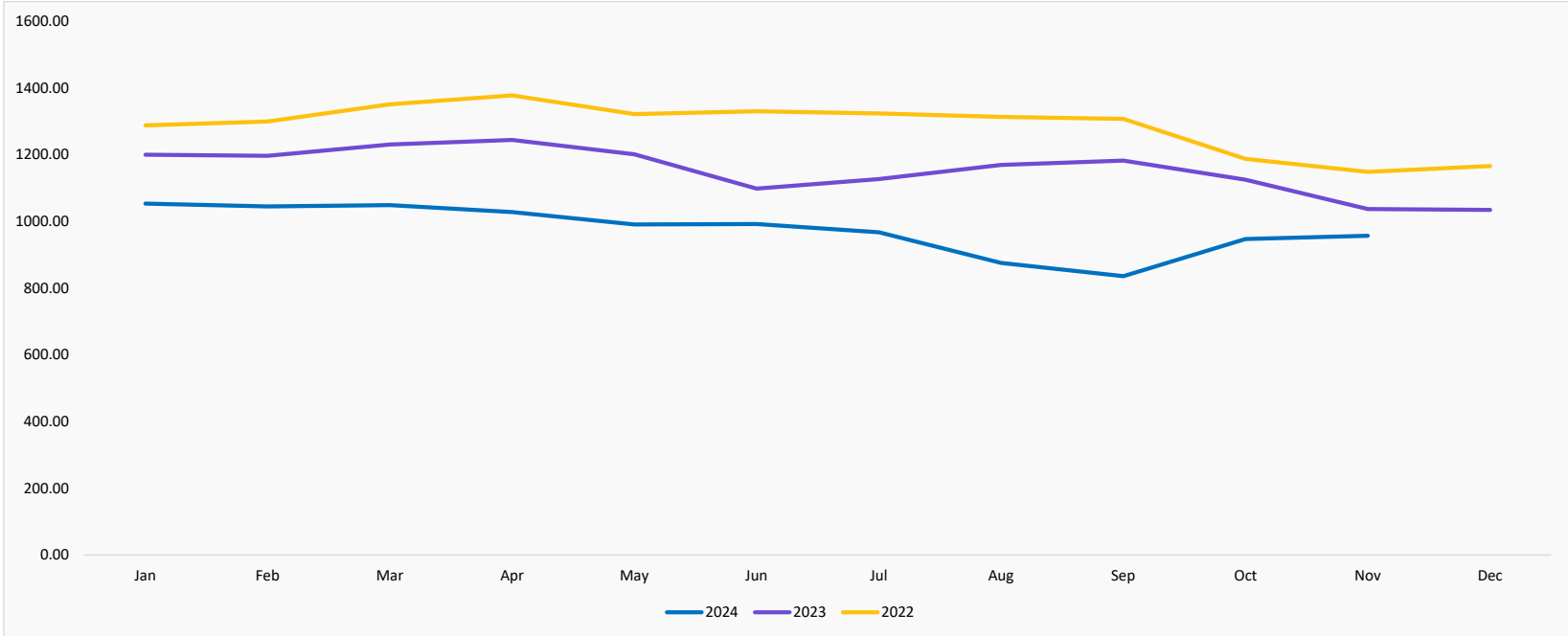
-3.74%

NOTE: For prices in USD, please check the excel sent with the presentation

Steel Tinplate - China

Euro/MT*

MONTH	YoY GROWTH	2024	2023	2022
January	-12.18%	1,053.73	1,199.87	1,288.18
February	-12.69%	1,045.01	1,196.83	1,299.65
March	-14.77%	1,048.76	1,230.45	1,351.53
April	-17.37%	1,028.24	1,244.37	1,377.95
May	-17.49%	991.15	1,201.23	1,321.75
June	-9.64%	992.62	1,098.57	1,330.47
July	-14.14%	967.66	1,127.01	1,324.09
August	-25.10%	875.82	1,169.35	1,313.30
September	-29.30%	836.05	1,182.51	1,307.91
October	-15.81%	947.28	1,125.18	1,187.46
November	-7.72%	956.96	1,036.98	1,148.42
December			1,035.01	1,166.51
Year Average		976.66	1,153.95	1,284.77



Monthly Price Variation

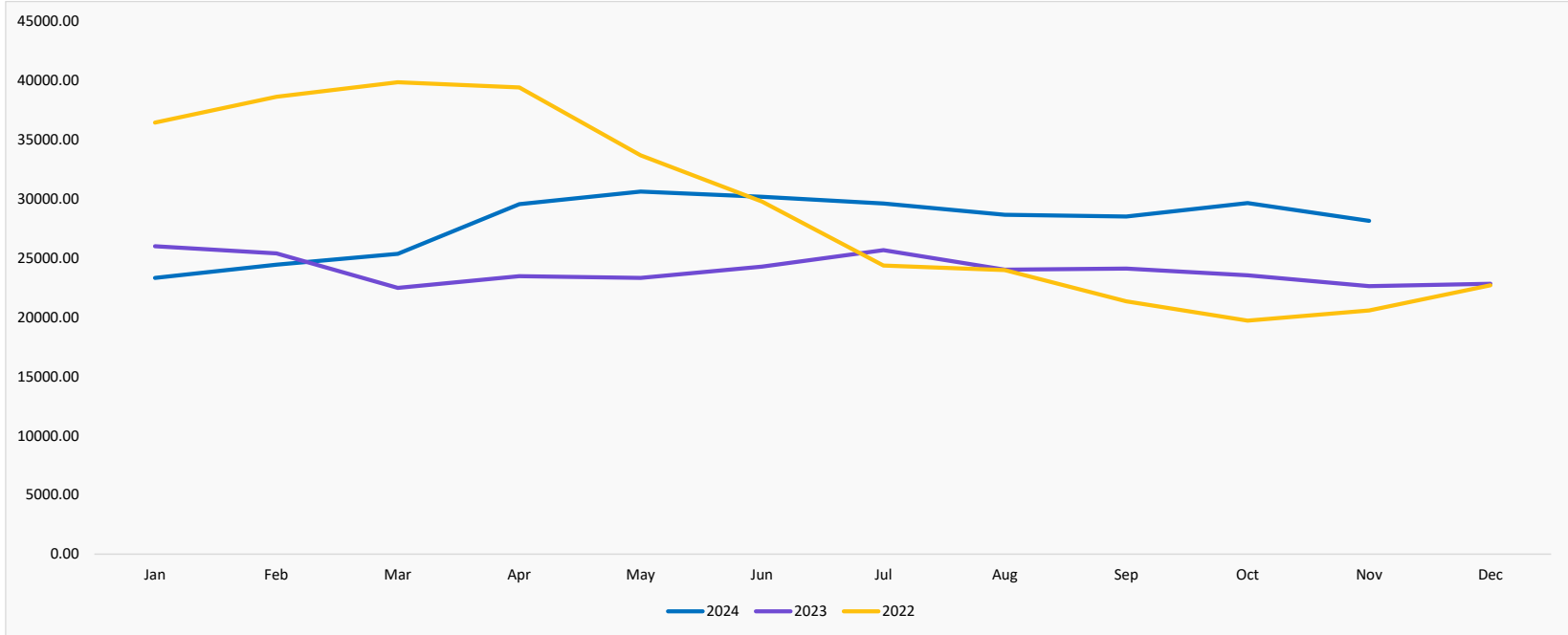
1.02%

NOTE: For prices in USD, please check the excel sent with the presentation

Tin - LME

Euro/MT*

MONTH	YoY GROWTH	2024	2023	2022
January	-10.25%	23,333.84	25,999.29	36,446.57
February	-3.76%	24,446.93	25,401.07	38,635.06
March	12.80%	25,367.91	22,488.36	39,855.63
April	25.93%	29,559.05	23,472.67	39,417.00
May	31.28%	30,617.06	23,321.60	33,685.13
June	24.28%	30,174.51	24,279.07	29,774.55
July	15.37%	29,615.22	25,670.38	24,380.26
August	19.28%	28,658.73	24,026.94	23,982.89
September	18.24%	28,516.12	24,117.93	21,355.95
October	25.89%	29,650.92	23,552.56	19,716.34
November	24.35%	28,154.21	22,641.63	20,589.45
December			22,836.33	22,704.29
Year Average		28,008.59	23,983.99	29,211.93



Monthly Price Variation

-5.05%

NOTE: For prices in USD, please check the excel sent with the presentation

PLASTICS

PRICE UPDATE

| Plastics

Commodity lookup

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Plastic ABS - Western Europe	MT	3350.00	3360.00	3360.00	0.00%	0.30%
Plastic HDPE Film - China	MT	828.07	839.11	855.59	1.96%	3.32%
Plastic HDPE Film - UAE	MT	914.12	931.74	937.19	0.59%	2.52%
Plastic HDPE Film - Western Europe	MT	1660.00	1750.00	1740.00	-0.57%	4.82%
Plastic LDPE Film - China	MT	932.62	1082.14	1110.05	2.58%	19.02%
Plastic LDPE Film Grade - Western Europe	MT	1715.00	1890.00	1880.00	-0.53%	9.62%
Plastic LLDPE Film Grade - Western Europe	MT	1625.00	1760.00	1745.00	-0.85%	7.38%
Plastic PET Bottle Grade - Western Europe	MT	1215.00	1150.00	1110.00	-3.48%	-8.64%
Plastic PP - China	MT	882.66	903.31	924.73	2.37%	4.77%
Plastic PP Copolymer Film - Western Europe	MT	1685.00	1760.00	1750.00	-0.57%	3.86%
Plastic PS General Purpose - Western Europe	MT	2115.00	2040.00	2040.00	0.00%	-3.55%
Plastic PVC - China	MT	700.39	685.05	707.89	3.33%	1.07%
Plastic PVC Pipe Grade - United Kingdom	MT	1194.53	995.20	1004.64	0.95%	-15.90%

| Plastics

Commodity lookup

PLASTICS – DECEMBER 2024

The market for **standard thermoplastics has already gone into hibernation**. Prices of the main feedstocks barely moved in December (C2 down EUR 7.50/t, C3 down EUR 10/t, SM down EUR 7/t). And because converters ordered homeopathic quantities at most, wanting to reduce rather than build up stocks for balance-sheet reasons, and also because the economic situation is still generally very weak, there was little change – if at all – with the prices. Consequently, the rates for LDPE, HDPE pipe, PVC, and polystyrene mostly stayed where they were at the beginning of December, while for the other materials, the marginal cost reductions were more or less factored in. The maximum change in the PIE bandwidths was down EUR 10/t (in the case of LLDPE, HDPE, EVA, and polypropylene). **Some converters are still pushing for further price reductions for December**, which producers would like to see linked to certain purchasing volumes. This could lead occasionally to further adjustments. If at all, these reductions will end up being very small, as many converters are not ordering anymore. Their focus already is on the Christmas holidays, which end up being longer than planned. These converters have already written off the year and will be happy to put 2024 behind them.

HDPE

- **Supply: normal** - The market is adequately supplied despite the cutbacks in European production.
- **Demand: weak**- Ordering activity remains slow, and many companies focus on reducing stock levels.
- **Outlook: little change** - In individual cases there is talk of even higher reductions, although, on the market as a whole, there is little likelihood now of any major changes in the short production month of December.

LDPE

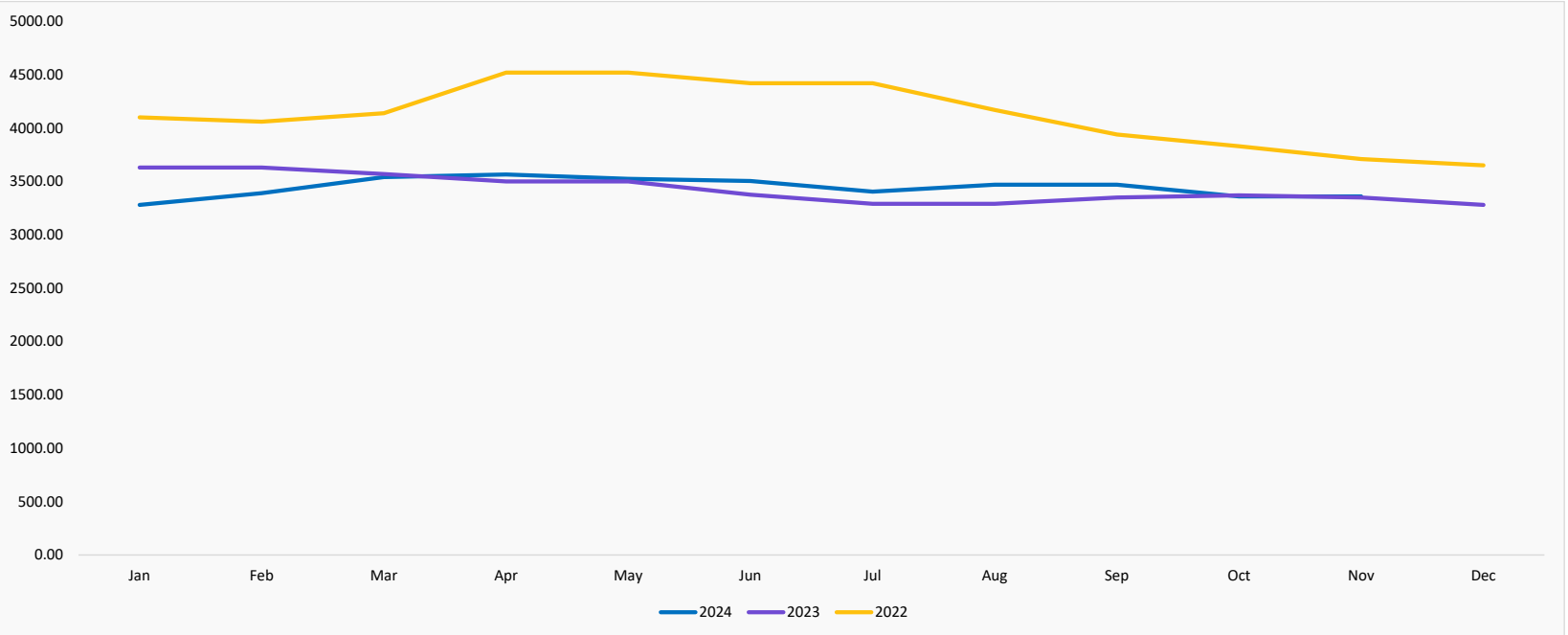
- **Supply: normal** - One producer declared force majeure at the end of November, and another is reportedly also having problems with one of its production plants. Apart from that, the remaining production lines in Europe are operating with reduced output. There is nevertheless enough material on the market. At any rate, there was no word of any supply problems during talks with the PIE price panel.
- **Demand: weak** - In the short production month, demand remains low. Many producers are concentrating on reducing stock levels for balance-sheet reasons.
- **Outlook: little change** - The negotiations have not yet been concluded. Some converters are still pushing to pass on the cost increase or plan to adjust the annual contracts..

Source: Plasteurope

Plastic ABS - Western Europe

Euro/MT*

MONTH	YoY GROWTH	2024	2023	2022
January	-9.64%	3,280.00	3,630.00	4,100.00
February	-6.61%	3,390.00	3,630.00	4,060.00
March	-0.84%	3,540.00	3,570.00	4,140.00
April	1.86%	3,565.00	3,500.00	4,520.00
May	0.71%	3,525.00	3,500.00	4,520.00
June	3.85%	3,505.00	3,375.00	4,420.00
July	3.50%	3,405.00	3,290.00	4,420.00
August	5.47%	3,470.00	3,290.00	4,170.00
September	3.58%	3,470.00	3,350.00	3,940.00
October	-0.30%	3,360.00	3,370.00	3,830.00
November	0.30%	3,360.00	3,350.00	3,710.00
December			3,280.00	3,650.00
Year Average		3,442.73	3,427.92	4,123.33



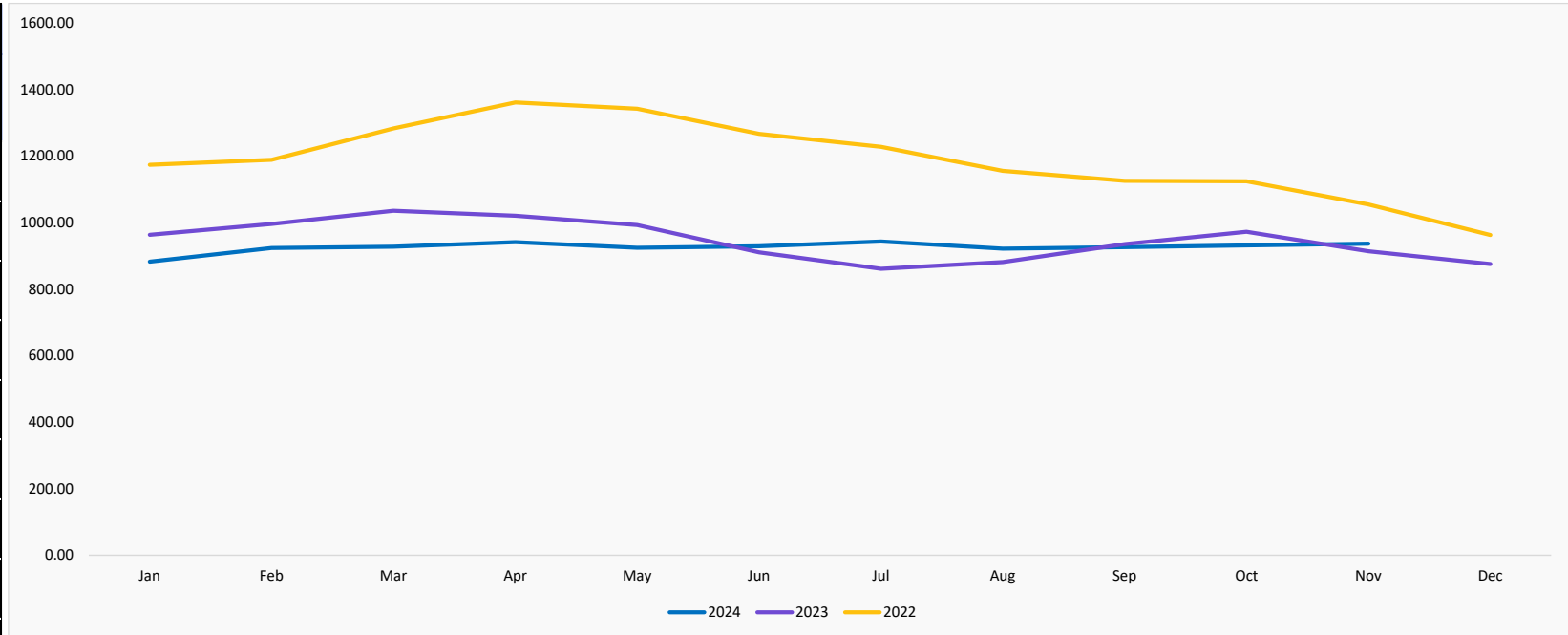
Monthly Price Variation

0.00%

NOTE: For prices in USD, please check the excel sent with the presentation

Plastic HDPE Film - Western Europe

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-8.34%	883.07	963.41	1,174.38
February	-7.25%	924.06	996.26	1,189.17
March	-10.43%	927.83	1,035.88	1,283.24
April	-7.80%	941.48	1,021.18	1,361.64
May	-6.85%	924.88	992.87	1,343.05
June	2.03%	929.45	910.99	1,267.29
July	9.52%	943.37	861.36	1,228.03
August	4.52%	921.71	881.85	1,156.15
September	-1.04%	926.30	936.00	1,125.83
October	-4.22%	931.74	972.78	1,124.61
November	2.52%	937.19	914.12	1,054.77
December			875.90	963.28
Year Average		926.46	946.88	1,189.29



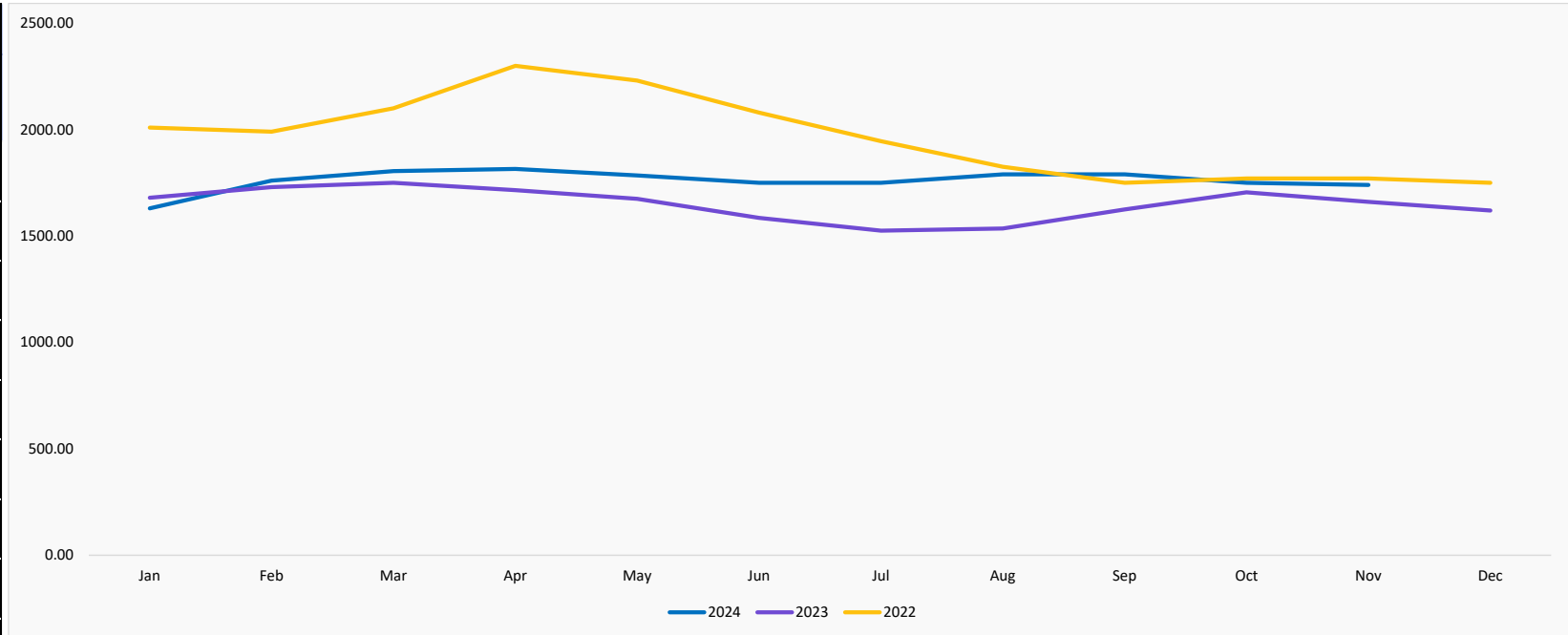
Monthly Price Variation

0.59%

NOTE: For prices in USD, please check the excel sent with the presentation

Plastic HDPE Film - UAE

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-2.98%	1,630.00	1,680.00	2,010.00
February	1.73%	1,760.00	1,730.00	1,990.00
March	3.14%	1,805.00	1,750.00	2,100.00
April	5.83%	1,815.00	1,715.00	2,300.00
May	6.57%	1,785.00	1,675.00	2,230.00
June	10.41%	1,750.00	1,585.00	2,080.00
July	14.75%	1,750.00	1,525.00	1,945.00
August	16.61%	1,790.00	1,535.00	1,825.00
September	10.15%	1,790.00	1,625.00	1,750.00
October	2.64%	1,750.00	1,705.00	1,770.00
November	4.82%	1,740.00	1,660.00	1,770.00
December			1,620.00	1,750.00
Year Average		1,760.45	1,650.42	1,960.00



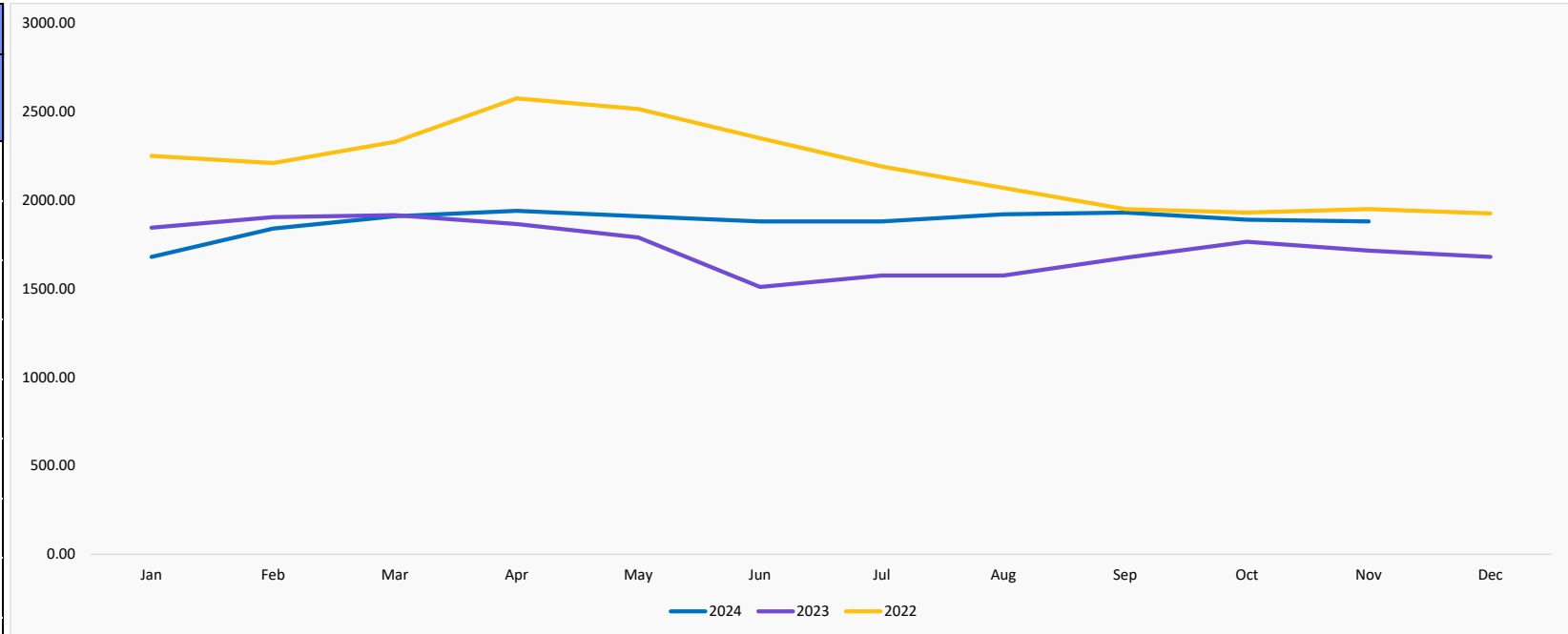
Monthly Price Variation

-0.57%

NOTE: For prices in USD, please check the excel sent with the presentation

Plastic LDPE Film Grade - Western Europe

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-8.94%	1,680.00	1,845.00	2,250.00
February	-3.41%	1,840.00	1,905.00	2,210.00
March	-0.26%	1,910.00	1,915.00	2,330.00
April	4.02%	1,940.00	1,865.00	2,575.00
May	6.70%	1,910.00	1,790.00	2,515.00
June	24.50%	1,880.00	1,510.00	2,350.00
July	19.37%	1,880.00	1,575.00	2,190.00
August	21.90%	1,920.00	1,575.00	2,070.00
September	15.22%	1,930.00	1,675.00	1,950.00
October	7.08%	1,890.00	1,765.00	1,930.00
November	9.62%	1,880.00	1,715.00	1,950.00
December			1,680.00	1,925.00
Year Average		1,878.18	1,734.58	2,187.08



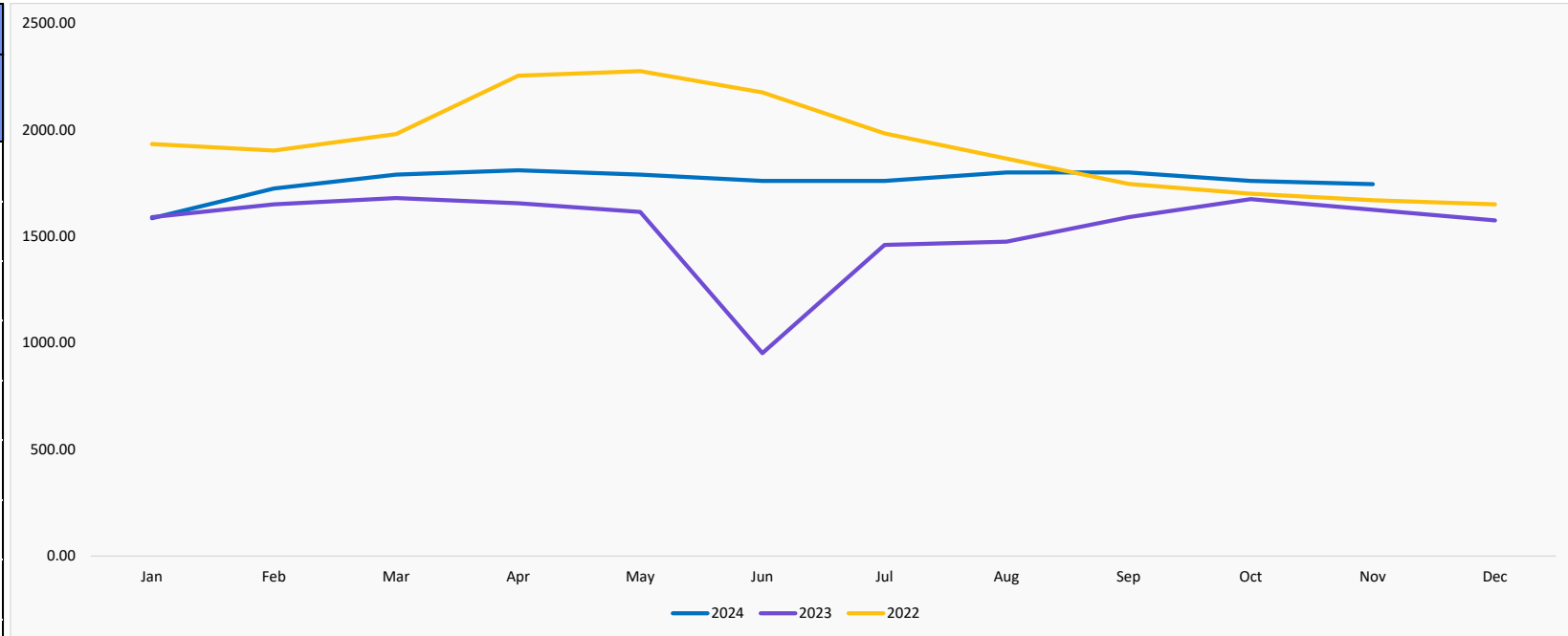
Monthly Price Variation

-0.53%

NOTE: For prices in USD, please check the excel sent with the presentation

Plastic LLDPE Film Grade - Western Europe

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-0.31%	1,585.00	1,590.00	1,933.00
February	4.55%	1,725.00	1,650.00	1,903.00
March	6.55%	1,790.00	1,680.00	1,980.00
April	9.37%	1,810.00	1,655.00	2,254.25
May	10.84%	1,790.00	1,615.00	2,275.50
June	84.78%	1,760.00	952.50	2,175.00
July	20.55%	1,760.00	1,460.00	1,983.00
August	22.03%	1,800.00	1,475.00	1,865.00
September	13.21%	1,800.00	1,590.00	1,745.50
October	5.07%	1,760.00	1,675.00	1,700.50
November	7.38%	1,745.00	1,625.00	1,670.00
December			1,575.00	1,650.00
Year Average		1,756.82	1,545.21	1,927.90



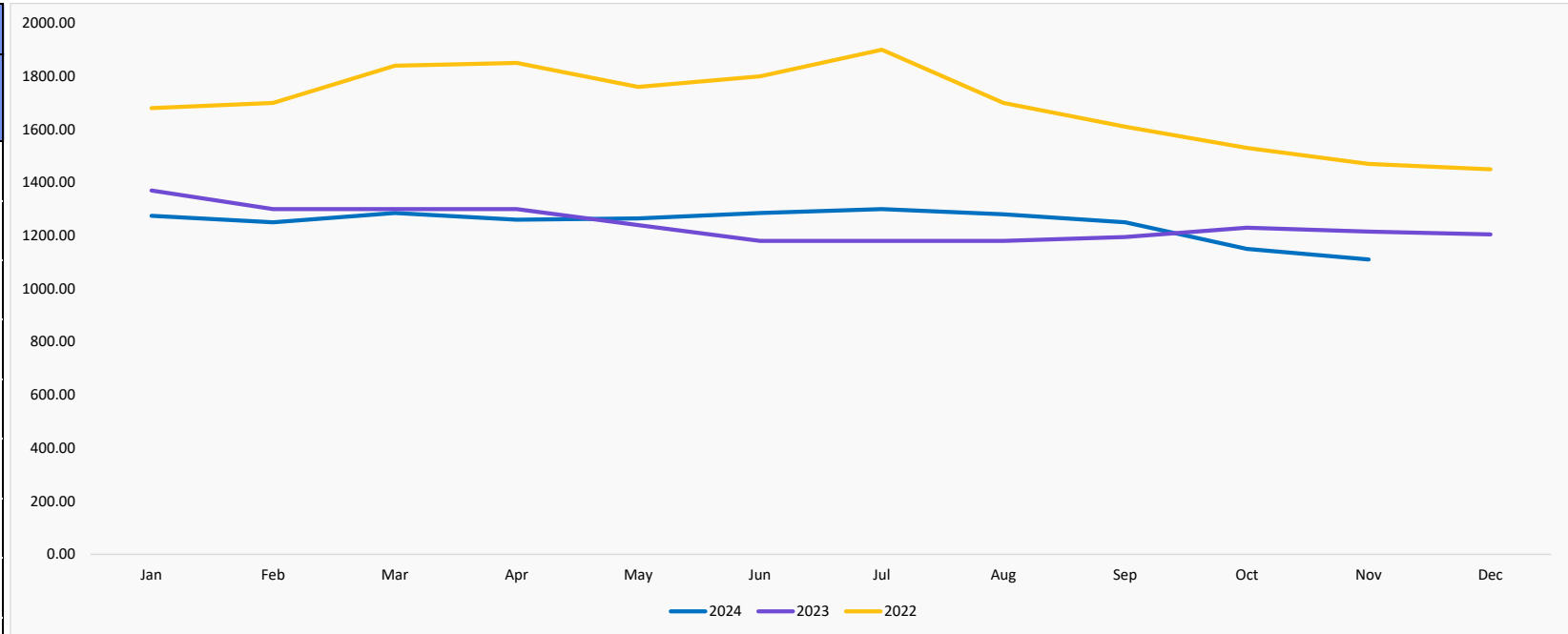
Monthly Price Variation

-0.85%

NOTE: For prices in USD, please check the excel sent with the presentation

Plastic PET Bottle Grade - Western Europe

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-6.93%	1,275.00	1,370.00	1,680.00
February	-3.85%	1,250.00	1,300.00	1,700.00
March	-1.15%	1,285.00	1,300.00	1,840.00
April	-3.08%	1,260.00	1,300.00	1,850.00
May	2.02%	1,265.00	1,240.00	1,760.00
June	8.90%	1,285.00	1,180.00	1,800.00
July	10.17%	1,300.00	1,180.00	1,900.00
August	8.47%	1,280.00	1,180.00	1,700.00
September	4.60%	1,250.00	1,195.00	1,610.00
October	-6.50%	1,150.00	1,230.00	1,530.00
November	-8.64%	1,110.00	1,215.00	1,470.00
December			1,205.00	1,450.00
Year Average		1,246.36	1,241.25	1,690.83



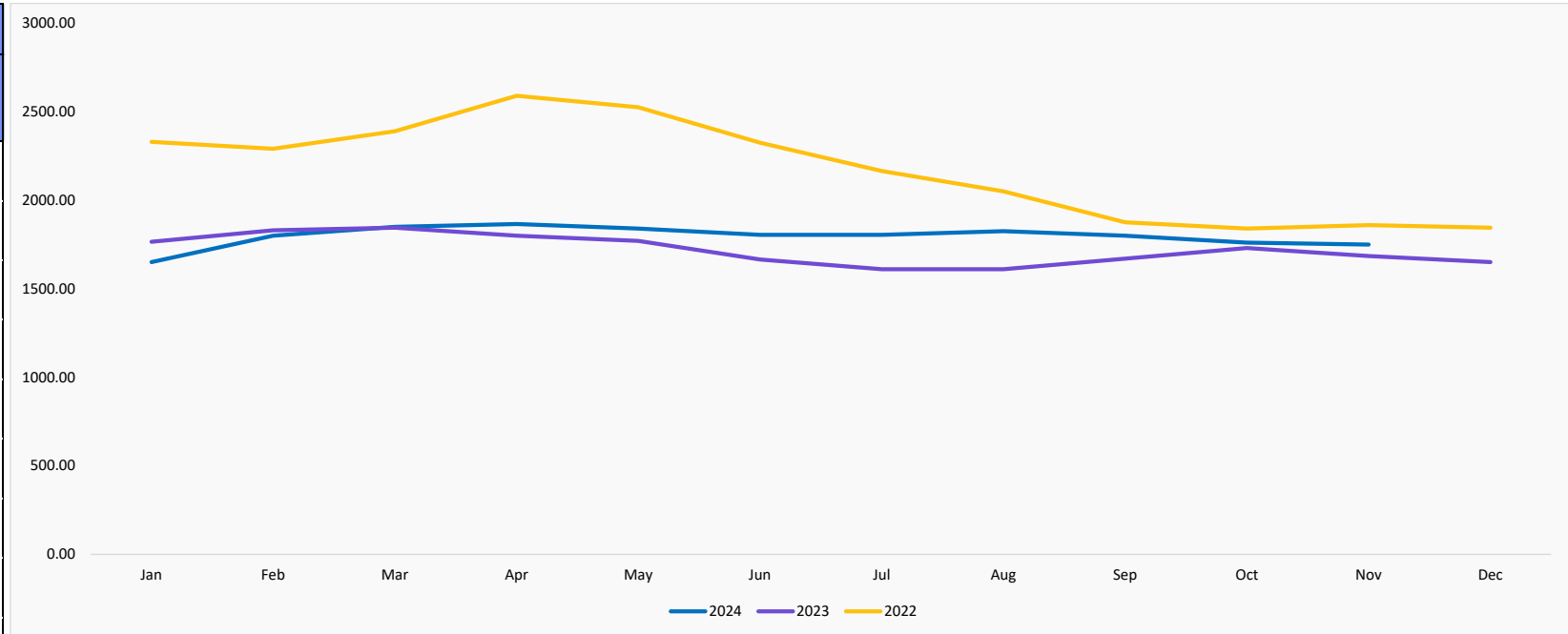
Monthly Price Variation

-3.48%

NOTE: For prices in USD, please check the excel sent with the presentation

Plastic PP Copolymer Film - Western Europe

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-6.52%	1,650.00	1,765.00	2,330.00
February	-1.64%	1,800.00	1,830.00	2,290.00
March	0.27%	1,850.00	1,845.00	2,390.00
April	3.61%	1,865.00	1,800.00	2,590.00
May	3.95%	1,840.00	1,770.00	2,525.00
June	8.41%	1,805.00	1,665.00	2,325.00
July	12.11%	1,805.00	1,610.00	2,165.00
August	13.35%	1,825.00	1,610.00	2,050.00
September	7.78%	1,800.00	1,670.00	1,875.00
October	1.73%	1,760.00	1,730.00	1,840.00
November	3.86%	1,750.00	1,685.00	1,860.00
December			1,650.00	1,845.00
Year Average		1,795.45	1,719.17	2,173.75



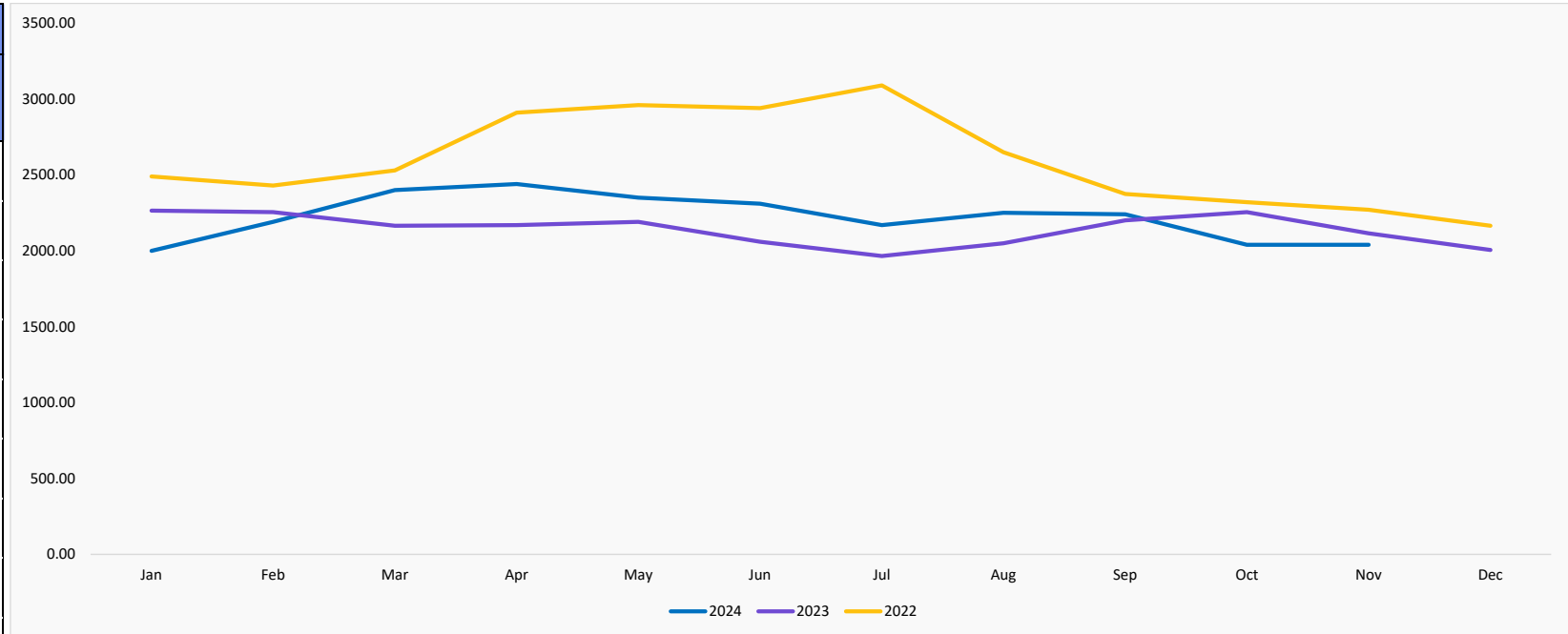
Monthly Price Variation

-0.57%

NOTE: For prices in USD, please check the excel sent with the presentation

Plastic PS General Purpose - Western Europe

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-11.70%	2,000.00	2,265.00	2,490.00
February	-2.88%	2,190.00	2,255.00	2,430.00
March	10.85%	2,400.00	2,165.00	2,530.00
April	12.44%	2,440.00	2,170.00	2,910.00
May	7.31%	2,350.00	2,190.00	2,960.00
June	12.14%	2,310.00	2,060.00	2,940.00
July	10.43%	2,170.00	1,965.00	3,090.00
August	9.76%	2,250.00	2,050.00	2,650.00
September	1.82%	2,240.00	2,200.00	2,375.00
October	-9.53%	2,040.00	2,255.00	2,320.00
November	-3.55%	2,040.00	2,115.00	2,270.00
December			2,005.00	2,165.00
Year Average		2,220.91	2,141.25	2,594.17



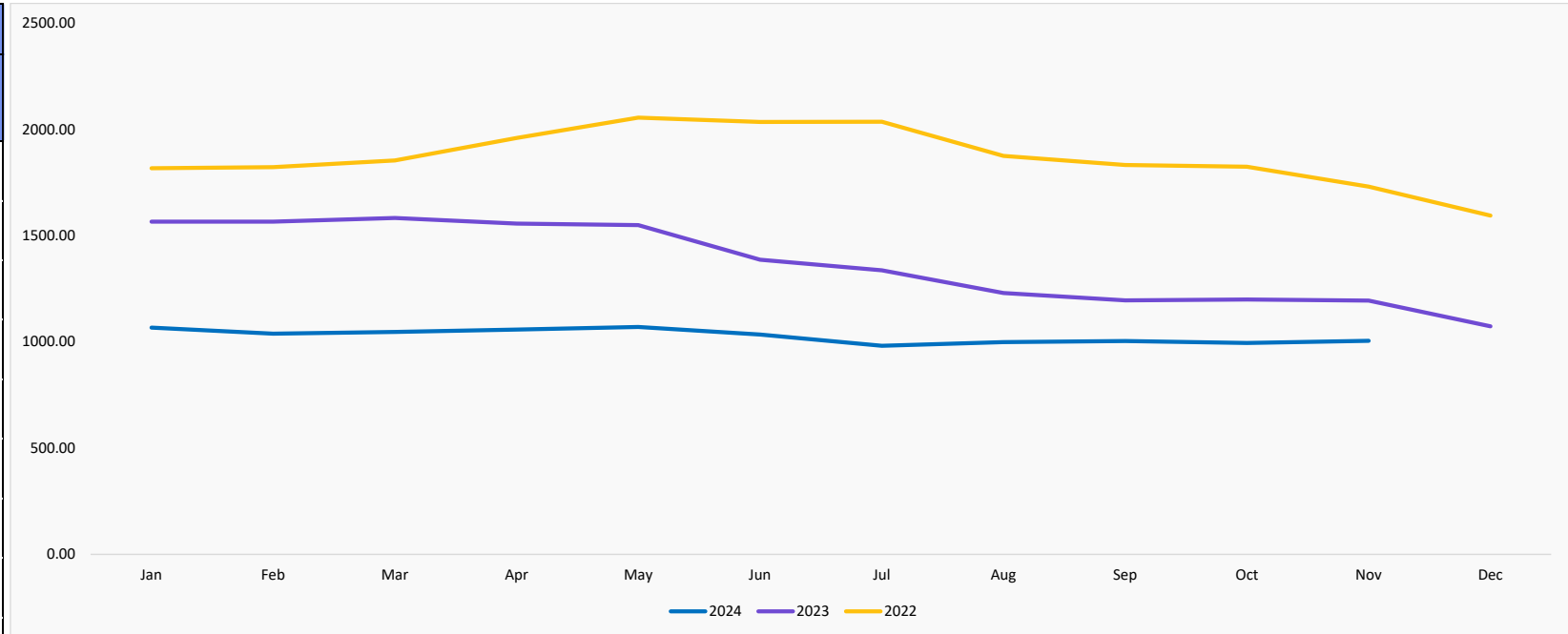
Monthly Price Variation

0.00%

NOTE: For prices in USD, please check the excel sent with the presentation

Plastic PVC Pipe Grade - United Kingdom

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-31.86%	1,066.78	1,565.54	1,817.36
February	-33.68%	1,038.61	1,565.95	1,822.06
March	-33.87%	1,046.82	1,583.07	1,853.56
April	-32.07%	1,057.61	1,556.98	1,959.31
May	-30.95%	1,069.79	1,549.28	2,055.28
June	-25.36%	1,034.72	1,386.34	2,034.94
July	-26.57%	981.31	1,336.30	2,036.26
August	-18.81%	998.60	1,229.88	1,874.93
September	-16.04%	1,003.52	1,195.19	1,832.81
October	-17.01%	995.20	1,199.11	1,824.71
November	-15.90%	1,004.64	1,194.53	1,730.43
December			1,073.22	1,594.62
Year Average		1,027.05	1,369.62	1,869.69



Monthly Price Variation

0.95%

NOTE: For prices in USD, please check the excel sent with the presentation

PAPER & RUBBER

PRICE UPDATE

| Paper

Commodity lookup

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Cartonboard - China	MT	643.63	541.11	539.02	▶ -0.38%	▶ -16.25%
Cartonboard - Europe	MT	1009.10	1060.42	1056.58	▶ -0.36%	▶ 4.71%
Cartonboard - Latin America	MT	1072.75	963.39	984.25	▶ 2.17%	▶ -8.25%
Cartonboard (Virgin) - Latin America	MT	1187.36	1067.47	1147.34	▶ 7.48%	▶ -3.37%
Graphic Paper Reel - Europe	MT	1060.00	1060.00	1045.00	▶ -1.42%	▶ -1.42%
Graphic Paper Sheet - Europe	MT	1100.00	1115.00	1105.00	▶ -0.90%	▶ 0.45%
Kraftliner - Europe	MT	735.00	815.00	795.00	▶ -2.45%	▶ 8.16%
Logs Birch (Hardwood) - Finland	CuM	63.46	69.16	69.29	▶ 0.19%	▶ 9.19%
Logs Pine (Softwood) - Finland	CuM	70.30	77.57	78.95	▶ 1.78%	▶ 12.30%
Paper Pulp - BHK in Europe	MT	819.50	1043.00	1002.00	▶ -3.93%	▶ 22.27%
Paper Pulp - BHK in Indonesia	MT	564.38	495.22	489.17	▶ -1.22%	▶ -13.33%
Paper Pulp - NBSK in Europe	MT	1084.21	1413.77	1427.07	▶ 0.94%	▶ 31.62%
Paper Pulp - SBSK in USA	MT	1138.02	1503.99	1542.78	▶ 2.58%	▶ 35.57%
Plywood - Brazil	CuM	422.64	184.39	532.53	▶ 188.81%	▶ 26.00%
Rubber - Singapore	100KG	154.85	244.53	219.71	▶ -10.15%	▶ 41.89%
Rubber SMR - Malaysia	100KG	136.35	191.11	188.64	▶ -1.29%	▶ 38.35%
Rubber Synthetic - China	100KG	158.07	213.56	198.59	▶ -7.01%	▶ 25.63%
Testliner - Europe	MT	575.00	675.00	655.00	▶ -2.96%	▶ 13.91%
Timber - Brazil	CuM	246.64	272.62	280.67	▶ 2.95%	▶ 13.80%
Timber - Canada	CuM	198.96	210.91	217.14	▶ 2.95%	▶ 9.14%

Commodity lookup

Modest demand and abundant supply cause ongoing pressure on pulp prices in Europe – 11TH December 2024

The **European pulp market remains a buyer's market**. As the year draws to a close, the downward price pressure continues, resulting in further price cuts for November deliveries. EUWID respondents reported falling prices for both hardwood and softwood pulp grades. While the talks for bleached eucalyptus kraft (BEK) pulp were concluded rather quickly, no final price agreement on November deliveries had been reached by early December in many instances for northern bleached softwood kraft (NBSK) pulp.

Source: EUWID

FAO Report 2023: Global trade in wood and paper declines – 11TH December 2024

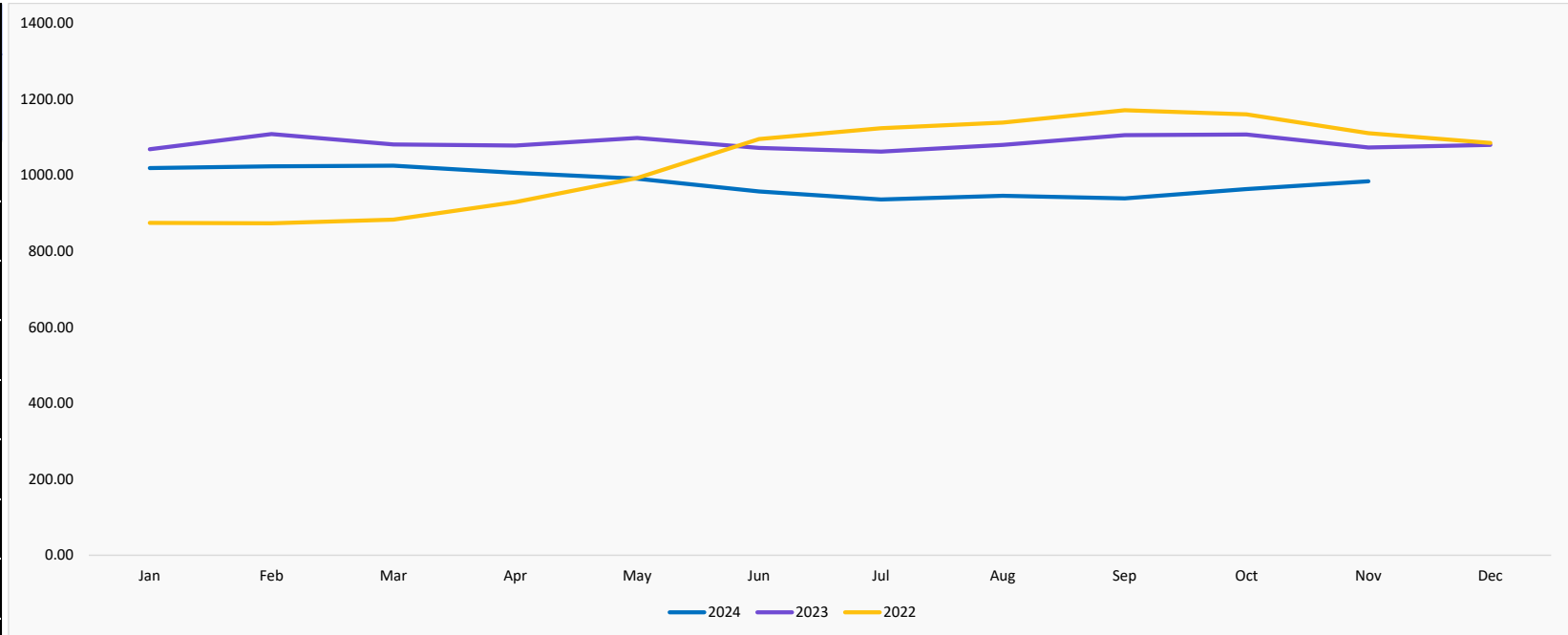
According to the latest data released by the Food and Agriculture Organization of the United Nations (FAO), global trade in wood and paper products dropped steeply from record levels in 2021 and 2022, with the paper trade continuing to decline under pressure from digital media. The Global forest products facts and figures 2023 report says the worldwide wood and paper products trade saw a significant drop of 12%: exports decreased by \$64 billion to \$482 billion in 2023. This level was still above the highest international trade value before 2021. However, the fact that trade value declined faster than traded quantities for most of the products significantly indicates a drop in forest product prices in 2023 amid a general slowdown in economic growth. Global production of paper and paperboard contracted by 3%, owing to a continuous replacement of printed media with digital products. *"What we have seen happening is a combination of factors, with production and trade declining due to global supply chain disruption, slowing consumer demand and trade restrictions, together with a longer-term decline, for example, in global paper production and trade along with the progress of digitalisation,"* said Zhimin Wu, Director of FAO's Forestry Division.

- **Wood pulp** - Global production of wood pulp declined by 2% to reach 193 million tonnes. In contrast, trade in wood pulp increased by 3% to reach a record level of 71 million tonnes.
- **Paper and paperboard** - In 2023, production declined in Europe and northern America, while it stagnated in Africa and Latin America and the Caribbean. It grew only in Asia-Pacific. World paper production dropped by 3% to 401 million tonnes (trade by 7% to 104 million tonnes, the lowest since 2010). Global production of graphic papers declined by 9% while other paper and paperboard recorded a smaller decrease of 3% in 2023. Production of graphic papers in 2023 (84 million tonnes) was at the lowest level since 1987.
- **Industrial roundwood** (used for any purpose other than energy and includes pulpwood, sawlogs and veneer logs, and wood used for fence posts and telephone or electricity poles) - In 2023, global industrial roundwood removals declined by 4 percent to 1.92 billion m³. Global trade decreased by 13 percent to 100 million m³ (the lowest level since 2009).
- **Sawnwood** (including planks, sleepers or cross-ties, beams, joists, boards, rafters and lumber) - Production decreased in all five regions around the world in 2023. Global production of sawnwood contracted by 4 percent to 445 million m³ (the lowest since 2014), and the decline in international trade was as twice as big - 8 percent to 129 million m³ (the lowest since 2014).

Source: Globalwood.org

Cartonboard - Latin America

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-4.63%	1,018.85	1,068.33	874.30
February	-7.65%	1,023.43	1,108.24	873.21
March	-5.14%	1,025.21	1,080.73	883.20
April	-6.65%	1,006.16	1,077.82	929.53
May	-9.77%	990.94	1,098.26	992.36
June	-10.70%	956.97	1,071.65	1,095.00
July	-11.85%	935.94	1,061.81	1,123.40
August	-12.39%	945.69	1,079.48	1,138.39
September	-15.08%	938.71	1,105.43	1,170.84
October	-13.00%	963.39	1,107.39	1,160.10
November	-8.25%	984.25	1,072.75	1,110.44
December			1,079.62	1,084.72
Year Average		980.87	1,084.29	1,036.29

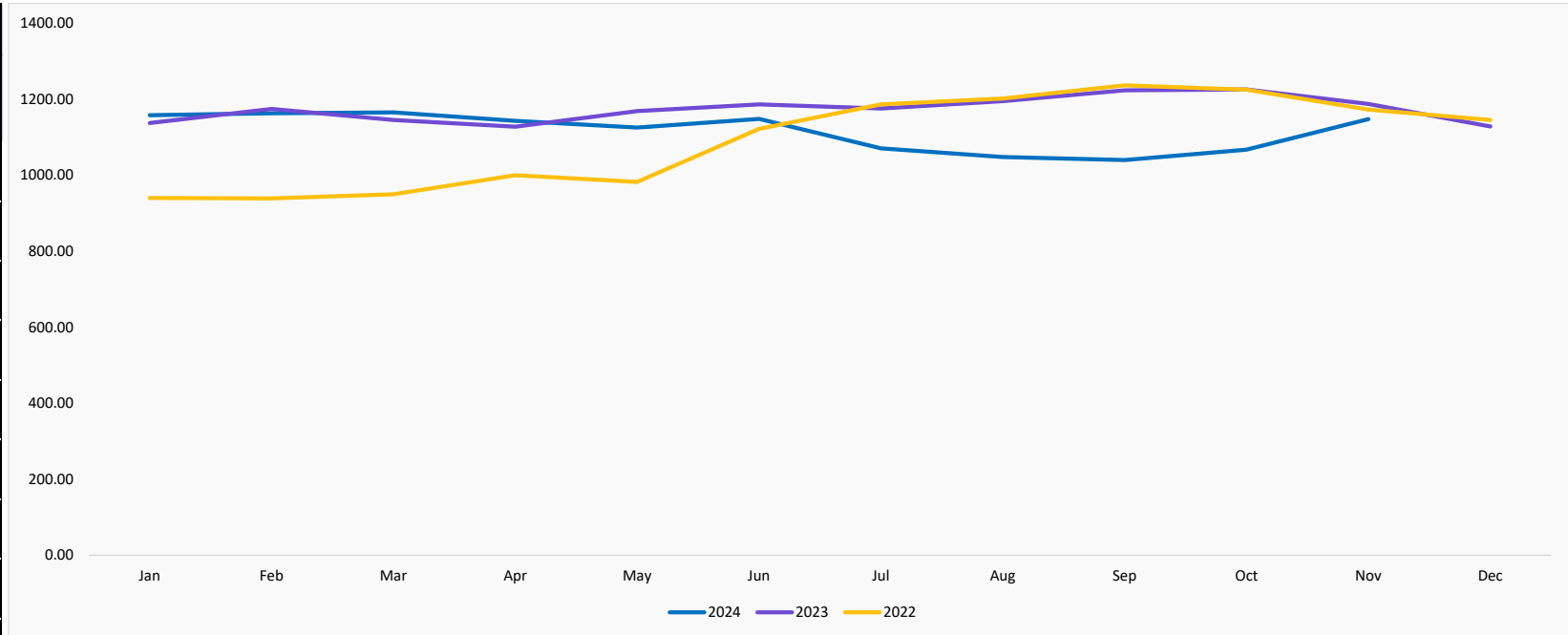


Monthly Price Variation

2.17%

Cartonboard (Virgin) - Latin America

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	1.81%	1,157.95	1,137.41	940.32
February	-0.95%	1,163.16	1,174.27	939.14
March	1.75%	1,165.18	1,145.11	949.89
April	1.35%	1,142.82	1,127.63	999.72
May	-3.69%	1,125.53	1,168.66	982.11
June	-3.19%	1,148.36	1,186.14	1,121.76
July	-8.88%	1,070.84	1,175.25	1,186.14
August	-12.30%	1,047.85	1,194.81	1,201.97
September	-14.99%	1,040.12	1,223.53	1,236.23
October	-12.91%	1,067.47	1,225.70	1,224.89
November	-3.37%	1,147.34	1,187.36	1,172.45
December			1,128.45	1,145.50
Year Average		1,116.06	1,172.86	1,091.68

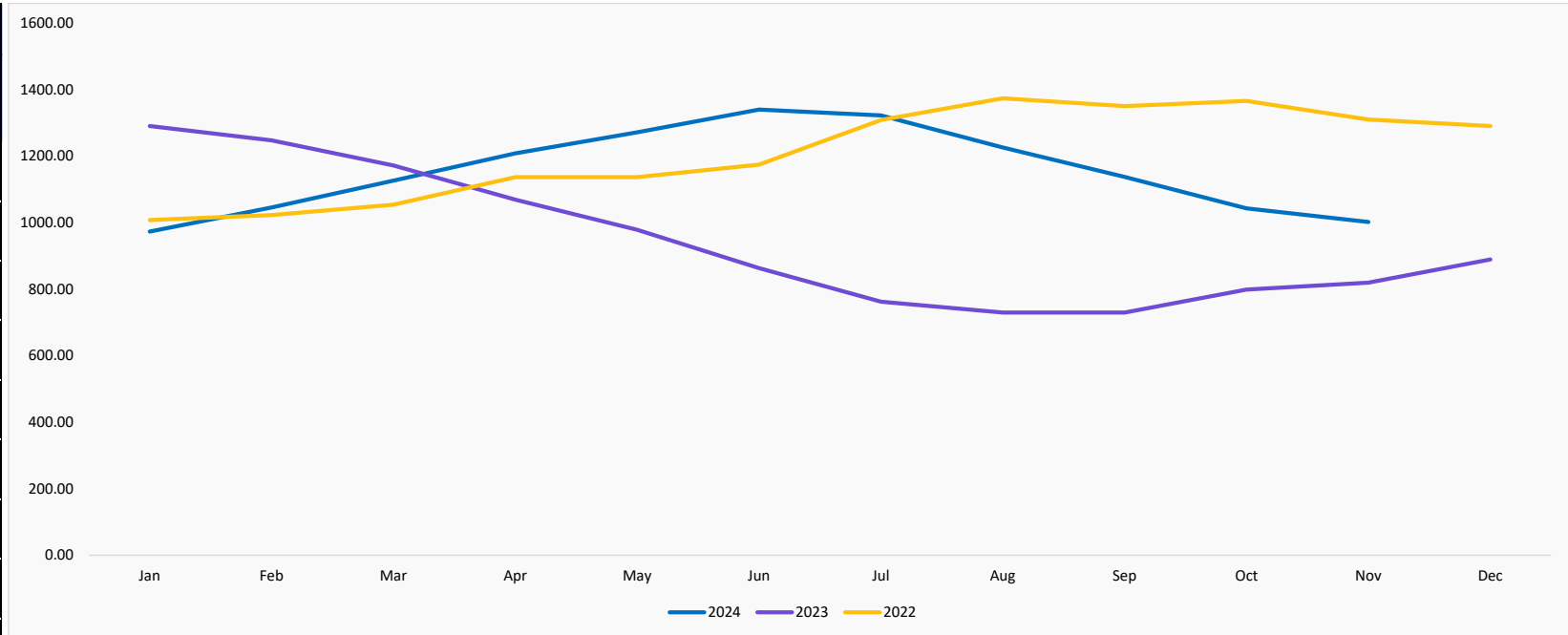


Monthly Price Variation

7.48%

Paper Pulp - BHK in Europe

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-24.56%	973.50	1,290.50	1,008.00
February	-16.16%	1,045.90	1,247.50	1,023.00
March	-3.88%	1,126.50	1,172.00	1,054.00
April	13.00%	1,208.50	1,069.50	1,137.00
May	29.99%	1,272.00	978.50	1,137.00
June	55.24%	1,340.50	863.50	1,174.50
July	73.44%	1,322.50	762.50	1,309.00
August	68.01%	1,226.50	730.00	1,374.00
September	55.82%	1,137.50	730.00	1,350.50
October	30.54%	1,043.00	799.00	1,366.00
November	22.27%	1,002.00	819.50	1,310.00
December			889.50	1,290.50
Year Average		1,154.40	946.00	1,211.13

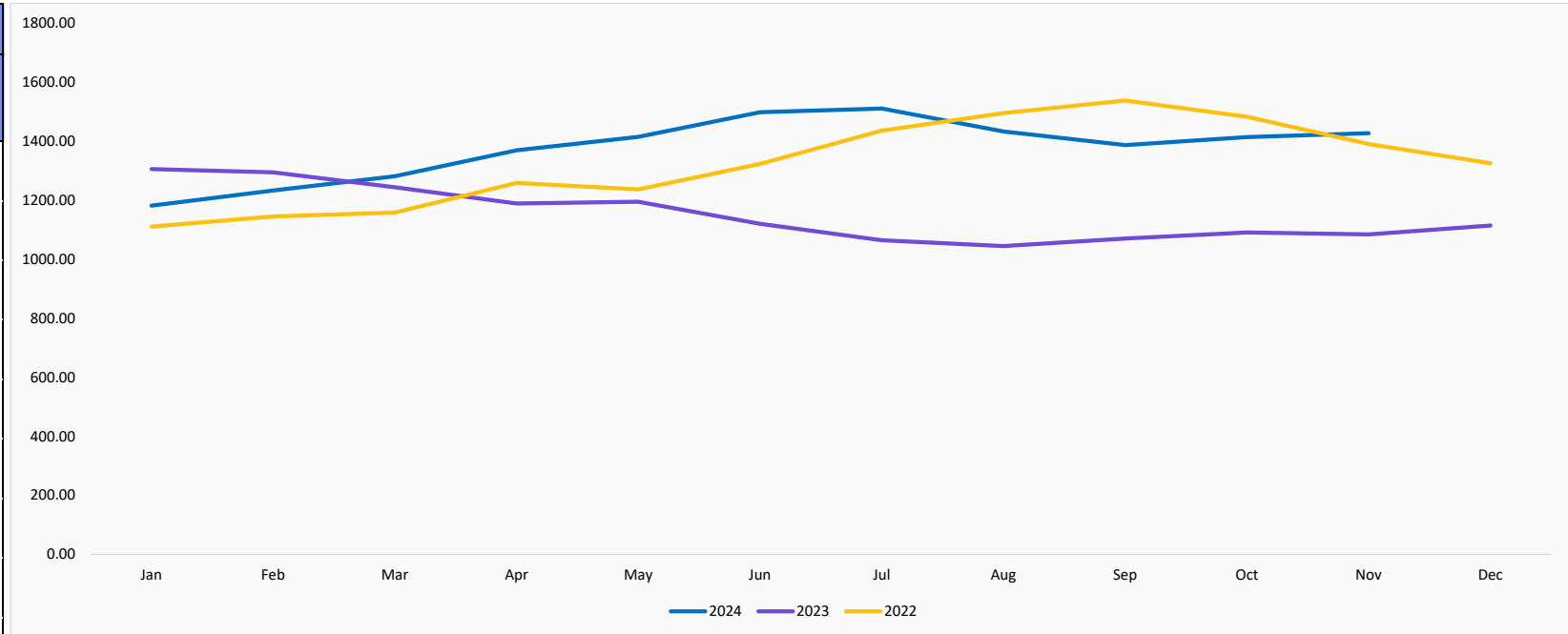


Monthly Price Variation

-3.93%

Paper Pulp - NBSK in Europe

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-9.50%	1,181.44	1,305.49	1,110.71
February	-4.75%	1,233.03	1,294.52	1,144.97
March	3.02%	1,281.51	1,243.99	1,158.07
April	15.15%	1,368.85	1,188.77	1,258.66
May	18.46%	1,414.97	1,194.47	1,236.49
June	33.82%	1,498.47	1,119.74	1,323.37
July	41.97%	1,510.63	1,064.08	1,436.11
August	37.14%	1,433.00	1,044.88	1,495.01
September	29.58%	1,386.53	1,070.00	1,537.62
October	29.60%	1,413.77	1,090.83	1,483.02
November	31.62%	1,427.07	1,084.21	1,390.47
December			1,114.43	1,325.50
Year Average		1,377.21	1,151.28	1,325.00



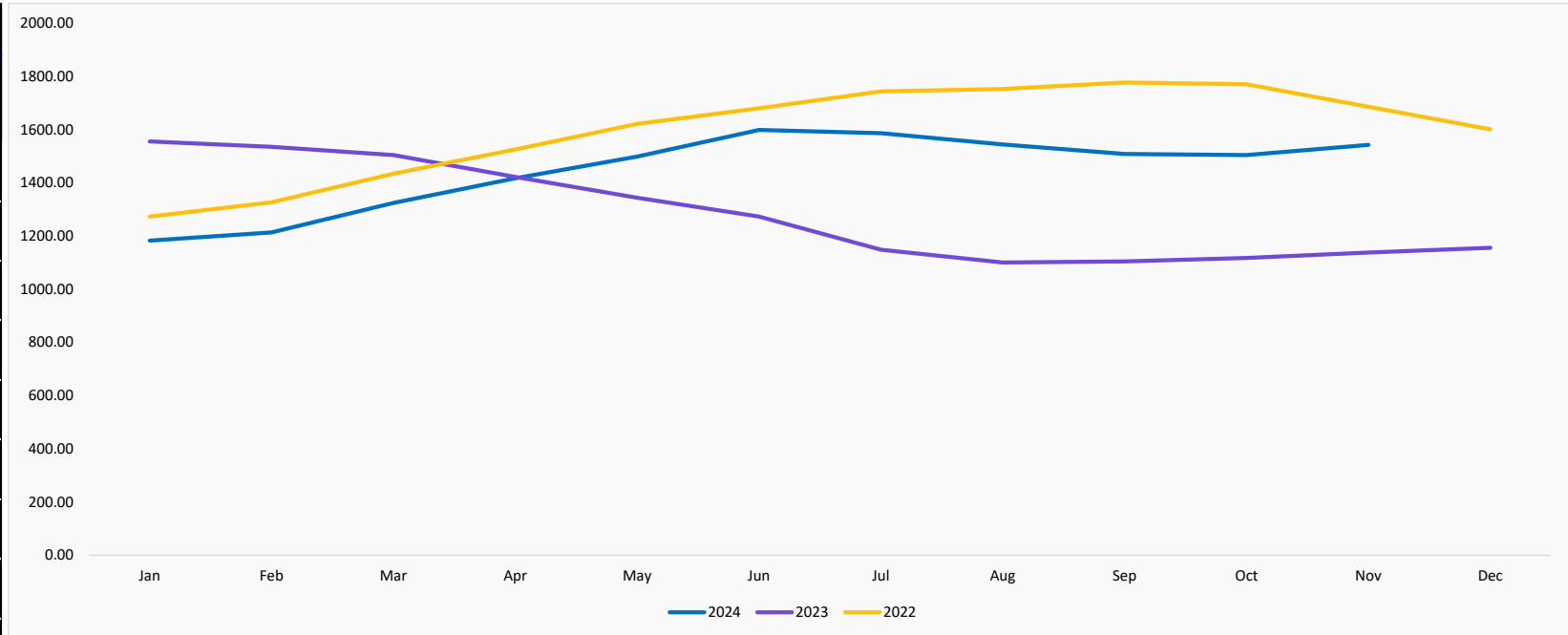
Monthly Price Variation

0.94%

NOTE: For prices in USD, please check the excel sent with the presentation

Paper Pulp - SBSK in USA

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-23.95%	1,182.93	1,555.39	1,272.71
February	-20.95%	1,213.56	1,535.22	1,326.94
March	-11.93%	1,324.48	1,503.85	1,433.89
April	-0.38%	1,416.88	1,422.36	1,525.13
May	11.53%	1,498.30	1,343.46	1,621.21
June	25.57%	1,598.66	1,273.08	1,679.95
July	38.11%	1,586.12	1,148.47	1,743.80
August	40.34%	1,543.74	1,100.02	1,752.49
September	36.55%	1,508.19	1,104.47	1,777.10
October	34.63%	1,503.99	1,117.15	1,770.87
November	35.57%	1,542.78	1,138.02	1,686.06
December			1,155.64	1,600.75
Year Average		1,447.24	1,283.09	1,599.24



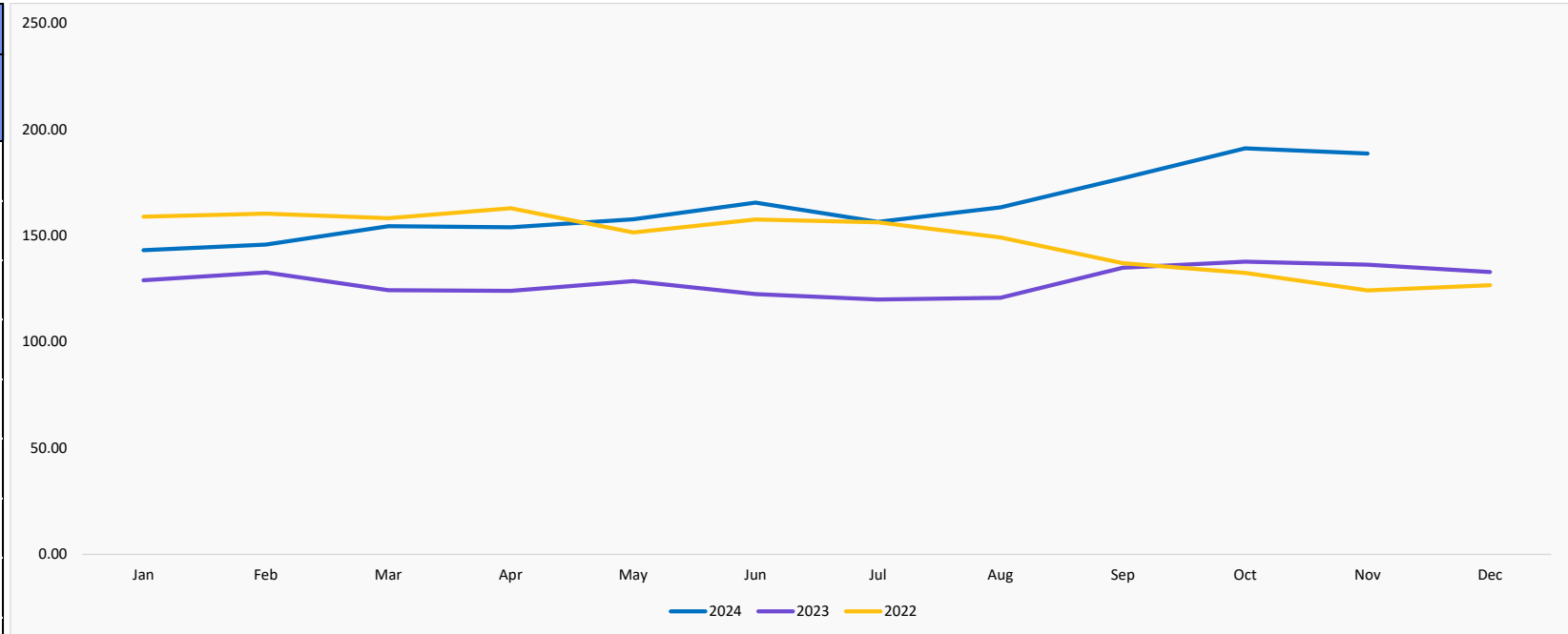
Monthly Price Variation

2.58%

NOTE: For prices in USD, please check the excel sent with the presentation

| Rubber SMR - Malaysia

Euro/100 KG*				
MONTH	YoY GROWTH	2024	2023	2022
January	11.01%	143.16	128.96	158.90
February	9.92%	145.82	132.66	160.39
March	24.21%	154.42	124.32	158.24
April	24.07%	153.91	124.05	162.92
May	22.65%	157.70	128.58	151.51
June	35.12%	165.54	122.51	157.58
July	30.53%	156.49	119.89	156.26
August	35.19%	163.27	120.77	149.10
September	31.23%	177.08	134.94	137.01
October	38.75%	191.11	137.74	132.44
November	38.35%	188.64	136.35	124.17
December			132.91	126.64
Year Average		163.38	128.64	147.93



Monthly Price Variation

-1.29%

NOTE: For prices in USD, please check the excel sent with the presentation

TEXTILES

PRICE UPDATE

| Textiles

Commodity lookup

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Cotton - ICE US	MT	1598.68	1448.58	1455.81	▶ 0.50%	▶ -8.94%
Nylon - China	MT	2286.70	2267.57	2211.72	▶ -2.46%	▶ -3.28%
Polyester - Europe	MT	1499.95	1457.58	1644.74	▶ 12.84%	▶ 9.65%
Wool - United Kingdom	MT	1575.72	1741.60	1820.87	▶ 4.55%	▶ 15.56%

| Textiles

Commodity lookup

Global CY 2024-25 cotton production to rise by over 1.2 mn bales: USDA – 11th December 2024

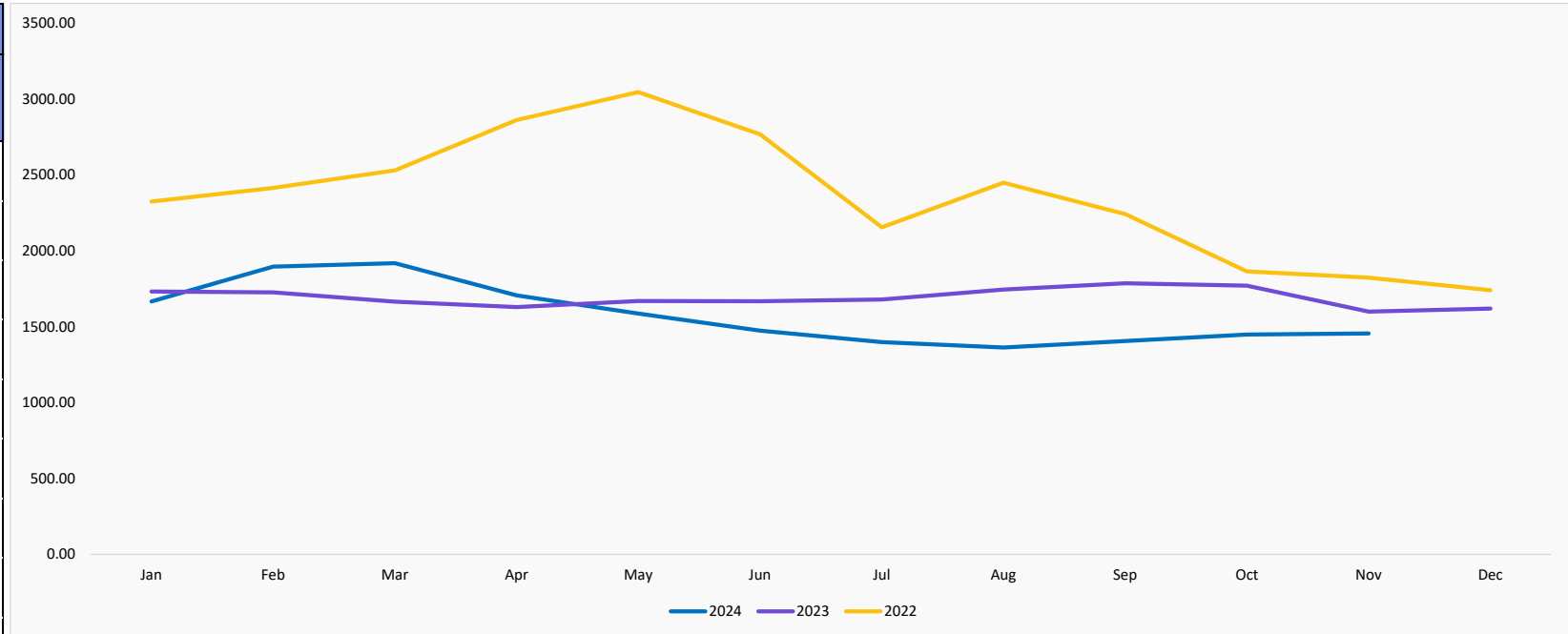
Global cotton production in cotton year (CY) 2024-25 is projected to rise by more than 1.2 million bales to 117.4 million bales on the back of higher production in India and Argentina, according to a report by the Foreign Agricultural Service (FAS) of the US department of agriculture (USDA). Production in India in CY 2024-25 is projected to be up by 1 million bales to 25 million bales on higher yields. Global consumption in CY 2024-25 is projected to be up by over 500,000 bales to 115.8 million bales as higher use in India, Pakistan and Vietnam will more than offset a reduction in China. Global cotton trade is projected to up slightly to 42.3 million bales. Upward adjustments to exports in Brazil and Benin will more than offset downward revisions to Burkina Faso's and Mali's exports. China cotton imports for the period are projected to reduce by 500,000 bales, while the same amount raised Pakistan's imports. Global ending cotton stocks are forecast to be up by nearly 300,000 bales on higher Argentina and US production and Pakistan imports.

The US season-average farm price for CY 2024-25 remains at 66 cents per pound. US exports during the period are forecast to be down by over 400,000 bales from the previous CY to 11.3 million despite higher supplies. US cotton shipments are projected at a nine-year low in CY-2024-25, mostly due to Brazil's more competitive prices and China's significant drop in demand. While US production has trended downward recently, Brazil's CY 2024-25 crop is estimated at 16.9 million bales, surpassing the previous year's record by 16 per cent. The incredible growth in supply and a significantly depreciated currency has lowered relative Brazilian prices with recently quoted basis levels around 800 points, compared with US origin at over 1,200 points. Falling global demand is also a factor in lower projected US shipments. CY 2024-25 world imports are forecast to be down by more than 2 million bales from the previous CY due to a significant drop in Chinese demand. China is still projected as the world's largest importer at 8.5 million bales. Still, volume is expected to fall by more than 40 per cent from the previous CY, primarily due to less demand for government reserves. The report said that Between August and November, US cotton sales and shipments to China are less than a quarter of last year's level at around 700,000 bales and the lowest level in nine years. It noted that the uncertain political environment has further stalled forward buying from Chinese buyers for US cotton, giving Brazil a further edge in addition to its competitive prices. US cotton spot prices are once again mostly unchanged at around 65 cents per pound compared with last month. China spot prices are down by 2 cents to 95 cents per pound. China consumption and imports are lowered 500,000 bales this month to 37.5 million. India spot prices are down slightly to around 81 cents per pound. Brazil prices are down by over 2 cents to around 68 cents per pound. Pakistan prices are down by 3 cents to roughly 76 cents per pound.

Source: Fibre2Fashion

Cotton - ICE US

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-3.75%	1,666.65	1,731.53	2,325.26
February	9.84%	1,895.70	1,725.92	2,414.82
March	15.18%	1,918.06	1,665.27	2,530.24
April	4.73%	1,706.80	1,629.70	2,861.18
May	-4.92%	1,587.06	1,669.14	3,046.28
June	-11.62%	1,473.71	1,667.48	2,768.06
July	-16.74%	1,397.86	1,679.01	2,154.65
August	-21.90%	1,362.39	1,744.52	2,448.02
September	-21.29%	1,405.91	1,786.11	2,241.70
October	-18.15%	1,448.58	1,769.77	1,863.81
November	-8.94%	1,455.81	1,598.68	1,823.47
December			1,619.02	1,740.12
Year Average		1,574.41	1,690.51	2,351.47



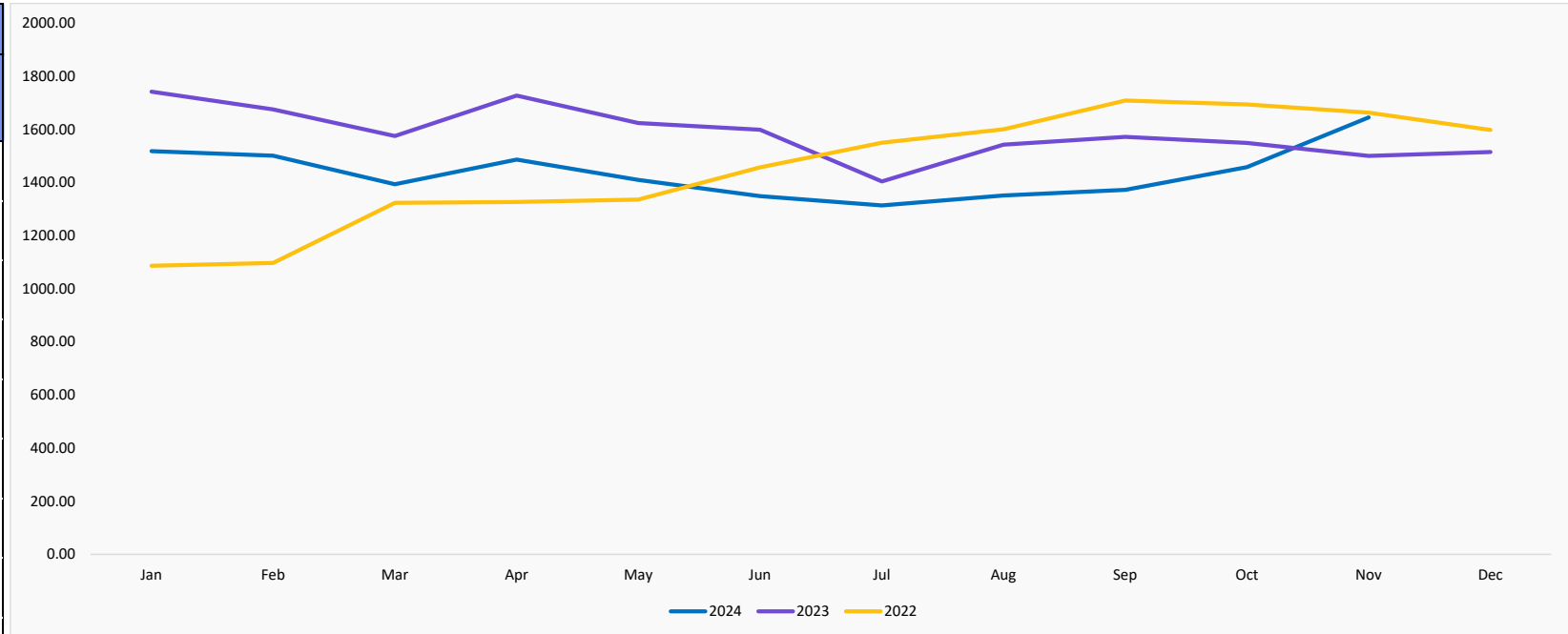
Monthly Price Variation

0.50%

NOTE: For prices in USD, please check the excel sent with the presentation

| Polyester - Europe

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	-12.83%	1,518.47	1,742.02	1,086.51
February	-10.40%	1,500.76	1,675.03	1,097.20
March	-11.50%	1,393.63	1,574.70	1,323.22
April	-13.93%	1,486.62	1,727.25	1,326.60
May	-13.20%	1,409.76	1,624.07	1,335.90
June	-15.63%	1,348.50	1,598.41	1,456.67
July	-6.45%	1,313.80	1,404.38	1,550.25
August	-12.38%	1,351.36	1,542.34	1,600.54
September	-12.72%	1,372.22	1,572.12	1,708.41
October	-5.88%	1,457.58	1,548.67	1,693.74
November	9.65%	1,644.74	1,499.95	1,662.85
December			1,515.07	1,598.26
Year Average		1,436.13	1,585.33	1,453.35



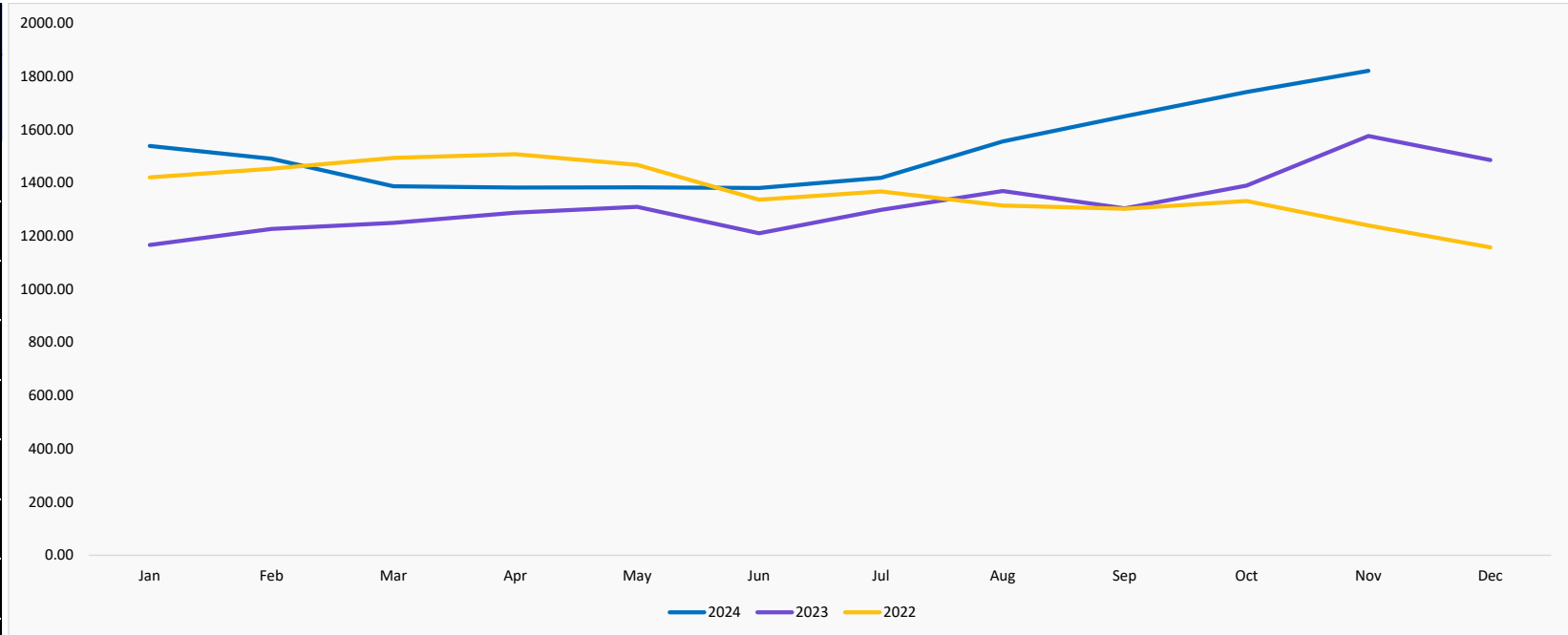
Monthly Price Variation

12.84%

NOTE: For prices in USD, please check the excel sent with the presentation

Wool - United Kingdom

Euro/MT*				
MONTH	YoY GROWTH	2024	2023	2022
January	31.96%	1,538.71	1,166.07	1,420.33
February	21.54%	1,490.41	1,226.30	1,452.63
March	11.06%	1,387.18	1,249.07	1,493.47
April	7.34%	1,382.03	1,287.51	1,507.85
May	5.59%	1,383.03	1,309.87	1,467.43
June	14.03%	1,380.41	1,210.57	1,336.18
July	9.30%	1,418.82	1,298.09	1,367.66
August	13.59%	1,555.50	1,369.38	1,314.44
September	26.54%	1,649.99	1,303.95	1,302.05
October	25.35%	1,741.60	1,389.44	1,331.61
November	15.56%	1,820.87	1,575.72	1,239.66
December			1,485.86	1,157.57
Year Average		1,522.60	1,322.65	1,365.91



Monthly Price Variation

4.55%

NOTE: For prices in USD, please check the excel sent with the presentation

TRANSPORTS

PRICE UPDATE

| Transports

Commodity lookup

COMMODITY	UNIT	NOV-2023 (€)	OCT-2024 (€)	NOV-2024 (€)	MoM GROWTH	YoY GROWTH
Shipping 20 ft - Northern Europe	Unit	998.48	2128.49	2691.99	▶ 26.47%	▶ 169.61%
Shipping 20 ft - USA (West Coast)	Unit	2144.58	4736.84	4114.32	▶ -13.14%	▶ 91.85%
Shipping 40 ft - Northern Europe	Unit	1075.68	3188.04	3808.28	▶ 19.46%	▶ 254.03%
Shipping 40 ft - USA (West Coast)	Unit	2700.21	5517.87	5364.07	▶ -2.79%	▶ 98.65%
Truck Road Freight - France	KM	1.59	1.62	1.62	▶ 0.00%	▶ 1.89%
Truck Road Freight - Germany	KM	1.87	1.98	1.97	▶ -0.51%	▶ 5.35%
Truck Road Freight - USA	KM	1.53	1.54	1.58	▶ 2.60%	▶ 3.27%

| Transports

Commodity lookup

Sea freight situation and outlook for 2025 – December 09th, 2024

With 2024 characterised by elevated freight rates and fluctuating dynamics, the container shipping lines have emerged as the primary financial beneficiaries, leveraging rate increases and stabilisation efforts to maintain profitability. **The outlook for 2025 presents a mixed landscape of opportunities and challenges, driven by shifting demand patterns, increased capacity, and geopolitical uncertainties.** Freight rates remain significantly above pre-crisis levels. Despite a gradual downward trend in global head-haul rates, the market has stabilised, suggesting a potential period of relative equilibrium in the coming quarters. **Recent general rate increases (GRIs) by Asia-Europe carriers have demonstrated success, with rates on key routes from Asia to Europe rising by over 20%.** These elevated rates are expected to persist until the Chinese New Year in late January 2025. However, the seasonal decline in demand and the introduction of new alliance networks in February may present an opportunity for shippers.

Supply chain and capacity dynamics

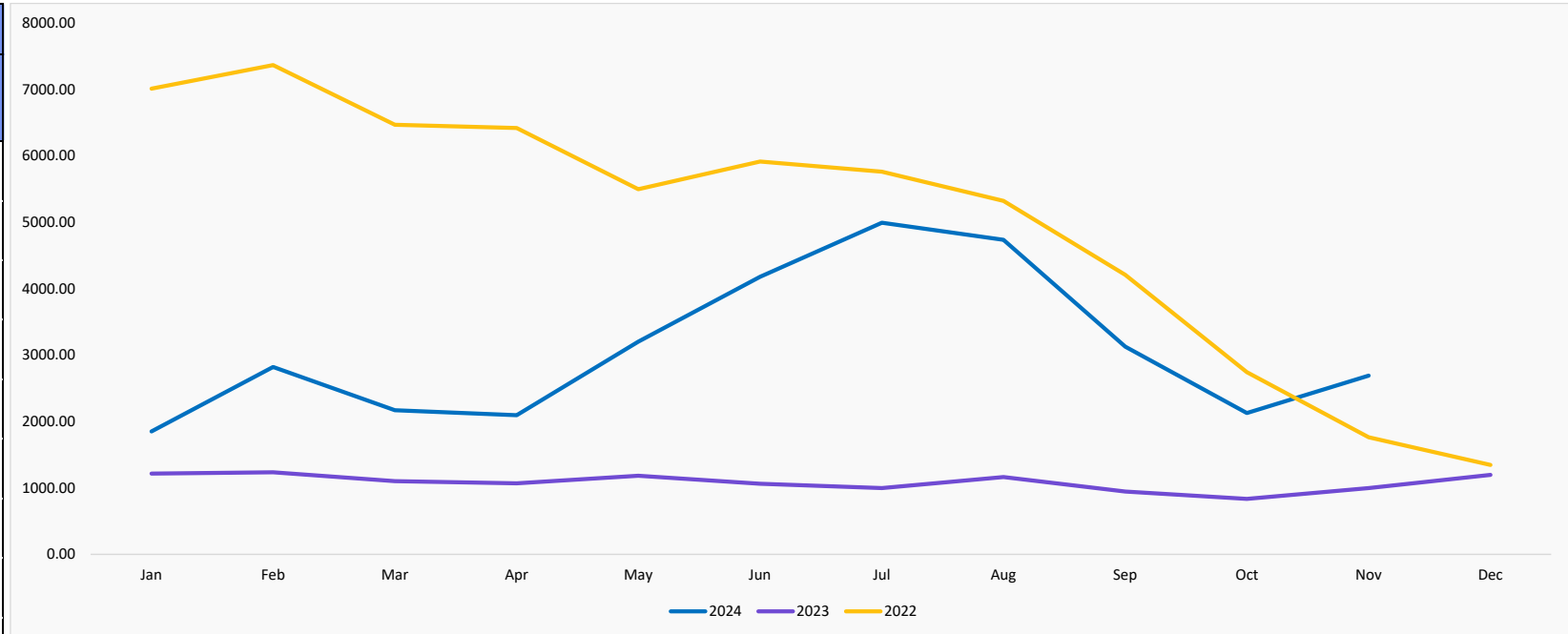
Global shipping capacity grew by nearly 5% in Q3 2024, supported by minimal fleet idling and increased vessel activity. Ships previously affected by Suez Canal disruptions have returned to regular service, further bolstering capacity. Nevertheless, the risk of overcapacity looms large. Continued vessel deliveries, combined with low scrappage rates, may necessitate fleet rationalisation if demand weakens. Carriers remain bullish, adding capacity to secure competitive positioning despite potential imbalances.

The sea freight market in 2025 is expected to face moderate demand growth, projected at around 3-4%, though low consumer confidence and increased import tariffs in key markets, particularly the United States, may temper this growth. Additionally, manufacturing indices in major regions, including China and Europe remain suppressed limiting demand potential. Geopolitical uncertainties will continue to shape the market. Ongoing negotiations in U.S. East and Gulf ports could lead to disruptions if unresolved by the 15th January 2025, while tensions in the Red Sea pose potential risks to key shipping routes. Trade policy remains a critical factor, with proposed tariff increases in the United States potentially reshaping containerised cargo flows, particularly on Asian export routes. Meanwhile, the temporary rerouting of vessels around the Cape of Good Hope has absorbed some capacity, but a return to normal operations through the Suez Canal could intensify supply-demand imbalances. As geopolitical risks and market disruptions continue to loom over the industry, maintaining resilient supply chains and budgeting effectively will be key priorities for shippers navigating the complexities of 2025's sea freight landscape. In a volatile sea freight market, our fixed-rate agreements on popular shipping routes reduce risk and provide essential budgetary certainty.

Source: Metro Global

Shipping 20 ft - Northern Europe

Euro/UNIT*				
MONTH	YoY GROWTH	2024	2023	2022
January	52.19%	1,850.20	1,215.69	7,012.22
February	128.25%	2,820.46	1,235.67	7,368.80
March	96.61%	2,169.99	1,103.72	6,470.80
April	96.17%	2,096.57	1,068.76	6,421.32
May	170.91%	3,204.20	1,182.74	5,497.58
June	293.31%	4,178.92	1,062.49	5,914.54
July	400.15%	4,992.92	998.28	5,764.05
August	307.60%	4,738.39	1,162.52	5,324.41
September	231.12%	3,128.45	944.81	4,209.31
October	154.97%	2,128.49	834.80	2,743.34
November	169.61%	2,691.99	998.48	1,763.52
December			1,196.26	1,346.54
Year Average		3,090.96	1,083.69	4,986.37



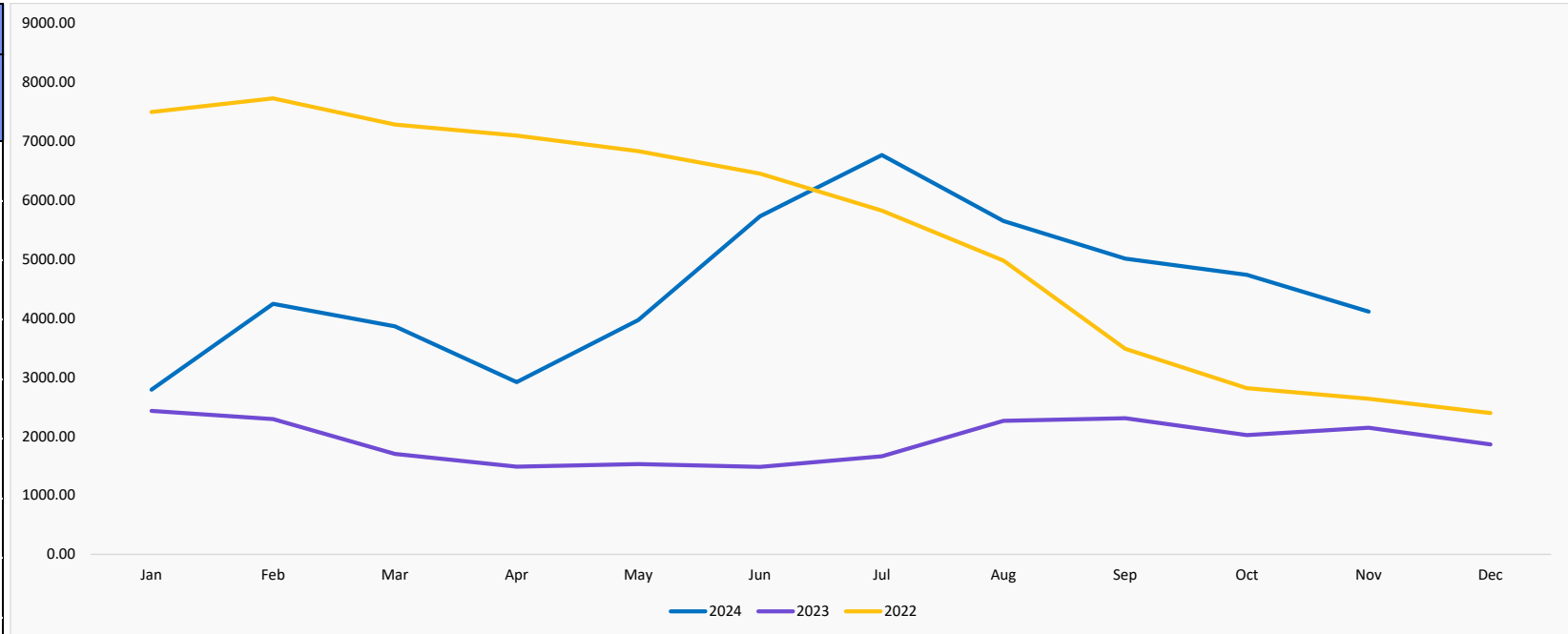
Monthly Price Variation

26.47%

NOTE: For prices in USD, please check the excel sent with the presentation

| Shipping 20 ft - USA (West Coast)

Euro/UNIT*				
MONTH	YoY GROWTH	2024	2023	2022
January	14.76%	2,790.32	2,431.38	7,493.98
February	85.25%	4,244.57	2,291.24	7,725.21
March	127.00%	3,862.61	1,701.57	7,281.90
April	96.34%	2,916.47	1,485.39	7,094.75
May	159.36%	3,968.38	1,530.05	6,830.04
June	286.21%	5,726.87	1,482.83	6,449.62
July	307.34%	6,765.02	1,660.78	5,822.87
August	149.78%	5,646.10	2,260.45	4,976.73
September	117.26%	5,008.57	2,305.34	3,483.92
October	134.30%	4,736.84	2,021.70	2,814.20
November	91.85%	4,114.32	2,144.58	2,635.59
December			1,864.47	2,393.86
Year Average		4,525.46	1,931.65	5,416.89



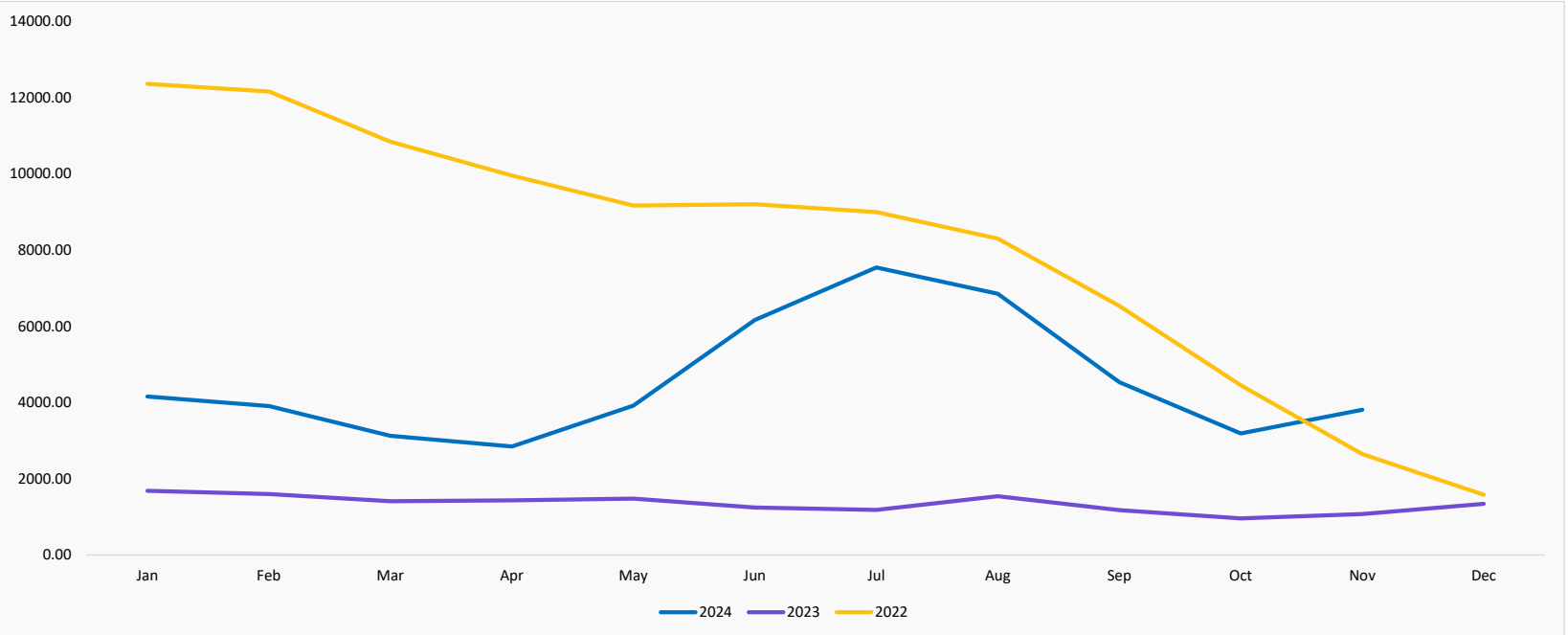
Monthly Price Variation

-13.14%

NOTE: For prices in USD, please check the excel sent with the presentation

Shipping 40 ft - Northern Europe

Euro/UNIT*				
MONTH	YoY GROWTH	2024	2023	2022
January	147.13%	4,159.97	1,683.32	12,361.94
February	144.32%	3,904.73	1,598.23	12,159.85
March	121.38%	3,126.37	1,412.21	10,844.45
April	98.82%	2,848.38	1,432.63	9,955.66
May	165.37%	3,918.23	1,476.54	9,167.68
June	395.54%	6,161.48	1,243.39	9,202.79
July	537.07%	7,545.00	1,184.33	8,996.03
August	344.00%	6,852.62	1,543.38	8,303.49
September	286.09%	4,534.27	1,174.40	6,532.09
October	231.44%	3,188.04	961.87	4,454.13
November	254.03%	3,808.28	1,075.68	2,646.06
December			1,341.84	1,579.07
Year Average		4,549.76	1,343.99	8,016.94



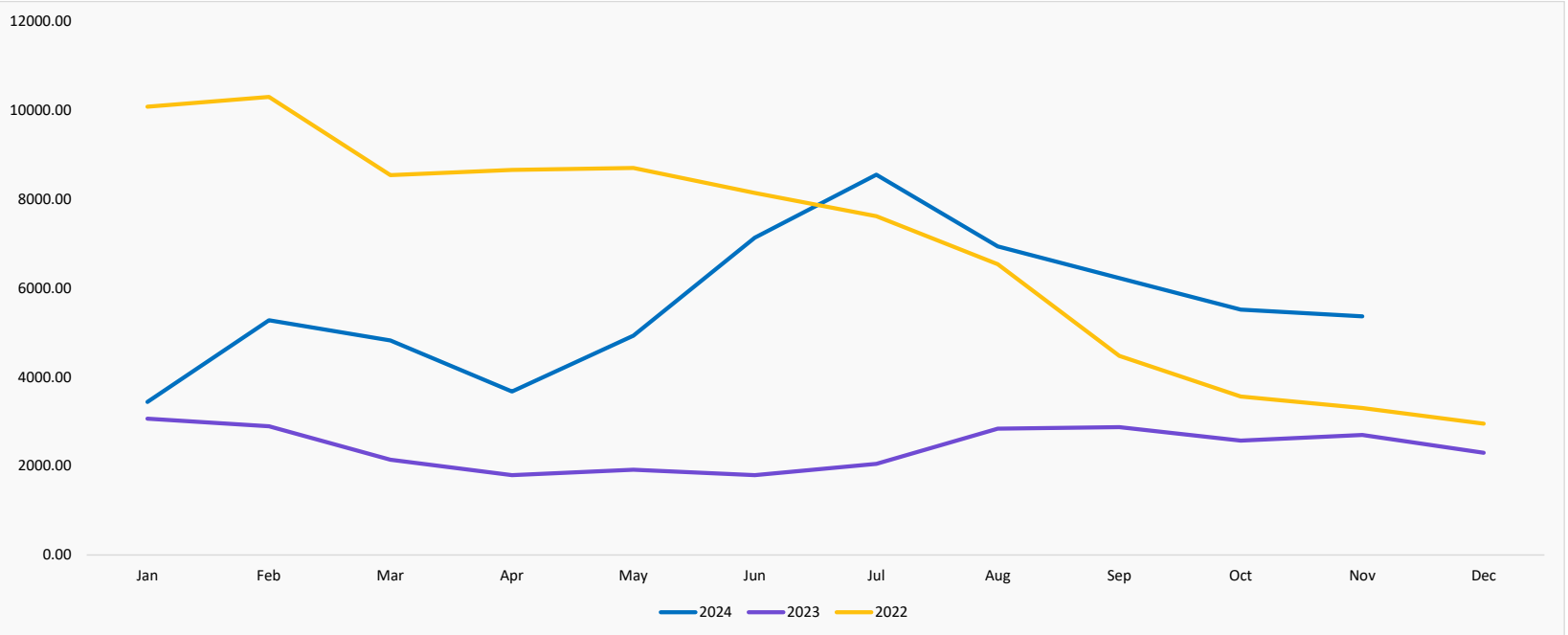
Monthly Price Variation

19.46%

NOTE: For prices in USD, please check the excel sent with the presentation

Shipping 40 ft - USA (West Coast)

Euro/UNIT*				
MONTH	YoY GROWTH	2024	2023	2022
January	12.13%	3,438.85	3,066.86	10,081.18
February	82.28%	5,278.18	2,895.58	10,300.28
March	125.09%	4,823.85	2,143.06	8,543.62
April	104.96%	3,675.54	1,793.34	8,659.77
May	157.49%	4,930.75	1,914.91	8,702.94
June	297.53%	7,136.65	1,795.24	8,140.85
July	317.00%	8,552.82	2,051.02	7,616.78
August	144.15%	6,938.06	2,841.71	6,536.31
September	116.84%	6,228.18	2,872.23	4,474.95
October	114.73%	5,517.87	2,569.72	3,563.31
November	98.65%	5,364.07	2,700.21	3,304.18
December			2,300.29	2,954.92
Year Average		5,625.89	2,412.01	6,906.59



Monthly Price Variation

-2.79%

NOTE: For prices in USD, please check the excel sent with the presentation



EXCHANGE RATES AND MACROECONOMIC INDICATORS

EXCHANGE RATES

EUR vs CNY

12 December 2024

EUR 1 = CNY 7.6272 -0.0046(-0.1%)

Change from 12 December 2023 to 12 December 2024

Min (22 November 2024)	Max (27 August 2024)	Average
7.5458	7.9547	7.7964

Select:

EUR vs. CNY

Period:

12/12/2023

13/12/2024

Zoom:

1m

6m

1y

10y

all



EXCHANGE RATES

EUR vs GBP

12 December 2024

EUR 1 = GBP 0.82428 -0.00030(-0.0%)

Change from 12 December 2023 to 12 December 2024

Min (12 December 2024)	Max (28 December 2023)	Average
0.82428	0.87060	0.84821

Select: EUR vs. GBP

Period: 12/12/2023

13/12/2024

Zoom:

1m

6m

1y

10y

all



EXCHANGE RATES

EUR vs INR

12 December 2024
EUR 1 = INR 89.044 -0.1055(-0.1%)

Change from 12 December 2023 to 12 December 2024

Min (22 November 2024)	Max (30 September 2024)	Average
87.9290	93.8130	90.6582

Select: EUR vs. INR

Period: 12/12/2023 | 13/12/2024

Zoom: 1m | 6m | 1y | 10y | all



EXCHANGE RATES

EUR vs USD

12 December 2024

EUR 1 = USD 1.0491 -0.0016(-0.2%)

Change from 12 December 2023 to 12 December 2024

Min (22 November 2024)

1.0412

Max (30 September 2024)

1.1196

Average

1.0847

Select: EUR vs. USD

Period: 12/12/2023



13/12/2024



Zoom:

1m

6m

1y

10y

all



EXCHANGE RATES

EUR vs PHP

12 December 2024

EUR 1 = PHP 61.185 -0.081(-0.1%)

Change from 12 December 2023 to 12 December 2024

Min (15 February 2024)	Max (5 June 2024)	Average
60.096	63.938	61.998

Select: EUR vs. PHP

Period: 12/12/2023

13/12/2024

Zoom:

1m

6m

1y

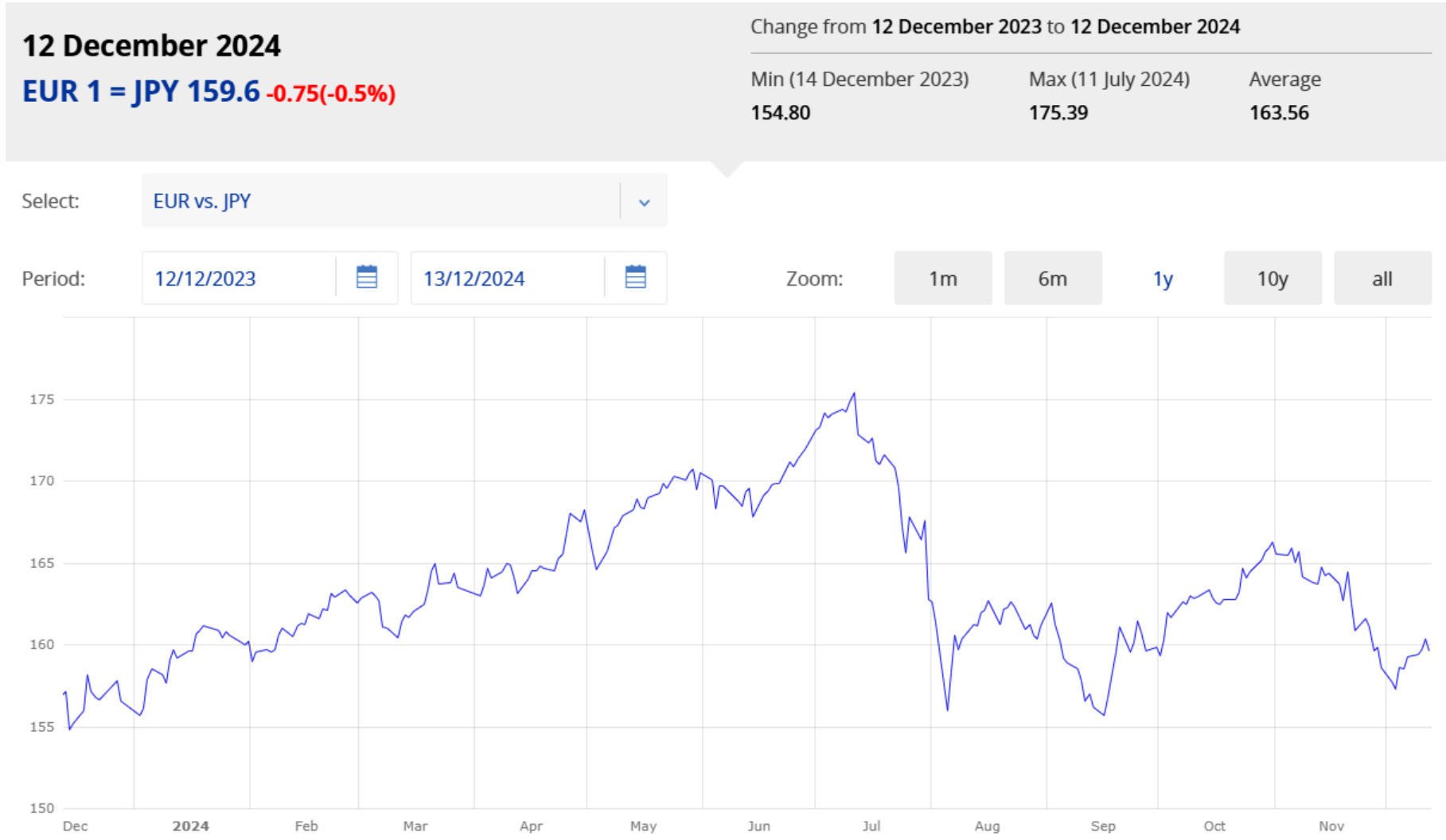
10y

all



EXCHANGE RATES

EUR vs YEN



EXCHANGE RATES

EUR vs ZAR

12 December 2024

EUR 1 = ZAR 18.5627 -0.1167(-0.6%)

Change from 12 December 2023 to 12 December 2024

Min (12 December 2024)	Max (26 February 2024)	Average
18.5627	20.9499	19.8799

Select:

EUR vs. ZAR

Period:

12/12/2023

13/12/2024

Zoom:

1m

6m

1y

10y

all



EXCHANGE RATES

EUR vs CLP

From To

We use midmarket rates ⓘ

[Track currency](#) [View transfer quote](#)

EUR to CLP Chart +8.04% (1Y)

1 EUR = 1,023.67 CLP Dec 13, 2024, 09:34 UTC

Euro to Chilean Peso



EXCHANGE RATES

USD vs CLP

From USD – US Dollar To CLP – Chilean Peso

We use midmarket rates ⓘ

[Track currency](#) [View transfer quote](#)

USD to CLP Chart +11.43% (1Y) ● 1 USD = 977.676 CLP Dec 13, 2024, 09:36 UTC

US Dollar to Chilean Peso



EXCHANGE RATES

USD vs PHP

From USD - US Dollar To PHP - Philippine Peso

We use midmarket rates ⓘ [Track currency](#) [View transfer quote](#)

USD to PHP Chart +5.49% (1Y) ● 1 USD = 58.5916 PHP Dec 13, 2024, 09:36 UTC

US Dollar to Philippine Peso



EXCHANGE RATES

USD vs ZAR

From To

We use midmarket rates ⓘ

[Track currency](#) [View transfer quote](#)

USD to ZAR Chart -5.57% (1Y)

1 USD = 17.8952 ZAR Dec 13, 2024, 09:38 UTC

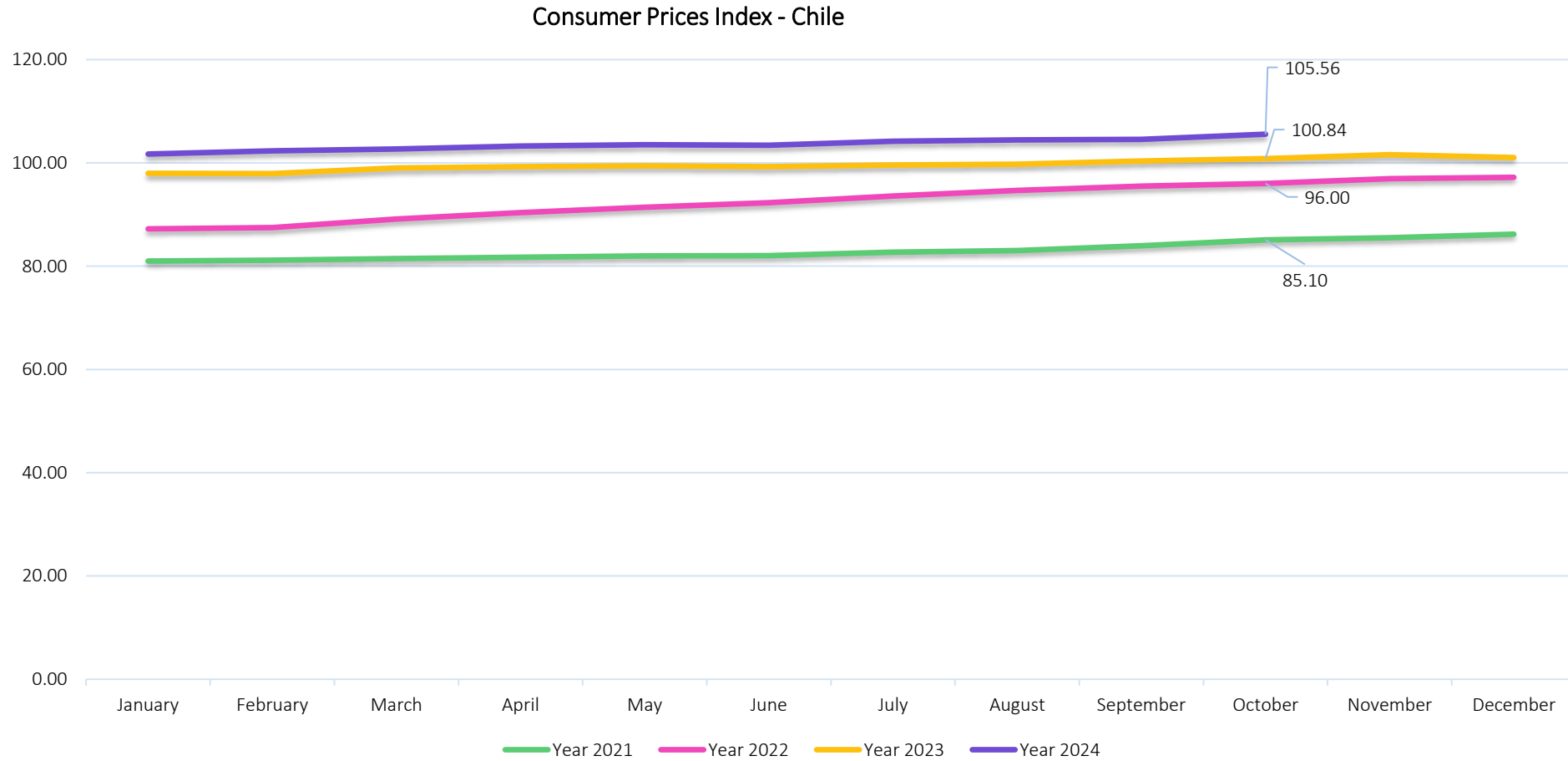
US Dollar to South African Rand





Macroeconomic Indicators

CONSUMER PRICE INDEX – CHILE



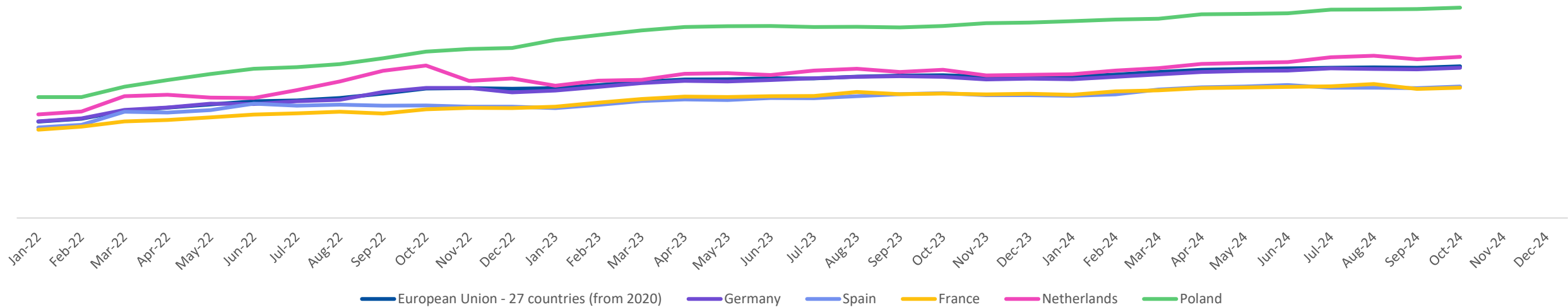
Consumer price Index – base year 2023=100, not seasonally adjusted



Macroeconomic Indicators

CONSUMER PRICE INDEX – EU AND KEY ECONOMIES

Geography	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Europe (27)	112.20	113.18	115.87	116.83	117.95	119.03	119.31	120.10	121.56	123.26	123.40	123.18	123.39	124.43	125.52	126.30	126.35	126.69	126.64	127.24	127.57	127.73	127.23	127.42	127.21	127.95	128.79	129.55	129.79	130.02	130.19	130.33	130.23	130.70		
Germany	112.30	113.30	116.10	116.90	118.20	118.10	119.00	119.50	122.10	123.50	123.50	122.00	122.60	123.80	125.10	125.80	125.60	126.10	126.70	127.20	127.40	127.20	126.30	126.60	126.40	127.20	128.00	128.80	129.10	129.30	130.00	129.80	129.70	130.20		
Spain	110.26	111.15	115.51	115.21	116.03	118.22	117.54	117.84	117.55	117.61	117.22	117.22	116.72	117.82	119.06	119.61	119.44	120.13	120.03	120.68	121.38	121.69	121.05	121.06	120.82	121.29	122.93	123.67	123.95	124.44	123.51	123.54	123.42	123.91		
France	109.51	110.49	112.26	112.78	113.63	114.60	114.94	115.49	114.90	116.32	116.81	116.70	117.22	118.55	119.76	120.55	120.46	120.71	120.77	122.10	121.40	121.61	121.32	121.49	121.20	122.35	122.65	123.41	123.59	123.78	124.03	124.77	123.15	123.54		
Netherlands	114.61	115.58	120.70	121.16	120.21	120.13	122.74	125.63	129.20	130.92	125.81	126.64	124.23	125.90	126.16	128.17	128.41	127.78	129.25	129.90	128.81	129.56	127.63	127.88	128.08	129.29	130.09	131.47	131.85	132.07	133.73	134.22	133.01	133.85		
Poland	120.40	120.40	123.90	126.10	128.10	129.90	130.40	131.40	133.40	135.60	136.50	136.80	139.50	141.10	142.70	143.80	144.10	144.20	143.80	143.90	143.70	144.20	145.10	145.30	145.80	146.30	146.60	148.10	148.20	148.40	149.60	149.70	149.80	150.30		

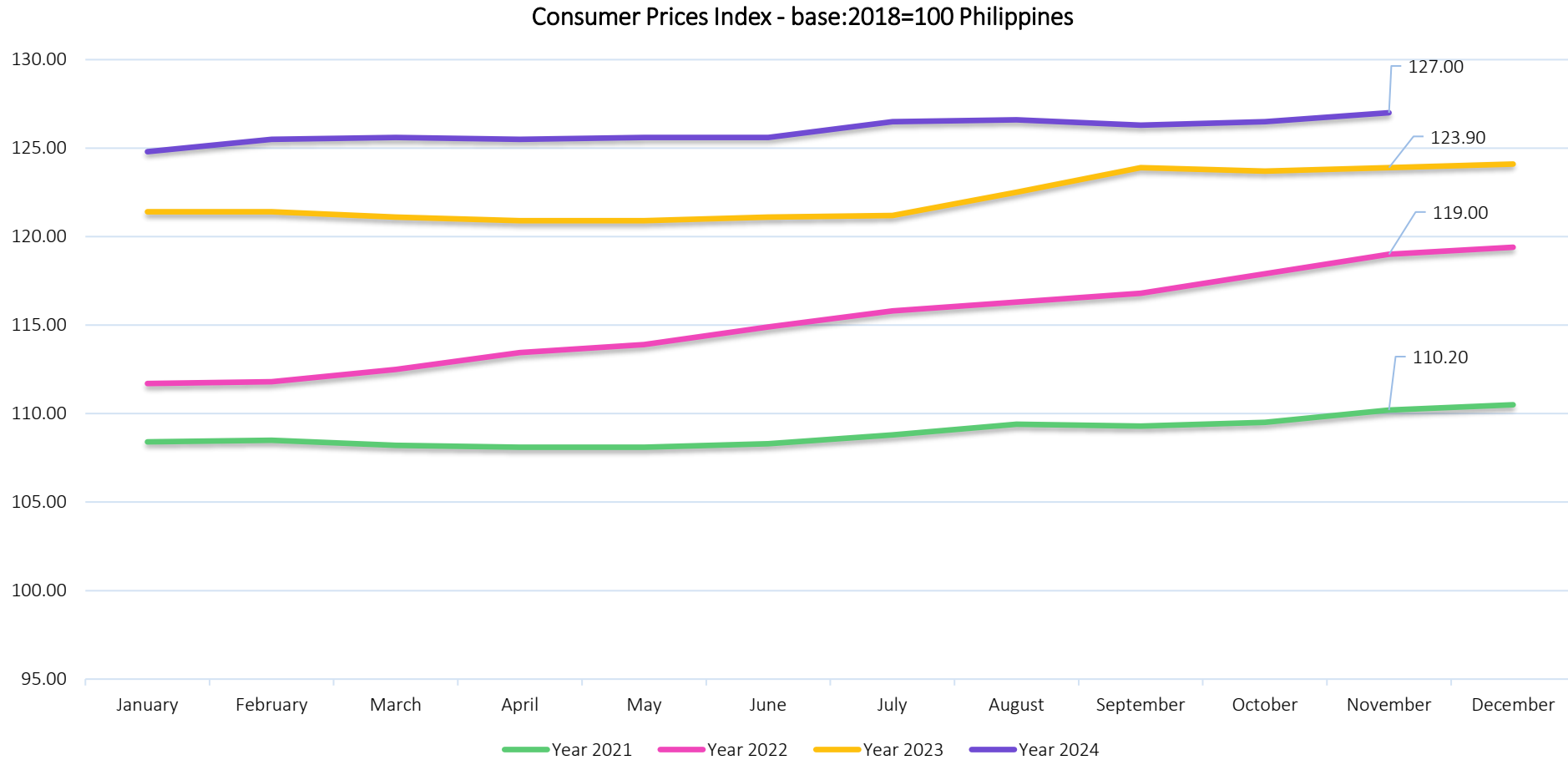


Consumer price inflation in the euro area is measured by the Harmonized Index of Consumer Prices (HICP). The HICP is compiled by Eurostat and the national statistical institutes in accordance with harmonized statistical methods.



Macroeconomic Indicators

CONSUMER PRICE INDEX – PHILIPPINES

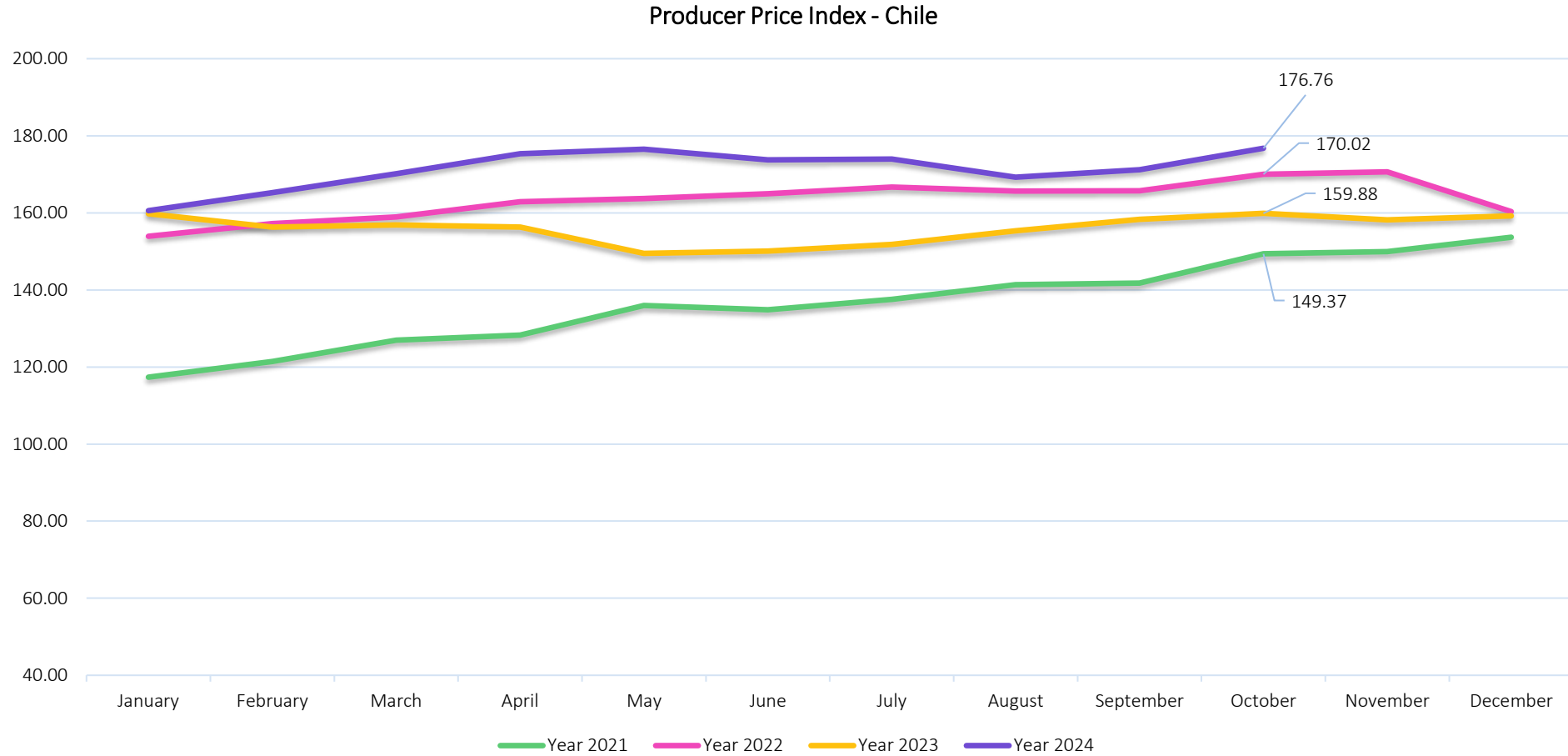


Monthly Consumer Price Index for All Income Households in the Philippines by Commodity Group - Index base:2018=100



Macroeconomic Indicators

PRODUCER PRICE INDEX – CHILE



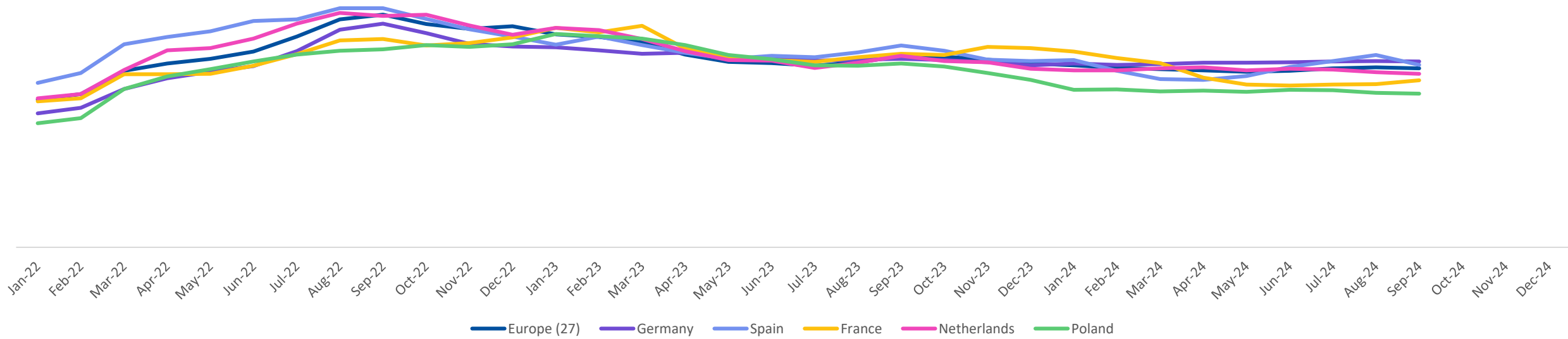
PPI general and category (average 2019=100) – all industries



Macroeconomic Indicators

PRODUCER PRICE INDEX – EU AND KEY ECONOMIES

Geography	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Europe (27)	114.40	115.70	121.10	122.80	123.90	125.60	129.10	133.10	134.20	132.00	130.90	131.50	129.60	129.00	127.70	124.90	123.20	122.90	122.30	123.10	124.50	124.40	123.70	122.80	122.40	121.80	121.50	120.90	120.60	121.10	121.70	121.90	121.40	121.70		
Germany	111.20	112.50	116.90	119.40	120.90	122.20	125.70	130.70	132.10	129.90	127.40	126.80	126.60	125.90	125.10	125.30	124.30	124.10	123.50	123.70	123.90	123.60	123.10	122.40	122.80	122.50	122.70	123.00	123.00	123.10	123.30	123.40	123.10	123.30		
Spain	118.30	120.60	127.30	129.00	130.30	132.70	133.10	135.70	135.70	133.20	130.80	129.10	127.20	129.10	127.10	125.30	123.90	124.60	124.30	125.40	127.00	125.80	123.70	123.40	123.60	121.10	119.20	119.00	119.90	122.00	123.40	124.70	122.50	122.50		
France	114.00	114.70	120.30	120.30	120.40	122.30	125.00	128.20	128.50	127.00	127.60	128.90	131.10	130.10	131.60	126.30	124.50	123.60	123.20	124.30	125.10	124.80	126.70	126.40	125.60	124.10	122.90	119.50	117.90	117.70	117.90	118.00	117.80	118.90		
Netherlands	114.70	115.70	121.30	125.90	126.40	128.60	132.10	134.60	133.90	134.20	131.70	129.50	131.10	130.60	128.50	125.70	123.60	123.50	121.80	123.00	124.60	123.40	123.10	121.60	121.20	121.20	121.70	121.90	121.10	121.50	121.30	120.90	120.70	120.40		
Poland	108.90	110.10	116.90	119.80	121.50	123.30	124.90	125.80	126.10	127.10	126.70	127.30	129.70	129.20	128.60	127.10	124.80	123.80	122.40	122.30	122.80	122.10	120.60	119.00	116.70	116.80	116.30	116.50	116.20	116.70	116.60	116.00	115.50	115.80		

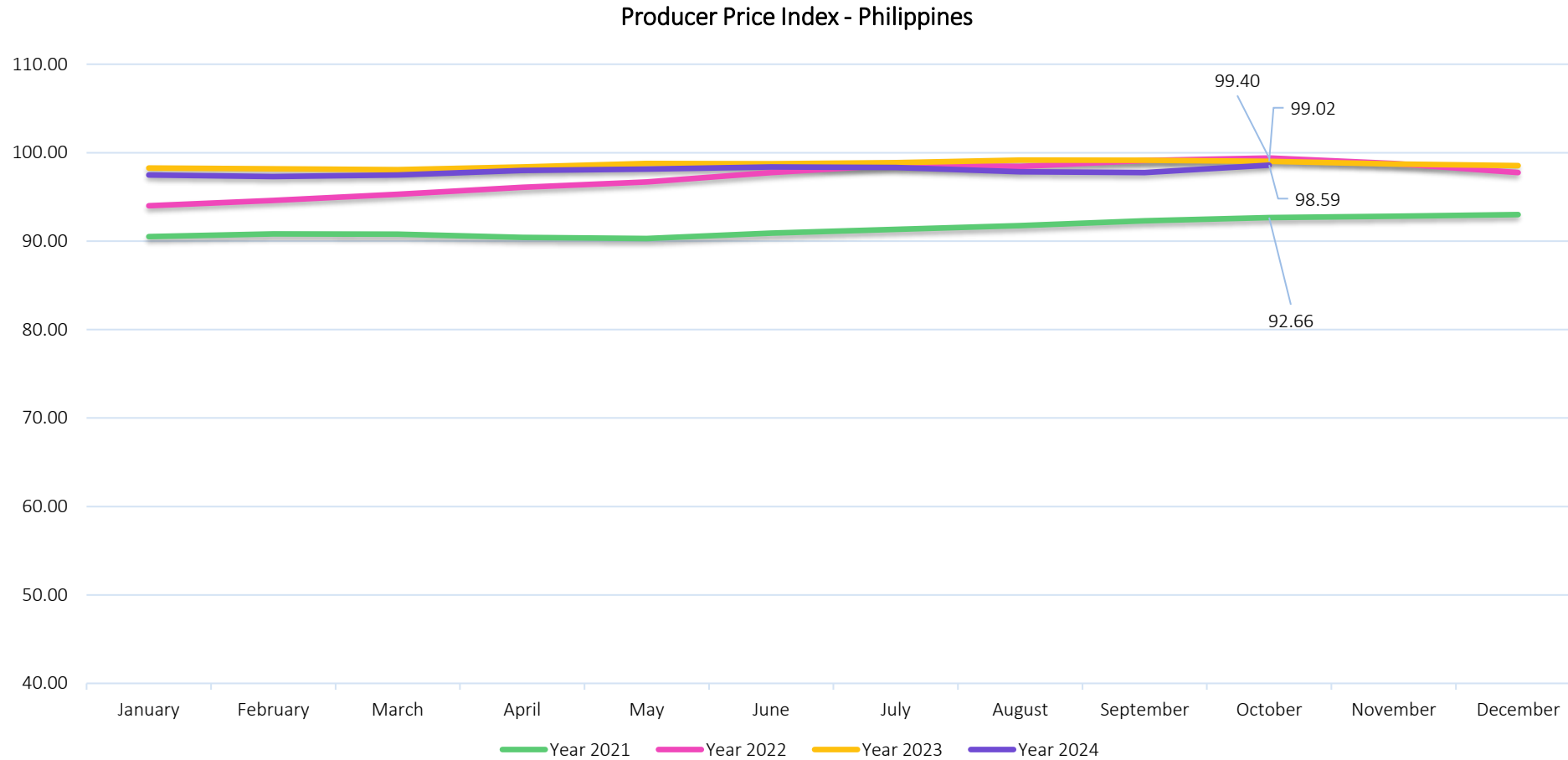


The Producer Price Index (PPI) is a weighted index of prices measured at the wholesale, or producer level. A monthly release from the Bureau of Labor Statistics (BLS), the PPI shows trends within the wholesale markets (the PPI was once called the Wholesale Price Index), manufacturing industries and commodities markets. 2021=100



Macroeconomic Indicators

PRODUCER PRICE INDEX - PHILIPPINES



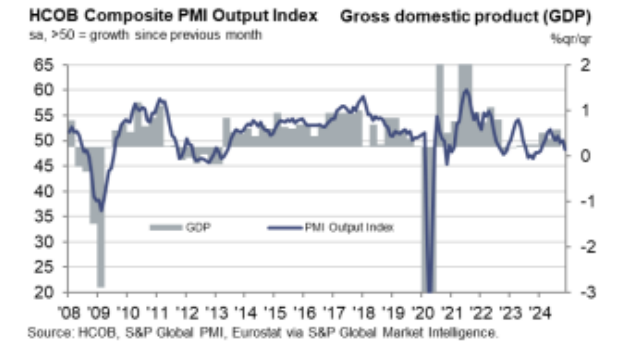
Producer Price Index (2018=100) Manufacturing Sector



Macroeconomic Indicators

PURCHASING MANAGERS INDEX - EUROZONE

The euro area economy fell back into contraction during the penultimate month of 2024. After stabilising in October, business activity levels decreased at the fastest pace since January amid a renewed decline in services output. Weak demand conditions remained apparent across the eurozone, with new private sector orders shrinking for the 6th month in a row and at the sharpest pace in the year-to-date. **There was a particularly notable reduction in sales to non-domestic clients.** Employment also fell further, while business confidence dropped to a 12-month low. Meanwhile, input cost and output price inflation rates ticked up to 3-month highs.



Central to November’s drop in activity levels was the service sector, which posted its first decline in output since the beginning of the year. Factory production volumes fell for a twentieth successive month, the longest sequence of contraction in the survey history. The eurozone’s big three economies, Germany, France, and Italy, all registered contractions in business activity midway through the final quarter of 2024. The other euro area nations that have Composite PMI available – Ireland and Spain – posted expansions, with the former registering the strongest growth in output for two and a half years. The latest data showed a **sustained reduction in demand for goods and services, which stifled economic activity levels.** For a sixth month running, intakes of new work shrank across the eurozone in November. Additionally, the pace of decline was the steepest in the year-to-date. Both manufacturers and service providers reported lower volumes of new business, although factory sales fell by a considerably stronger margin. Export* performance was a heavy drag on the euro area economy, with new orders from non-domestic customers falling faster than total sales. With demand trending lower, the onus on backlogs as a means to sustain activity levels increased. Subsequently, outstanding order volumes decreased in November. This marked the twentieth month in succession that work-in-hand has fallen. The rate of backlog depletion was broadly level with those seen in both October and September and, therefore, among the fastest in 2024 so far.



COMMODITY PRICE SEASONALITY

| Commodity Price Seasonality

Dairy

- ✓ [Milk - EU](#)
- ✓ [Butter - EU](#)
- ✓ [Eggs - EU](#)

Grain/Cereal

- ✓ [Wheat - EU](#)
- ✓ [Corn \(Maize\) - EU](#)
- ✓ [Rice - USA](#)
- ✓ [Oats - USA](#)

Oil

- ✓ [Olive Oil - Italy](#)
- ✓ [Palm Oil](#)
- ✓ [Soyabean Oil US](#)
- ✓ [Rapeseed Oil - EU](#)
- ✓ [Sunflower Oil](#)

Softs

- ✓ [Coffee Arabica](#)
- ✓ [Cocoa](#)
- ✓ [Sugar](#)

Nuts

- ✓ [Hazelnuts](#)
- ✓ [Peanuts](#)

Meat

- ✓ [Beef EU](#)
- ✓ [Pork EU](#)

Seafood

- ✓ [Salmon - Norway](#)
- ✓ [Tuna Skipjack - Spain](#)

Fruits/Vegetables

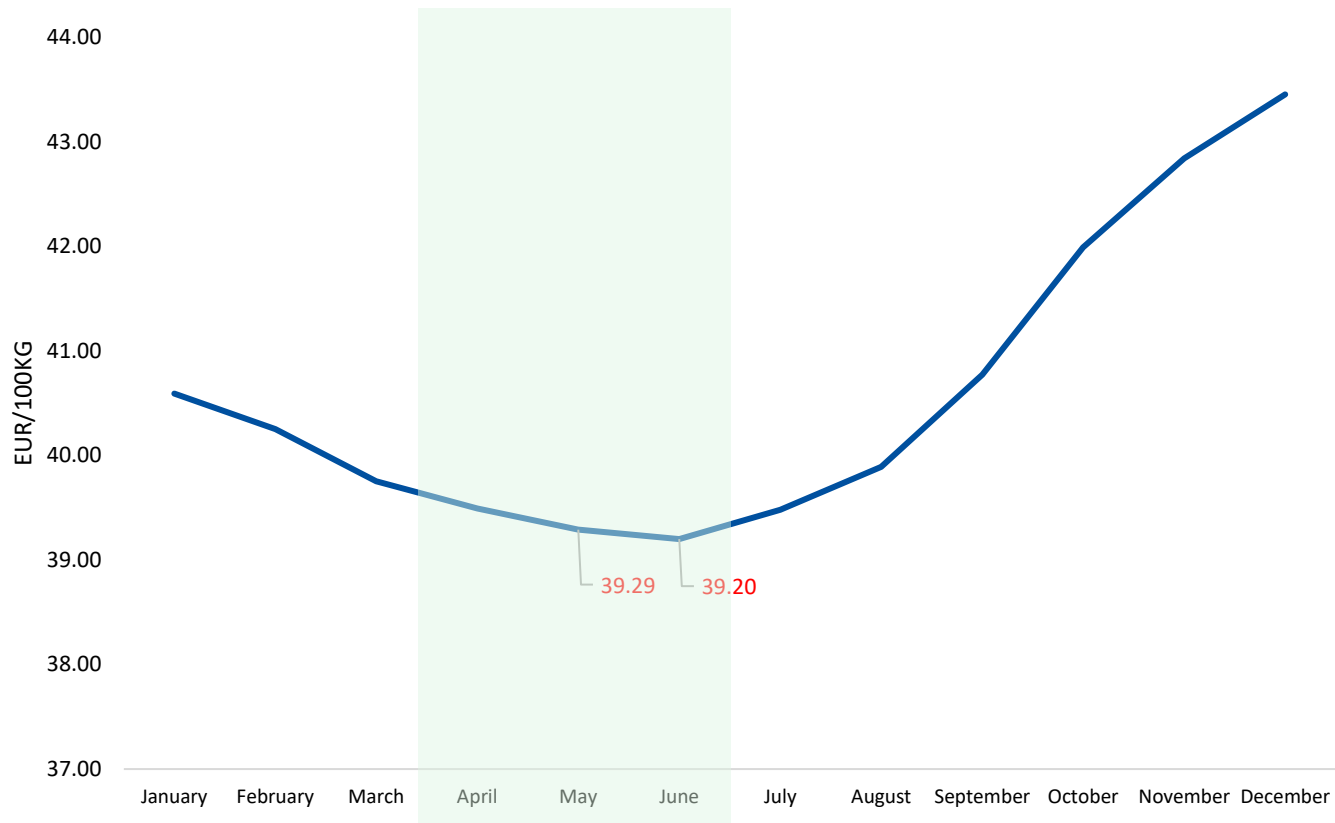
- ✓ [Apples - Poland](#)
- ✓ [Pears - Spain](#)

DAIRY

SEASONALITY

| Milk - EU

Commodity Price Seasonality - Monthly Average 2019-2023



Source: European Commission
HISTORICAL EU PRICE SERIE of COW's RAW MILK in EURO/100 kg

Daymon Buying Recommendation

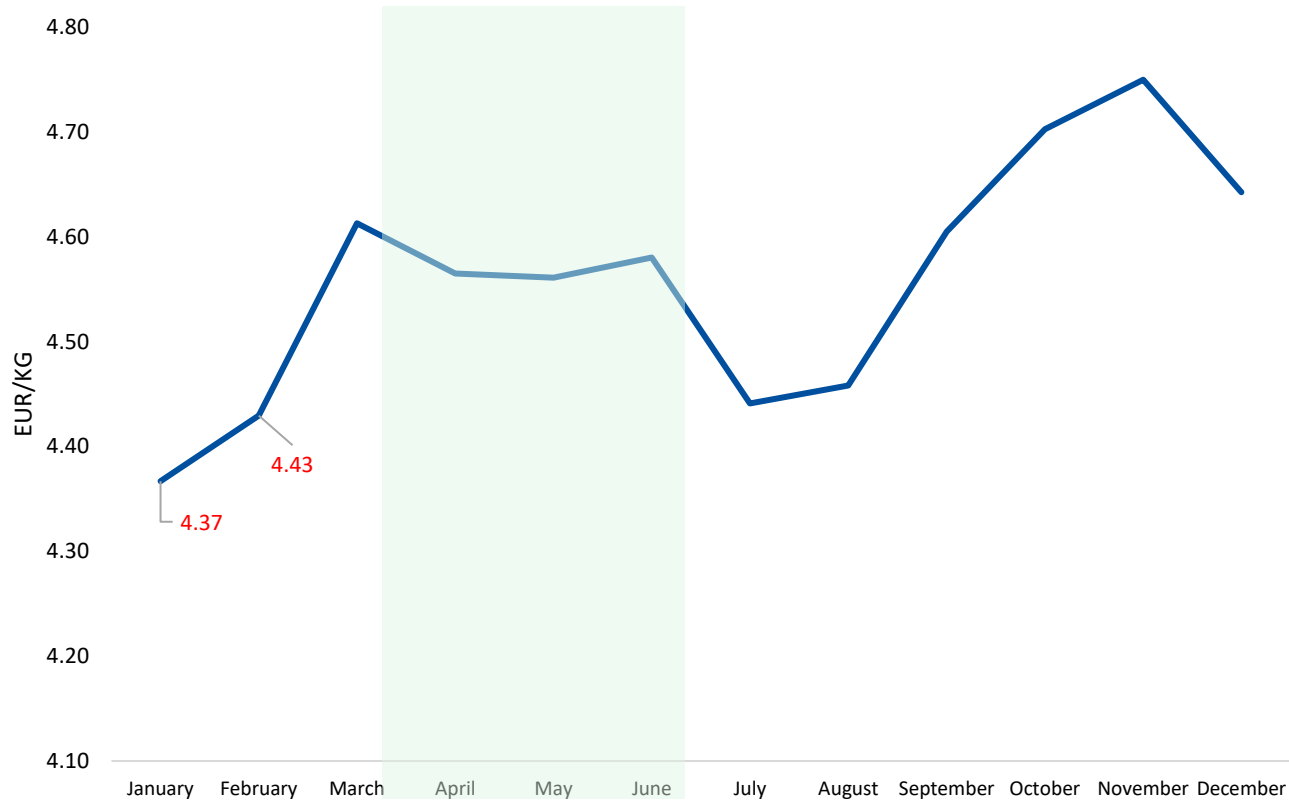
Milk tends to follow a seasonal price pattern. Prices are usually lower in late spring and early summer, after the peak in supply has been reached, and tend to recover again in late Autumn and Winter when the milk supply is less plentiful.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 times to buy **Milk in the Northern Hemisphere** were **May** and **June**, during to the Northern Hemisphere peak supply


Milk Peak Supply – Northern Hemisphere

| Butter - EU

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
Butter, internal market price - European Union

 Milk Peak Supply – Northern Hemisphere

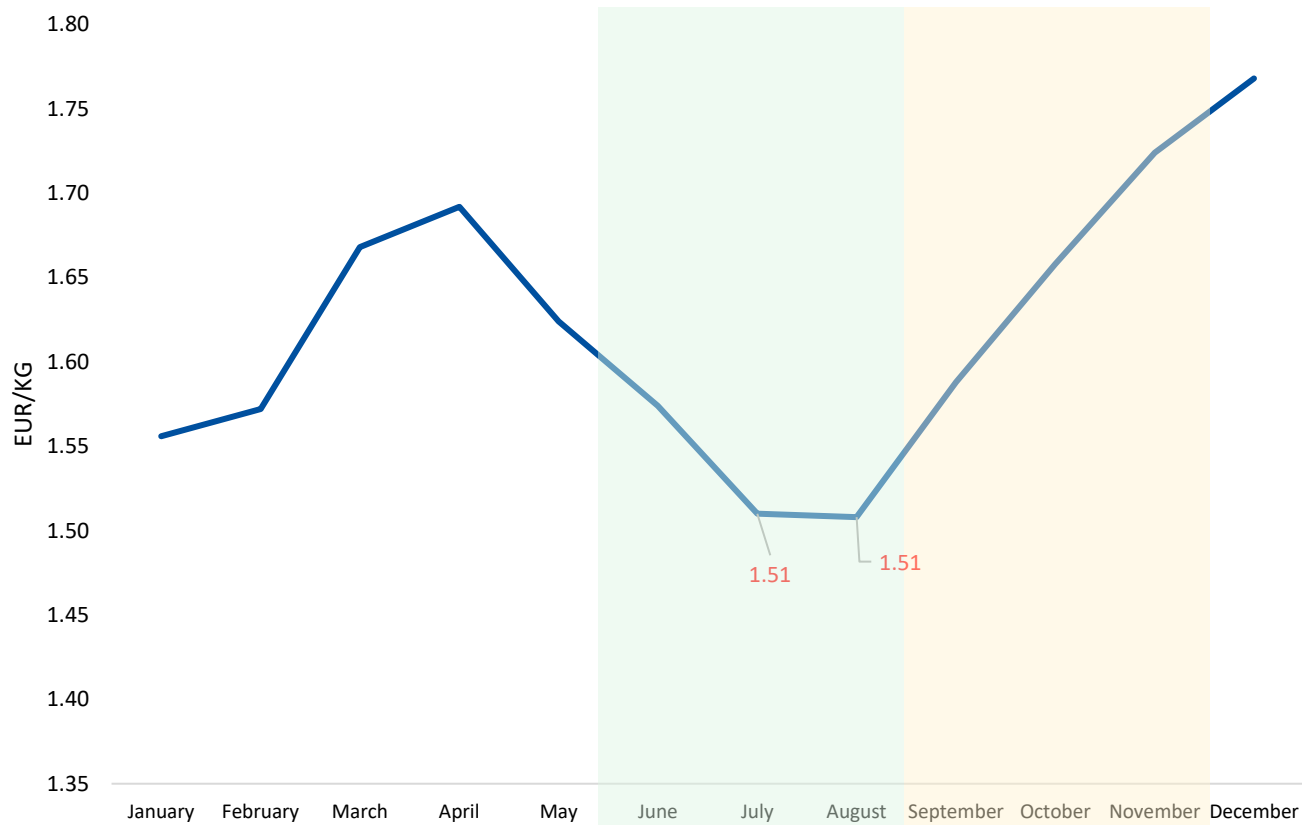
Daymon Buying Recommendation

Butter is a dairy product. As well as being used as a spread, **butter is a key ingredient** in many sauces, soups, pastries and bakery products. It is also commonly used to season potatoes and vegetables.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 times to buy **Butter in the Northern Hemisphere** were **January** and **February**, prior to the Northern Hemisphere peak supply season kick-off.

| Eggs - EU

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
Eggs for consumption, class A; enriched caged/medium and large size - wholesale EU

 Wheat Harvest – Northern Hemisphere

 Maize Harvest – Northern Hemisphere

Daymon Buying Recommendation

Feed can constitute as much as 75% of the cost of egg production. At least 50% of the feed blend tends to be wheat, which is required as an energy source for hens

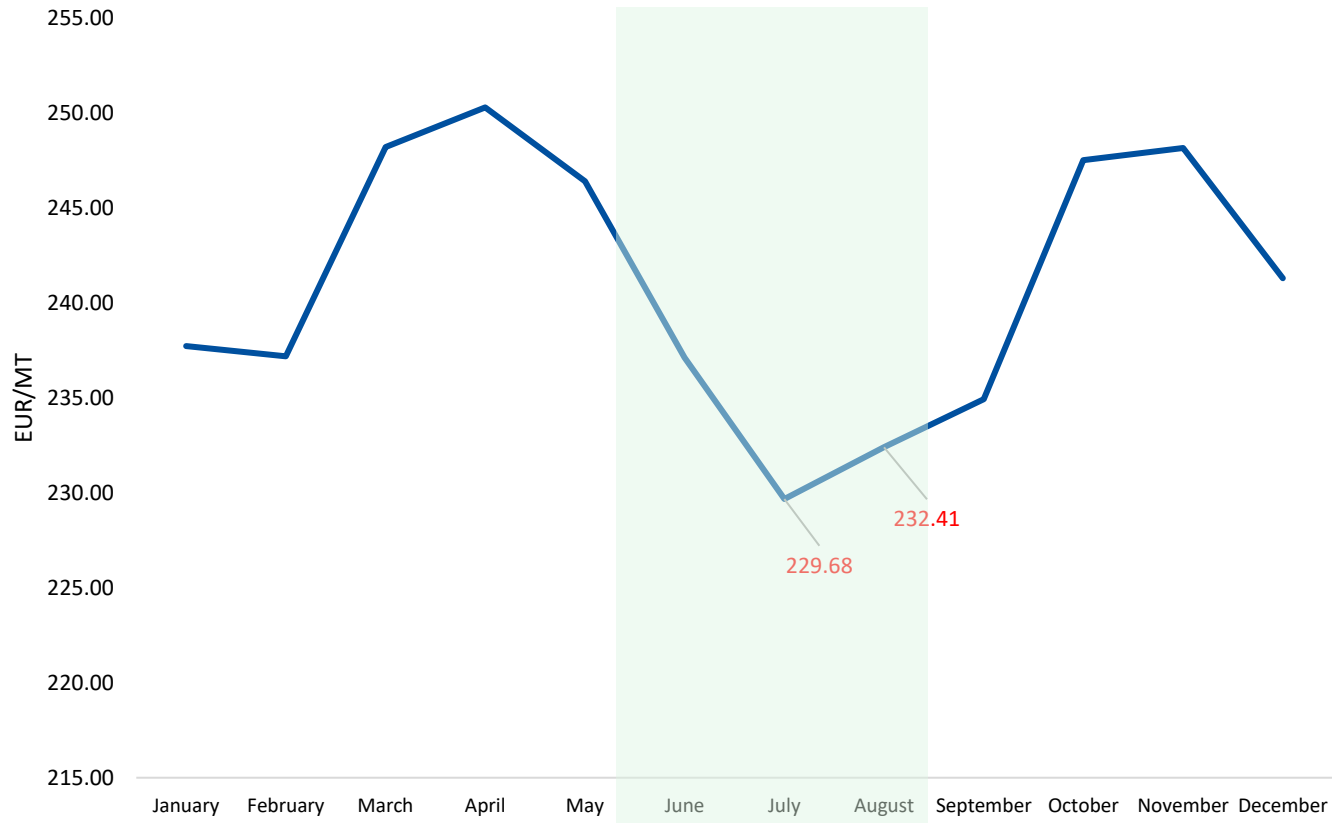
Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Eggs in Europe** were **July** and **August**, during the wheat harvest season in the Northern Hemisphere.

GRAINS & CEREALS

SEASONALITY

| Wheat - EU

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
MILLING WHEAT - ORIGIN: ANY OF SOUND FAIR AND MERCHANTABLE QUALITY EURONEXT LIFFE; PARIS FRANCE

Daymon Buying Recommendation

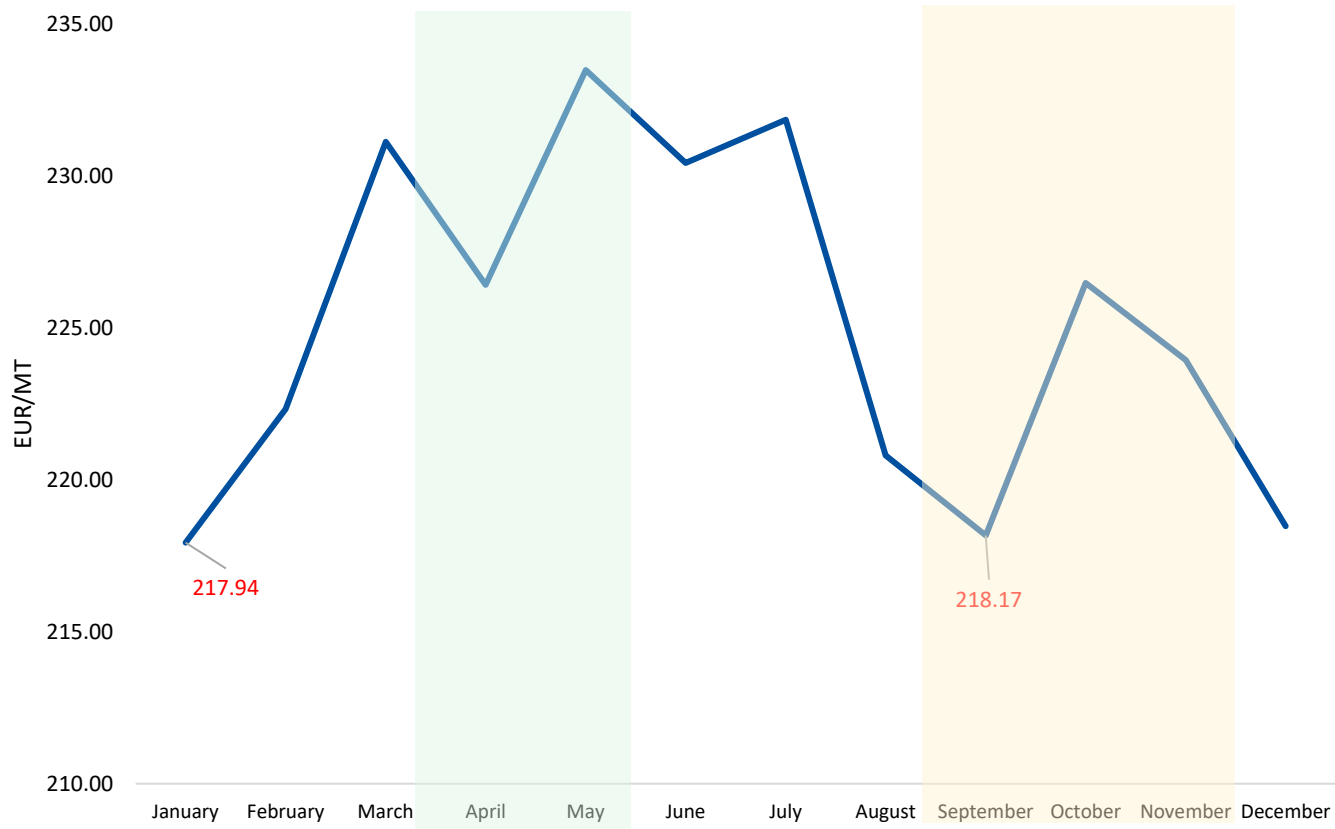
In the NH, most grains are planted between September and December. Harvest usually occurs in the summer months, between May and August. The crop can be sensitive to a water deficit from February to April during the flowering period.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 times to buy **Wheat in Europe** were **July** and **August**, during the harvest season in the Northern Hemisphere kick-off.

Wheat Harvest – Northern Hemisphere

Corn (Maize) - EU

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
MAIZE - FRENCH YELLOW RED CORN OF SOUND FAIR AND MERCHANTABLE QUALITY - EURONEXT; PARIS FRANCE

Daymon Buying Recommendation

It is one of the world's most consumed grains, serving as both a staple crop for humans and an ingredient for livestock feed, and is widely cultivated throughout the globe.

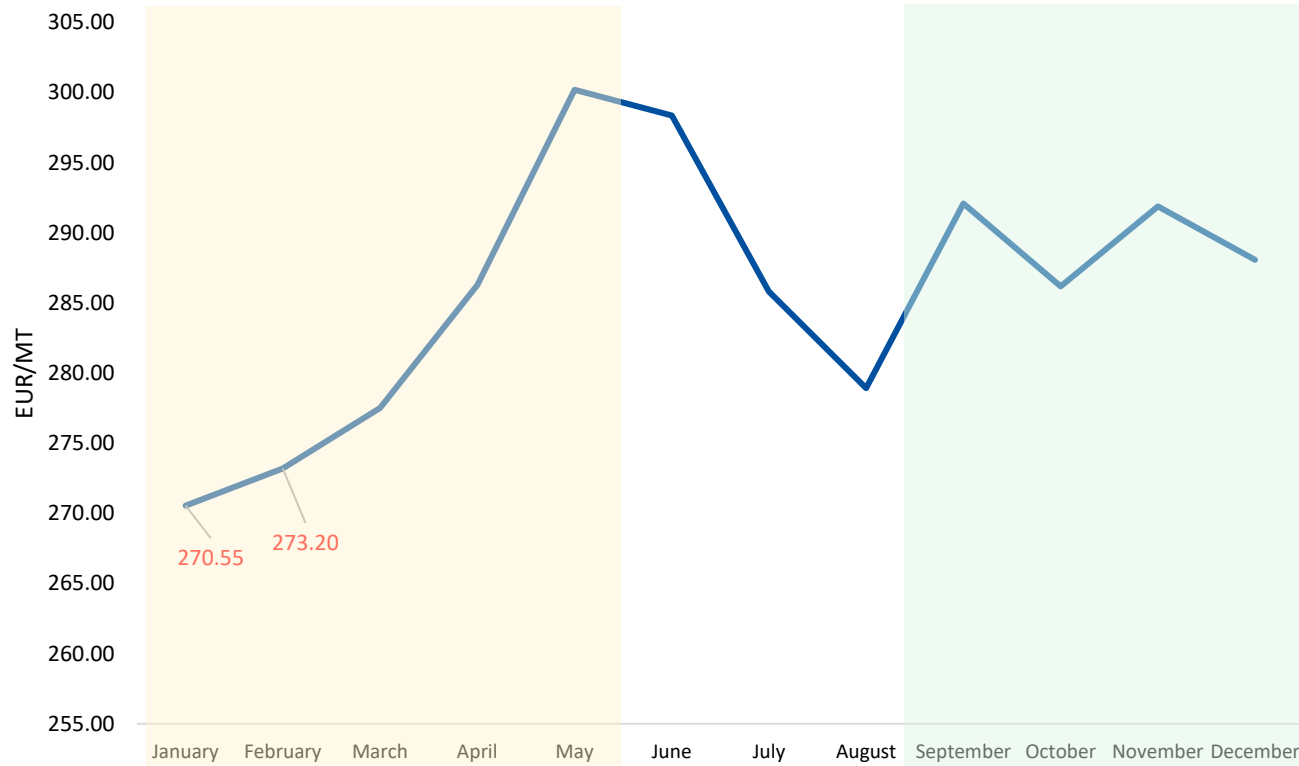
Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Maize (Corn) in Europe** were **January** and **September**, before the harvest season in the Southern Hemisphere, and during the Northern Hemisphere season.

Maize/Corn Harvest South Hemisphere

Maize/Corn Harvest North Hemisphere

Rice - USA

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
PADDY RICE US NO 2 OR BETTER LONG GRAIN ROUGH RICE TOTAL MILLING YIELD OF NOT LESS THAN 65%
EXCHANGE-APPROVED GRADES AND STANDARDS CHICAGO BOARD OF TRADE (CBOT); CHICAGO USA

Daymon Buying Recommendation

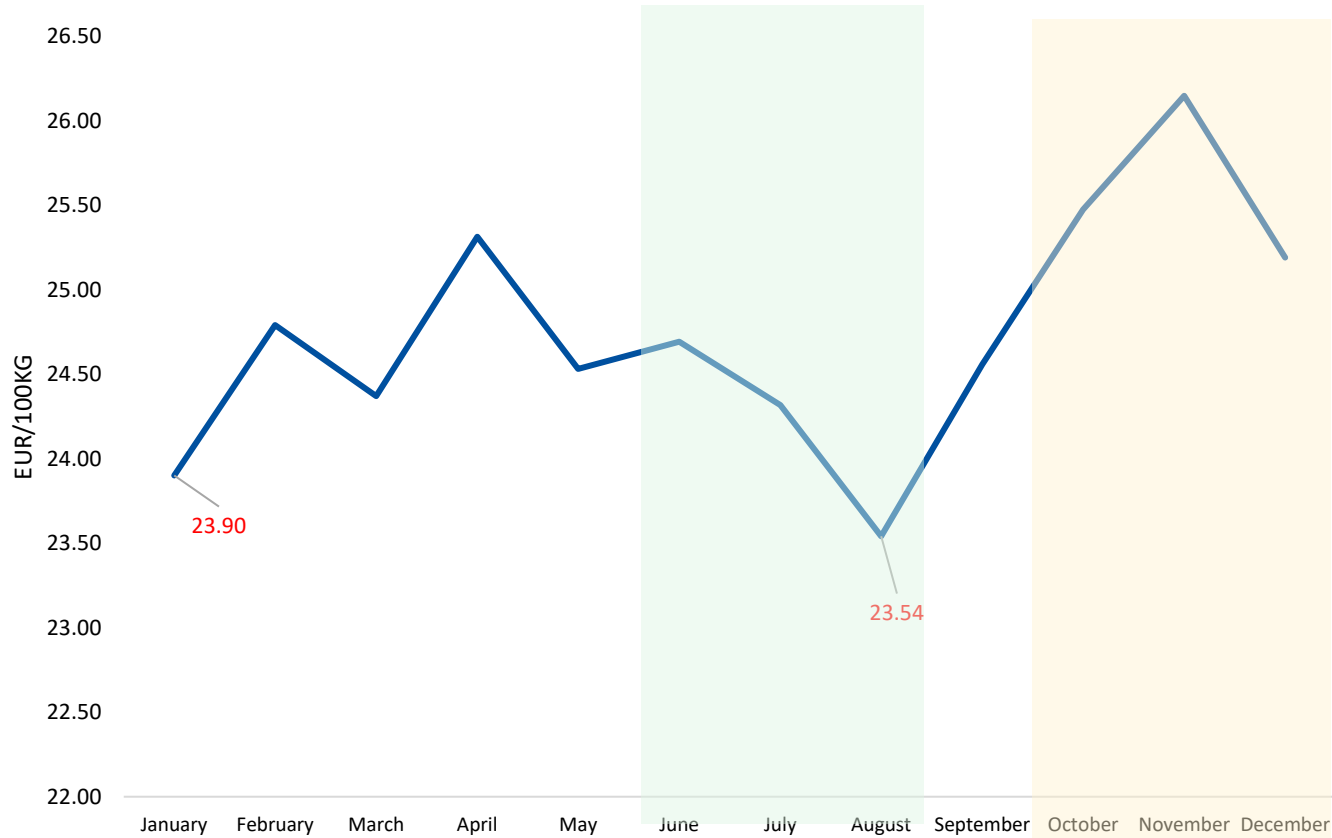
Rice is one of the most important of the world's cereals. Over half of the world's population subsists in large part on rice, the majority of which is simply boiled then consumed.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Rice in Northern Hemisphere** were **January** and **February**, as the harvest season in the Northern Hemisphere starts, while the harvest season in the Southern Hemisphere ends.

 Rice Harvest North Hemisphere  Rice Harvest South Hemisphere

| Oats - USA

Commodity Price Seasonality - Monthly Average 2019-2023



Daymon Buying Recommendation

Oats are a cereal grains grown for human and animal consumption. Production of oats is considerably less than other grains.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 times to buy Oats in the **Northern Hemisphere** were **January** and **August**, as Spring Oats are harvested in the Northern Hemisphere and as the crop ends in the Southern Hemisphere.

Source: Mintec
OATS NO 2 AND NO 1 EXCHANGE-APPROVED GRADES AND STANDARDS CHICAGO BOARD OF TRADE (CBOT);
CHICAGO US



Oats Harvest North Hemisphere



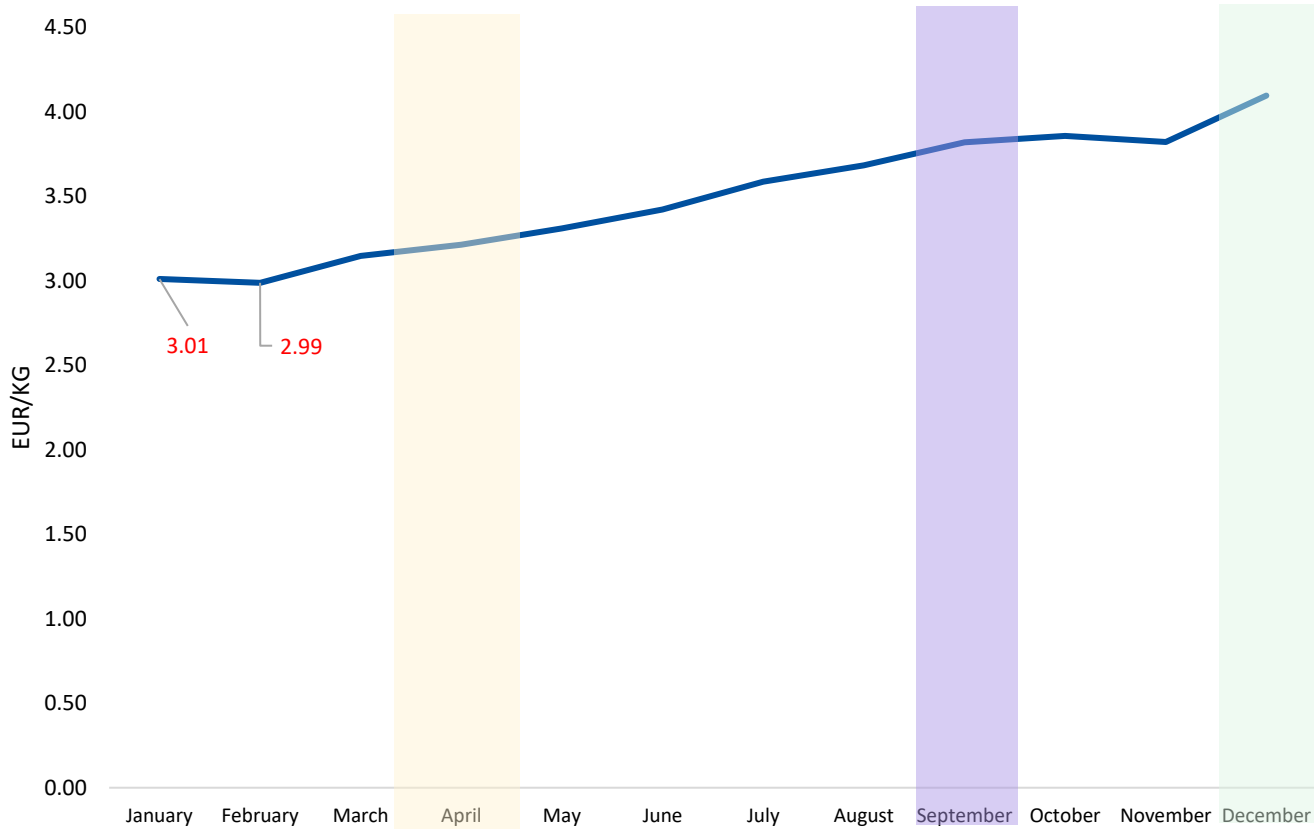
Oats Harvest South Hemisphere

OILS

SEASONALITY

Olive Oil - Italy

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
OLIVE OIL REFINED - AVERAGE WHOLESALE PRICE; EXCLUDING VAT, ITALY

Daymon Buying Recommendation

Olive oil is mainly produced around the Mediterranean basin where the olive tree originated. Globally, around 90% of all olives produced are crushed to extract the oil.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Olive Oil in Northern Hemisphere** were **January** and **February**, when the harvesting ends in Northern Hemisphere, and before the blossoming period.



Blossoming North Hemisphere



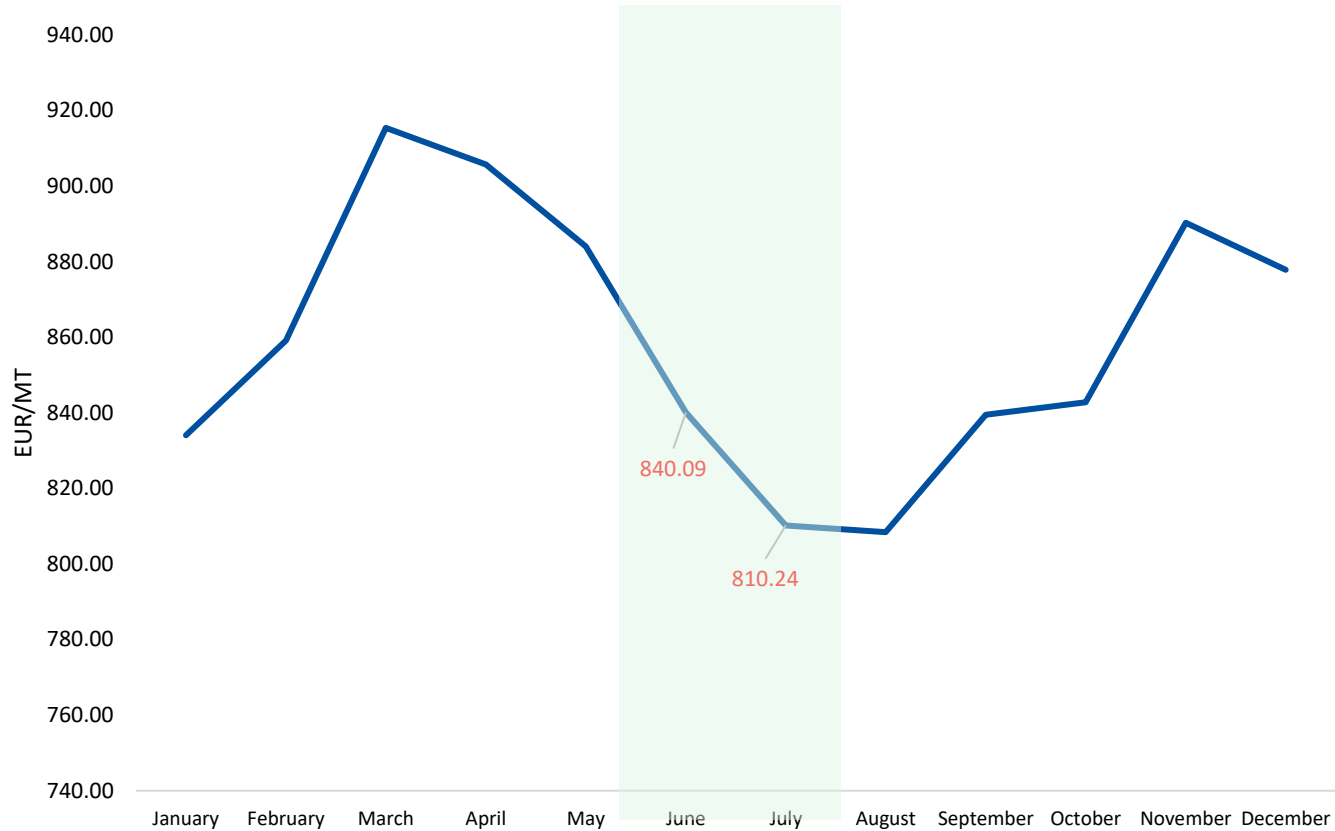
Green Olives Harvest N. Hemisphere



Black Olives Harvest N. Hemisphere

| Palm Oil

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
PALM OIL CRUDE PHYSICAL SPOT & FORWARD PRICES COST; INSURANCE & FREIGHT ROTTERDAM

Daymon Buying Recommendation

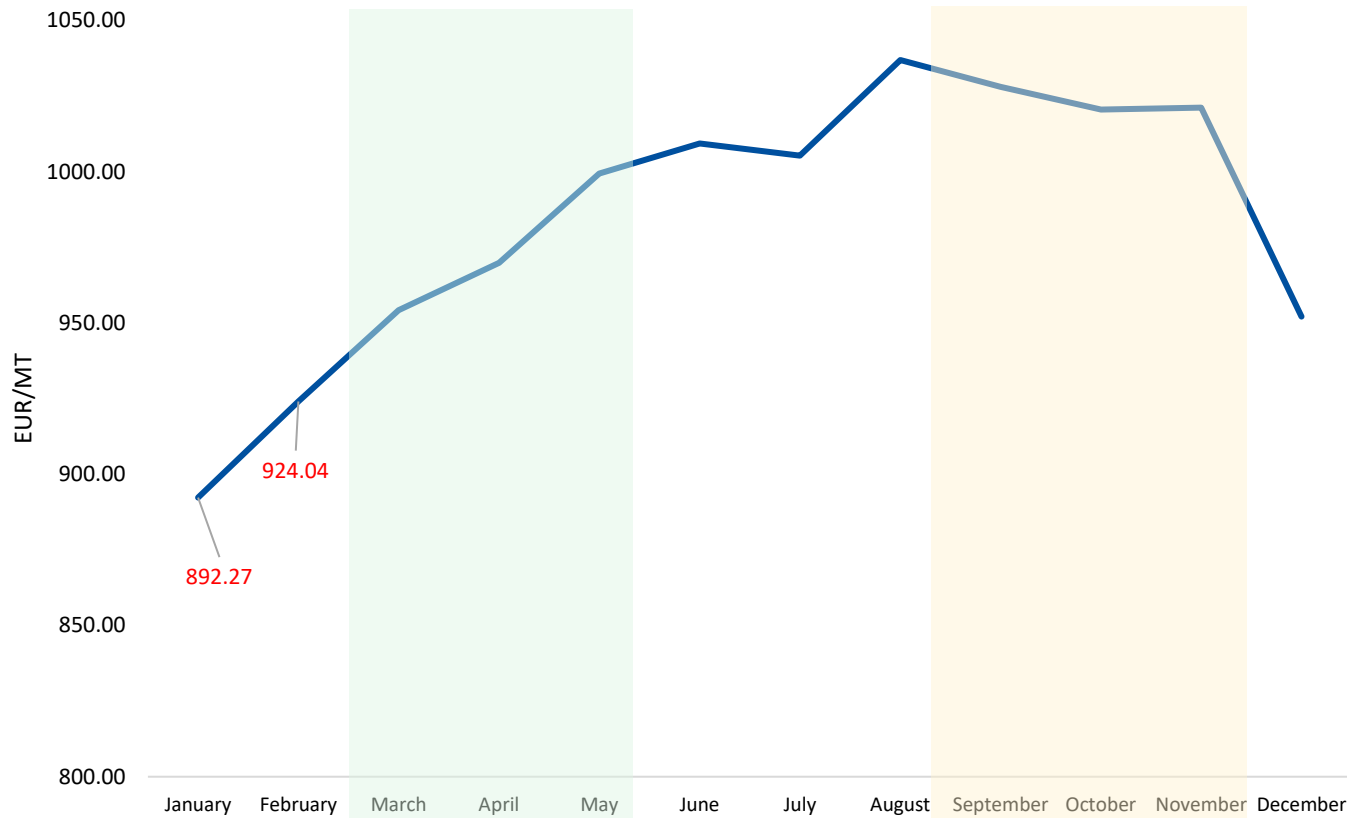
Approximately 50 MT of palm oil are produced every year, making palm oil the largest of all vegetable oil markets.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Palm Oil** were **June** and **July**, as the summer is at its peak. Moreover, oil palms require lots of sunshine and rain in order to produce the best quality fruit

Lowest Palm Oil price – End of Summer

| Soybean Oil US

Commodity Price Seasonality - Monthly Average 2019-2023



Daymon Buying Recommendation

Used in the food industry for products such as frying oil, margarine, bread, biscuits, ice cream, mayonnaise and salad dressings. Non-food usage includes paints, biodiesel, candles and soaps.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Soyabean Oil** were **January** and **February**, just prior to the harvest season kick off in the Southern Hemisphere.

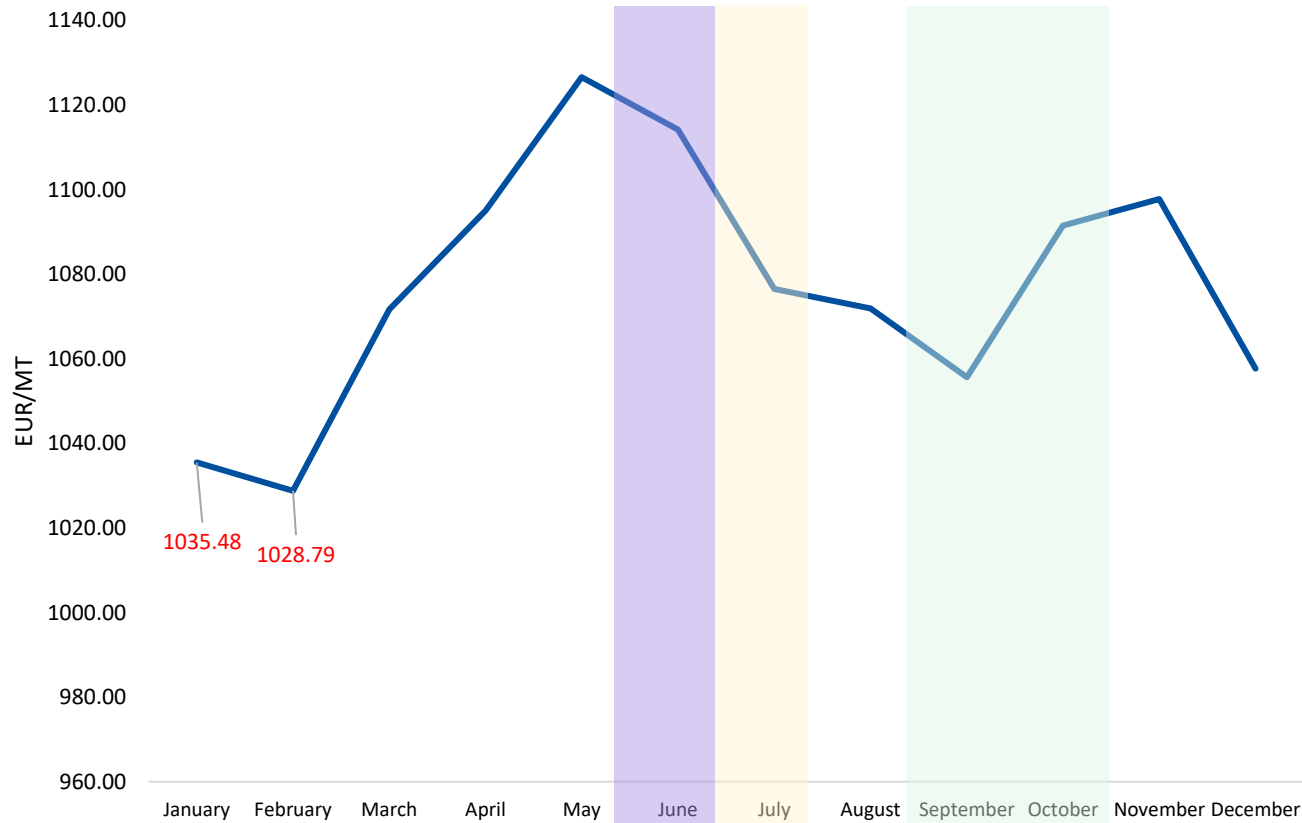
Source: Mintec
Soyabean oil, crude, exchange-approved grades and standards - Chicago Board of Trade (CBOT); Chicago USA

 Soyabean Harvest South Hemisphere

 Soyabean Harvest North Hemisphere

Rapeseed Oil - EU

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
Rapeseed oil crude, physical spot & forward prices ex mill - Rotterdam



Daymon Buying Recommendation

Rapeseed oil, also known as canola oil, is a vegetable oil extracted from rapeseed. It is the third most produced edible oil, after palm and soyabean oil.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Rapeseed Oil** were **January** and **February**, prior to the harvest season in the Northern Hemisphere (Canada Winter crop and EU).

| Sunflower Oil

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
SUNFLOWER OIL REFINED PHYSICAL SPOT & FORWARD PRICES FREE ON BOARD SIX PORTS; NORTH WEST EUROPE

Daymon Buying Recommendation

Competitive vegetable oils such as soyabean oil, rapeseed oil and palm oil can influence the price of sunflower oil.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Sunflower Oil** were **January** and **September**, during the harvest season, and 2 months after the harvest season in the Northern Hemisphere – European Union, Russia and Ukraine. It receives the impact of other vegetable oils.



Harvest Season EU



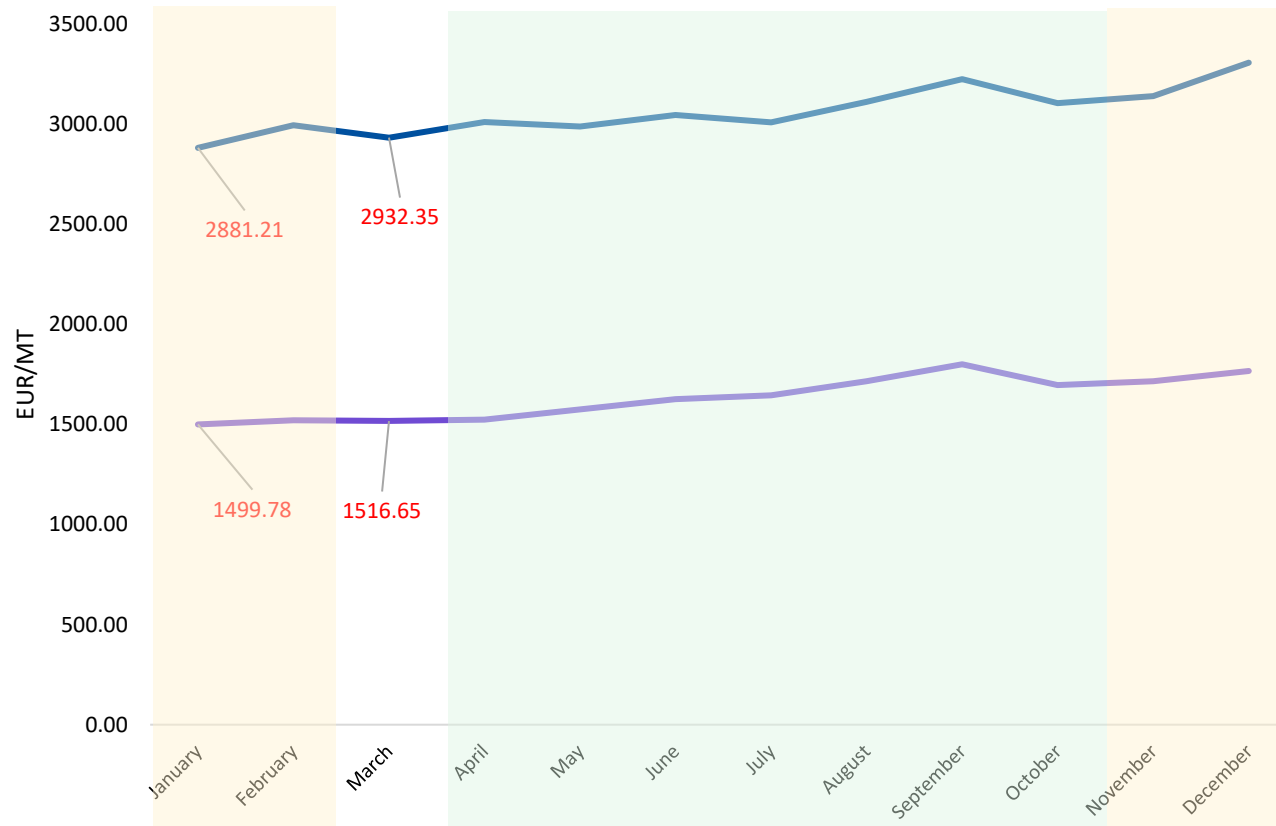
Harvest Season Ukraine and Russia

SOFTS

SEASONALITY

Coffee Arabica & Robusta

Commodity Price Seasonality - Monthly Average 2019-2023



Daymon Buying Recommendation

Coffee beans are the second most commonly traded commodity after crude oil and are mainly used to produce coffee, one of the world's most popular hot beverages.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Coffee** were **January** and **March**.

Source: Mintec

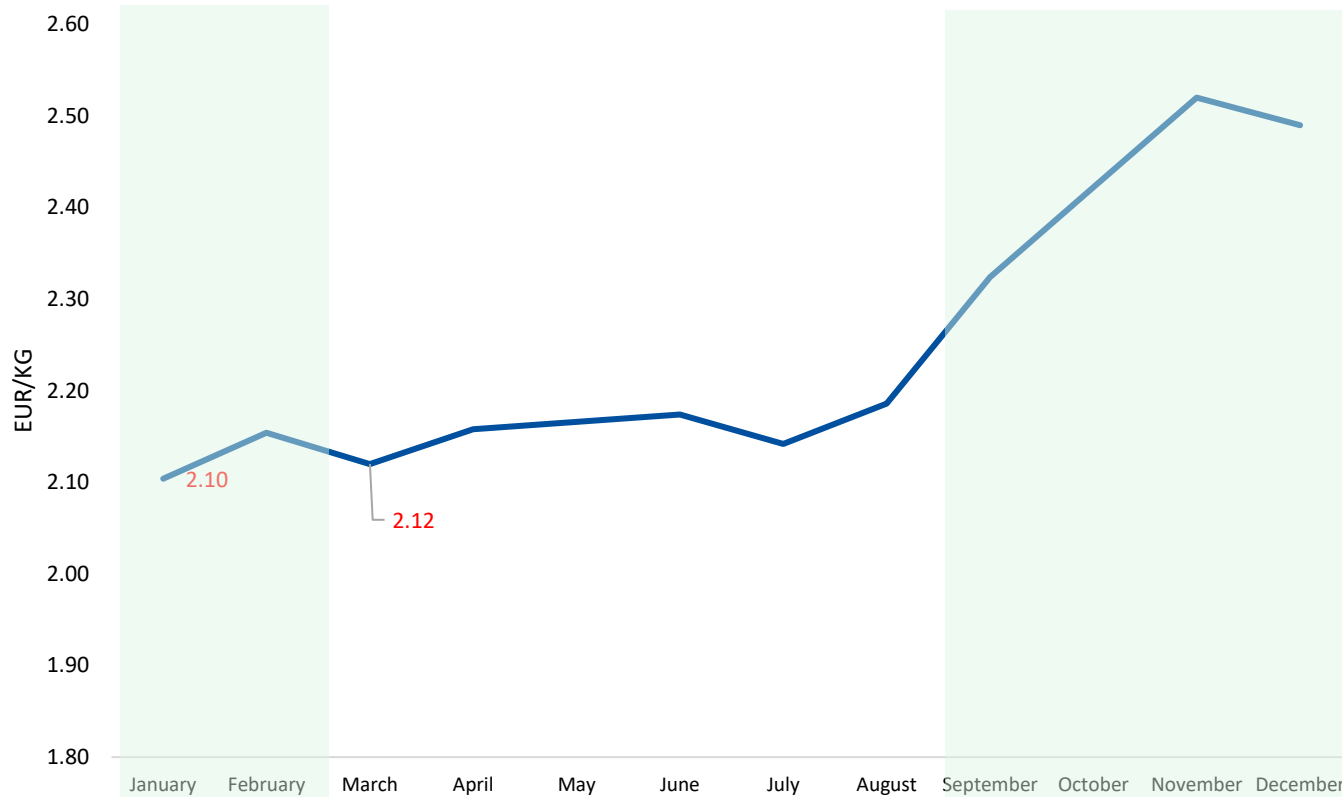
Coffee robusta CTML standard grade determined by the Exchange's coffee graders, origin: various, Intercontinental Exchange (ICE); European Union

Coffee arabica coffee produced in several Central and South American, Asian and African countries - Intercontinental Exchange (ICE) USA



Cocoa

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
COCOA BEANS MAXIMUM 20% SLATY BY COUNT ORIGIN:W.AFRICA & CARIBBEAN ISLANDS EURONEXT LIFFE;
LONDON

 **Main Crop Ghana and Ivory Coast**

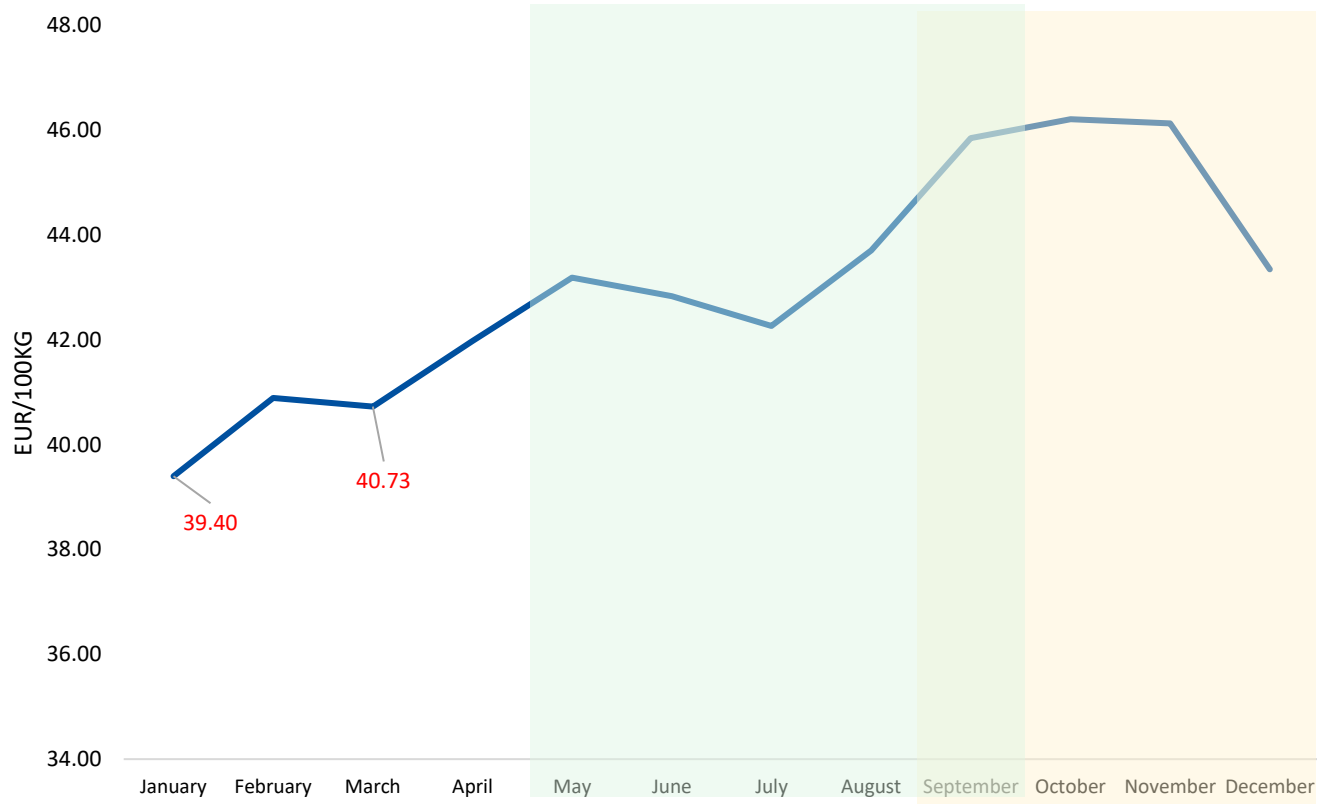
Daymon Buying Recommendation

Unlike many other crops, the cocoa harvest is not confined to one short period. Each cocoa pod ripens at different times and the harvest is therefore spread over several months twice a year.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 times to buy **Cocoa** were **January** and **March**, as the main crop in Ghana and Ivory Coast, the 2 biggest producers worldwide, is ending.

| Sugar

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
WHITE SUGAR BEET OR CANE CRYSTAL OR REFINED FREE RUNNING OF REGULAR GRAIN SIZE FAIR TO AVERAGE
QUALITY OF ANY ORIGIN EURONEXT LIFFE; LONDON



Brazil Sugar Cane Harvest Season



Harvest Season Sugar Beet EU

Daymon Buying Recommendation

Sugar is the most commonly used sweetener in the world. Sugar beet is produced predominantly in temperate climates and sugar cane is produced in tropical climates.

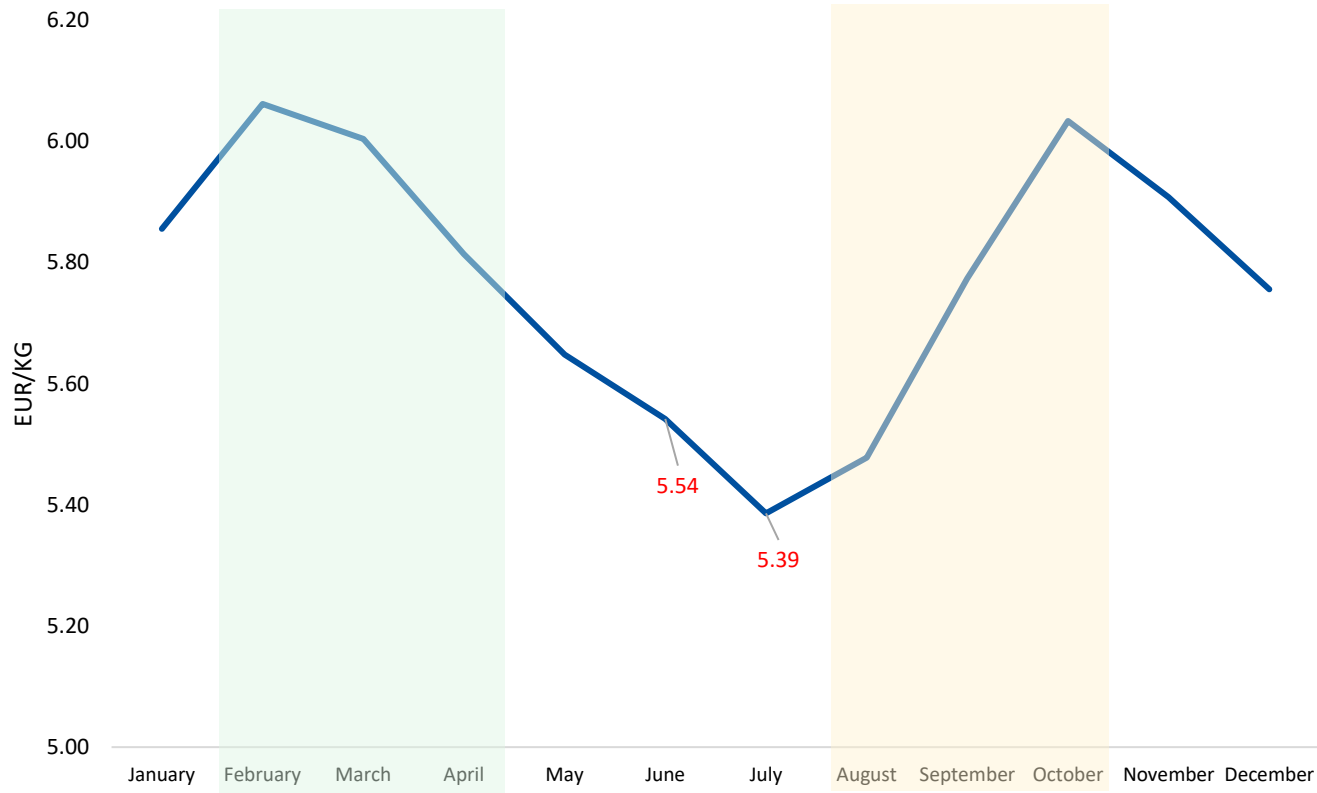
Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Sugar in EU** were **January** and **March**, after the Sugar beet harvest season ends in the EU, and just before the sugar cane production starts in Brazil.

NUTS

SEASONALITY

Hazelnuts

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
HAZELNUT GROUND SIZE 0/2MM - ORIGIN: TURKEY, DELIVERED DUTY PAID GERMANY

Daymon Buying Recommendation

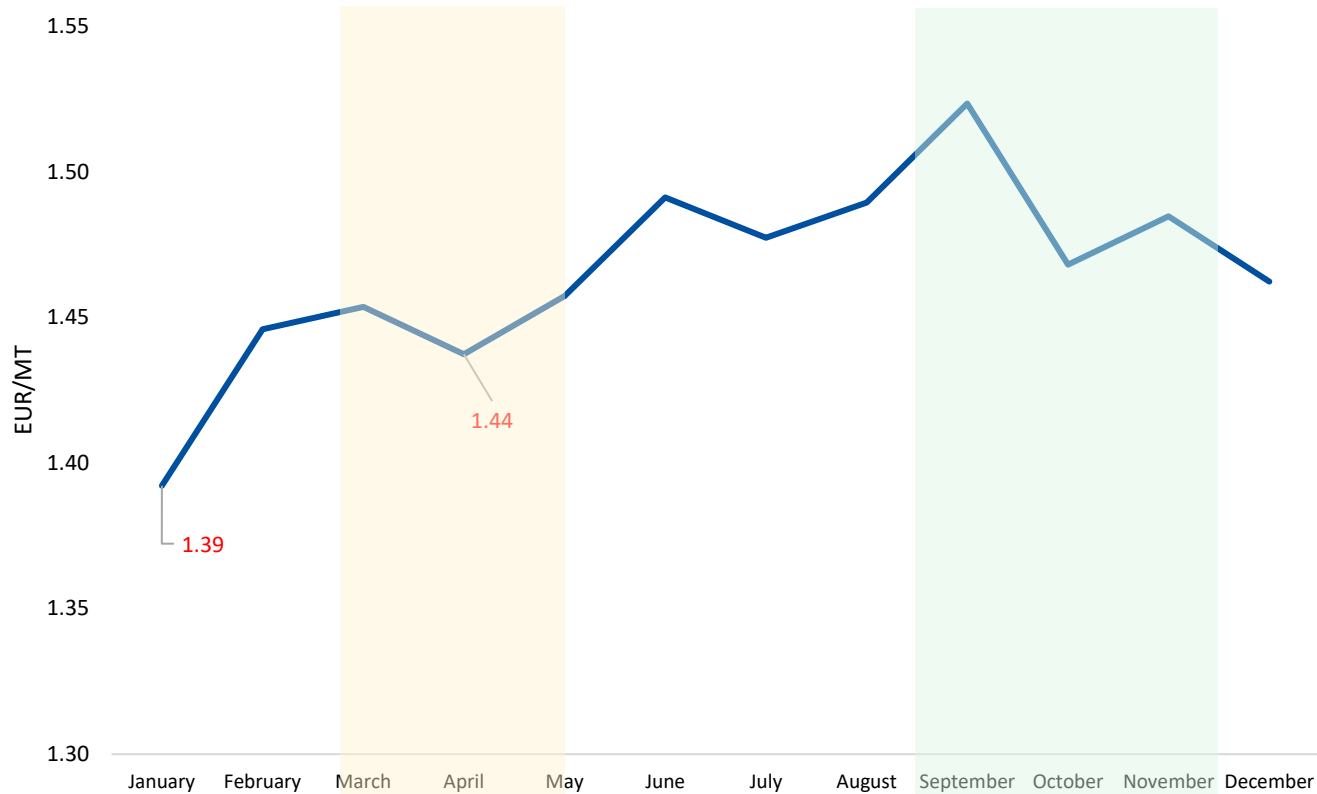
Processed hazelnuts are used extensively in the confectionery and baking industries, for instance to make praline (a combination of sugar and hazelnuts) and mixed with chocolate to make spreads.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Hazelnuts in EU** were **June** and **July**, prior to the harvest season kick off in the Northern Hemisphere.

 Southern Hemisphere Harvest Season  Northern Hemisphere Harvest Season

| Peanuts

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
PEANUTS/GROUNDNUTS|, 40/50 PER OUNCE - ORIGIN:WORLD, MINTEC CALCULATED AVERAGE PRICE
ROTTERDAM

 Southern Hemisphere Harvest Season  Northern Hemisphere Harvest Season

Daymon Buying Recommendation

Peanuts, or groundnuts, are a legume native to central South America which are often sold whole (usually shelled and then roasted or salted) directly to consumers, providing over 30 essential nutrients.

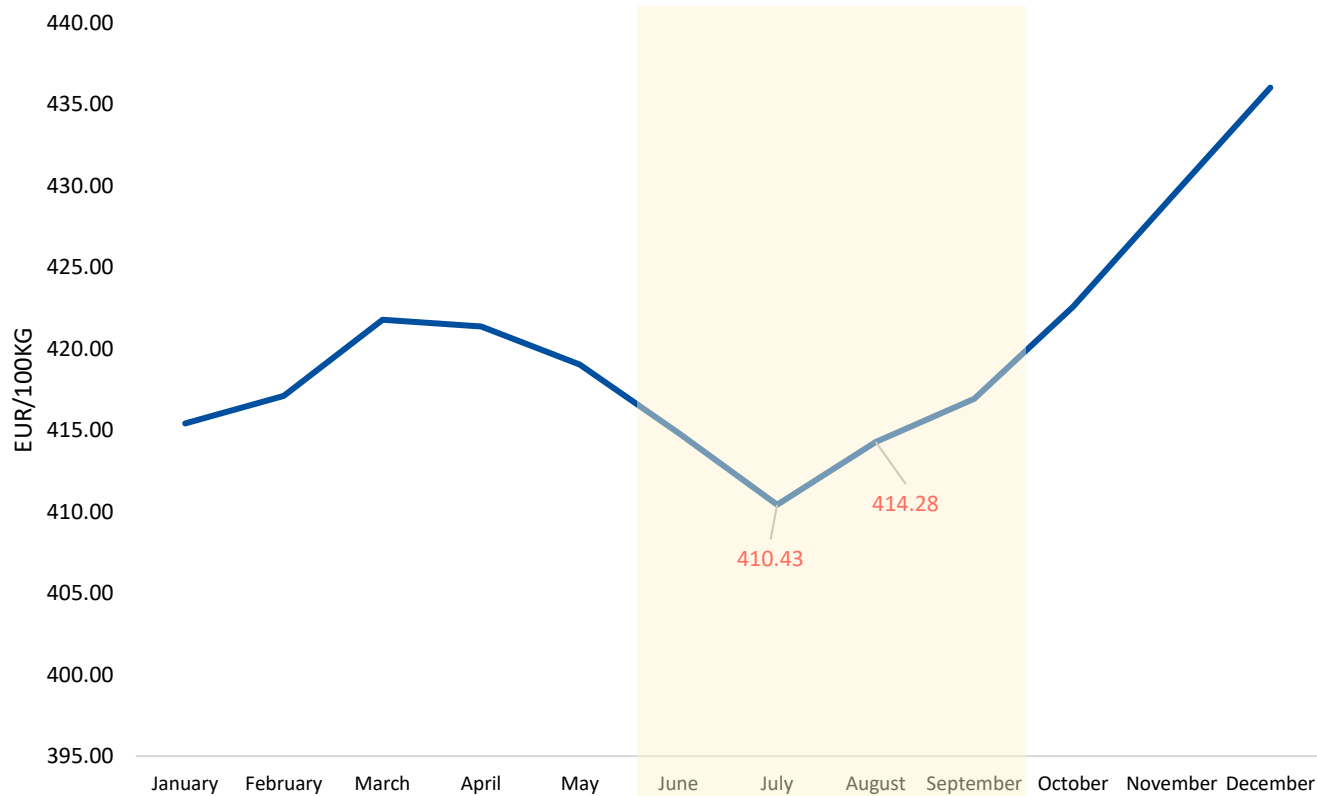
Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 times to buy **Peanuts** in the **USA** were **January** and **April**, prior to the harvest season in the South Hemisphere and after closing the North Hemisphere harvest season.

LIVESTOCK

SEASONALITY

| Beef EU

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
YOUNG BULLS R3 DEADWEIGHT MARKET PRICE EUROPE (EUR/KG)

 **Wheat EU and USA – Harvest Season**

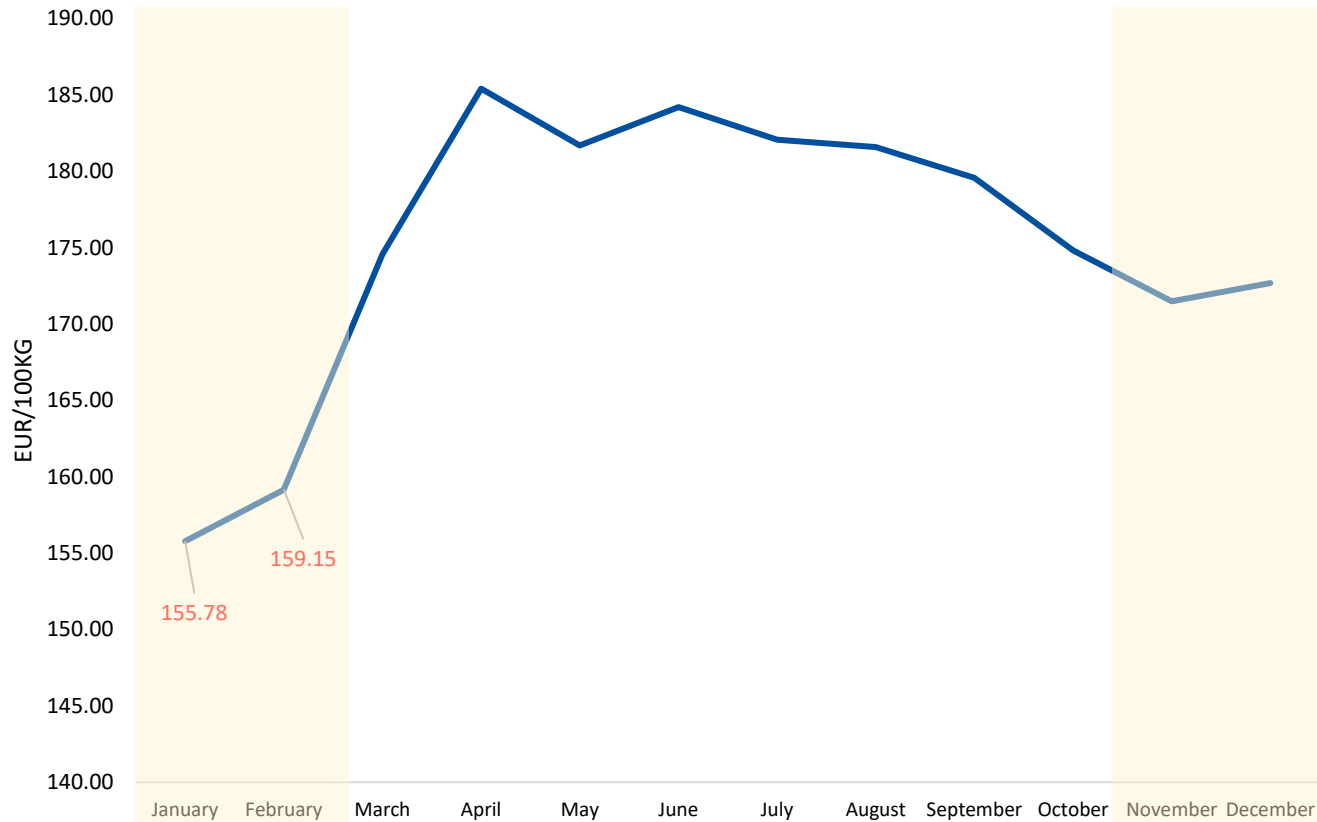
Daymon Buying Recommendation

Beef is the third most consumed meat in the world. It is one of the principal meats used in European and American cuisine and is becoming increasingly important in developing countries such as Brazil, Russia and China.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 times to buy Beef meat in the **European Union** were **July** and **August**. During July, wheat is being harvested, which impacts feed costs.

| Pork EU

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
Pig deadweight, grade E; 55-60% lean meat - market price, European Union

Winter – Lowest Consumption of Pork Meat

Daymon Buying Recommendation

The 2nd most consumed meat in the world, after poultry, despite its consumption not being allowed in some cultures. Demand for pork is particularly high in China and Europe.

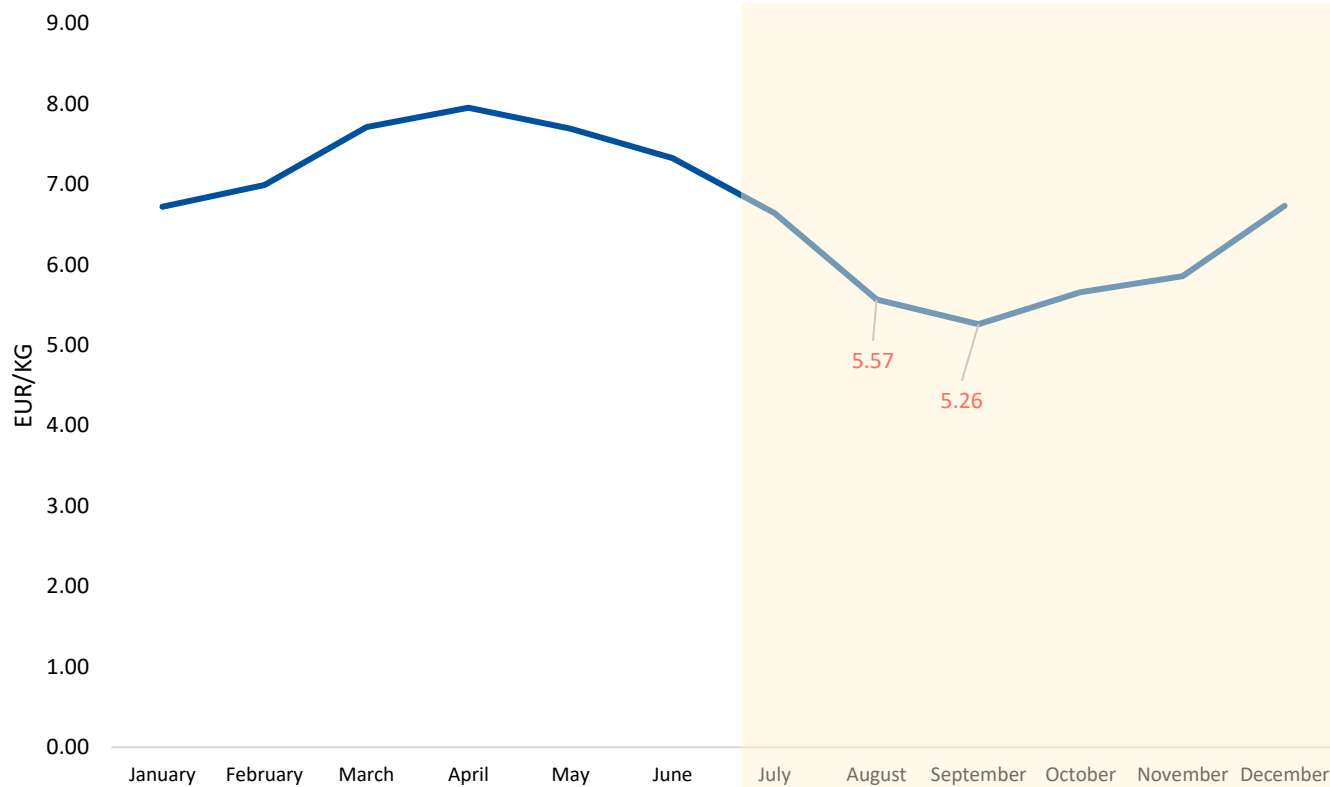
Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Pig meat in European Union** were **January** and **February**, during winter months when consumption of such meat tends to be lower.

SEAFOOD

SEASONALITY

| Salmon - Norway

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
Farmed Atlantic salmon|3-6 kg| superior quality; fresh; gutted| excluding terminal costs; export duty and taxes| free carrier Oslo; Norway| Nasdaq salmon i

Daymon Buying Recommendation

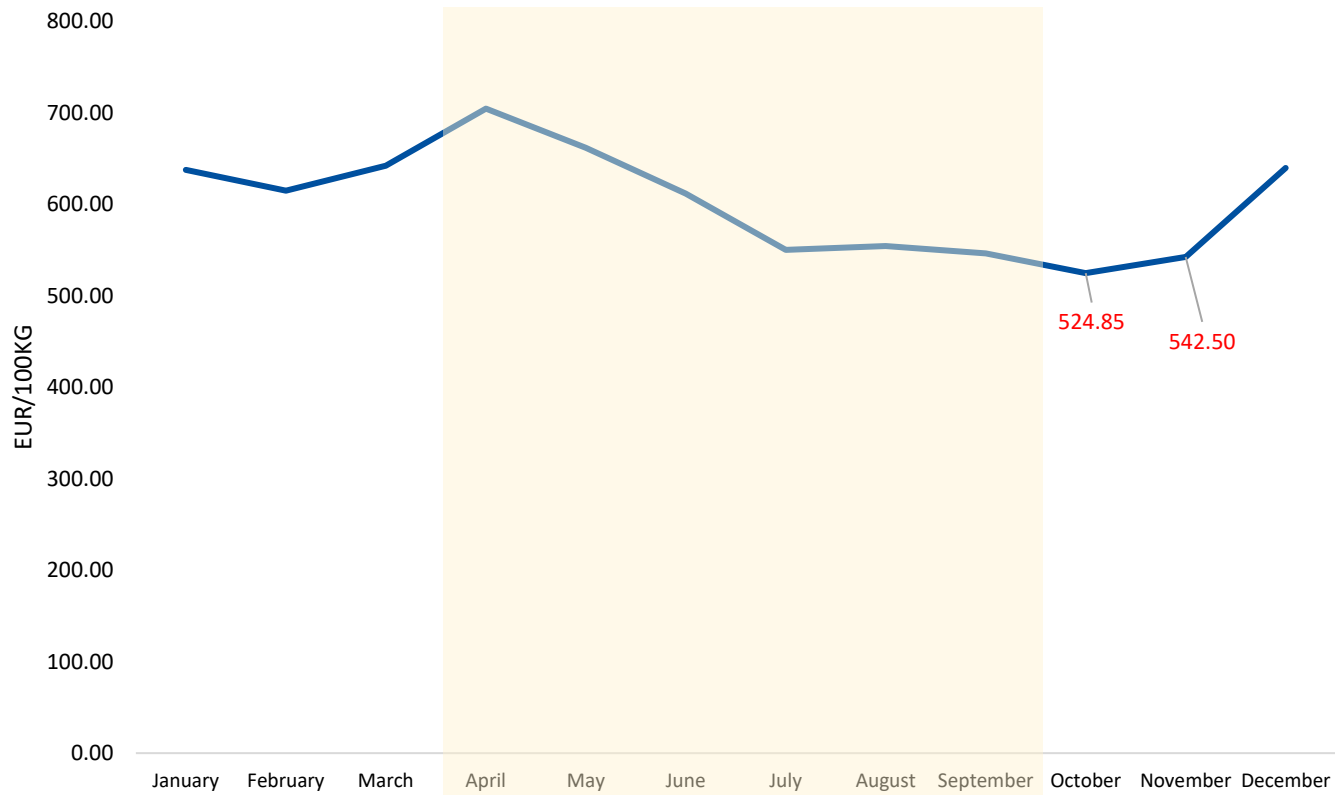
Salmon accounts for around 4% of total world seafood supplies. Approximately 75% of all salmon supplied to the fish industry comes from a farmed source. Atlantic salmon is the main variety of farmed salmon.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Salmon from Norway**, were **August** and **September**, during Atlantic Salmon peak season.

Atlantic Salmon Peak Season

| Tuna Albacore - Spain

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
ALBACORE TUNA, WHOLE, WHOLESALE PRICE; SPAIN

Daymon Buying Recommendation

Fresh tuna is primarily consumed as steak or sushi. Japan, in particular, prizes high quality fresh tuna as sashimi (raw fish). In Europe, tuna is most commonly sold in supermarkets in cans.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Albacore Tuna**, were **October** and **November**, after its peak season come to an end. Afterwards, prices tend to get higher.

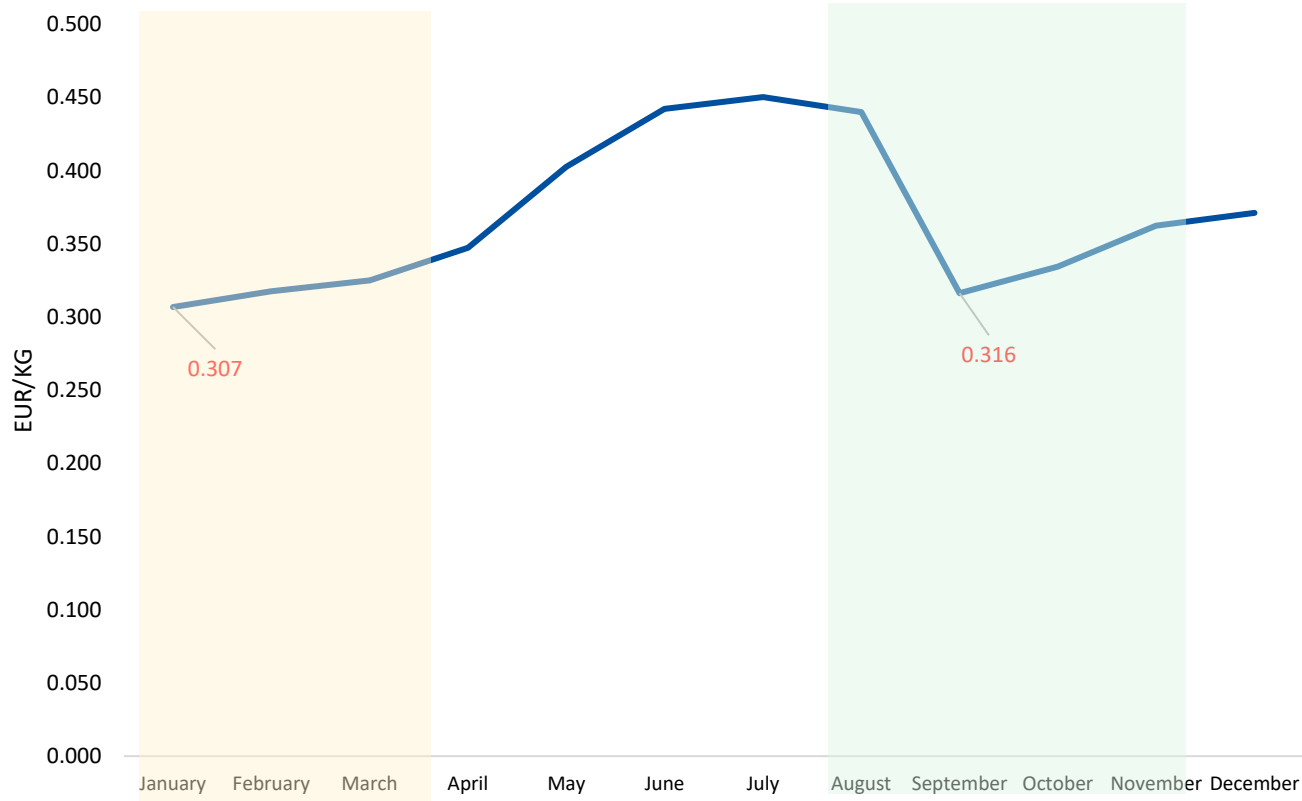
Main Fishing Season for Tuna Albacore

FRUITS & VEGETABLES

SEASONALITY

| Apples - Poland

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
Apples Gala|over 65mm|average wholesale price|Poland

Daymon Buying Recommendation

Around 80% of apples produced globally are eaten fresh with most of the remaining 20% processed into products like apple juice and other beverages.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Apples in Poland** were **January** and **September**, after harvest season in Northern Hemisphere, as apples later ripening last longer, which will keep for months in cool, dark conditions (not in the fridge) if separated from each other.



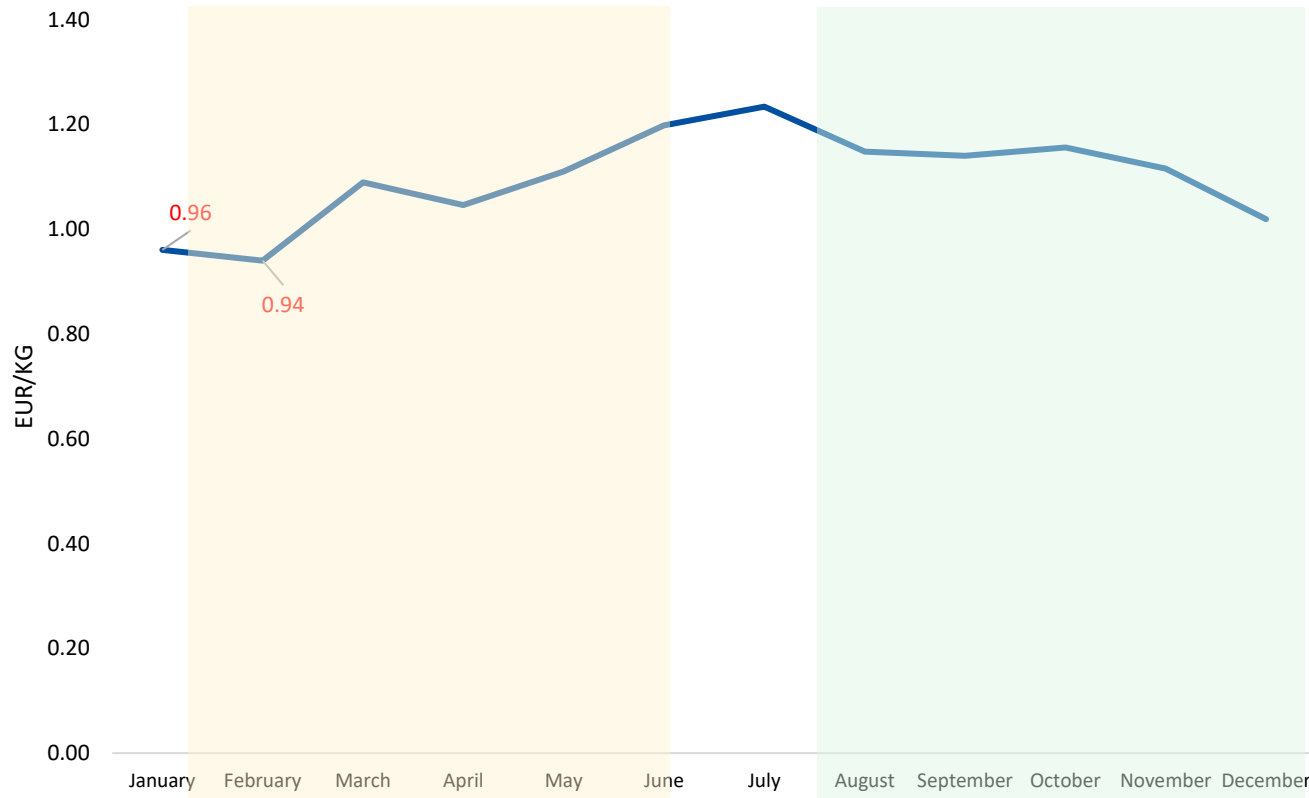
Harvest Season North Hemisphere



Harvest Season Southern Hemisphere

| Pears - Spain

Commodity Price Seasonality - Monthly Average 2019-2023



Source: Mintec
PEARS BLANQUILLA - | WHOLESALE PRICE, SPAIN

 Harvest Season North Hemisphere

 Harvest Season Southern Hemisphere

Daymon Buying Recommendation

Pears are split into summer, autumn and winter pears depending on when they are harvested. Around 90% of the pears produced globally are eaten fresh with most of the remaining 10% going into products like pear juice and desserts.

Analyzing the period between 2019 and 2023 monthly averages, we can see that the best 2 timings to buy **Pears in Spain**, were **January** and **February**, as harvest season in Northern Hemisphere ends (December), and during flowering in the same hemisphere – key months to have an idea of potential crop size.



COMMODITY PROFILE

| Commodity Profile

Dairy

- ✓ [Milk](#)
- ✓ [Butter](#)
- ✓ [Eggs](#)

Grain/Cereal

- ✓ [Wheat](#)
- ✓ [Corn](#)
- ✓ [Rice](#)
- ✓ [Oats](#)

Oil

- ✓ [Olive Oil](#)
- ✓ [Palm Oil](#)
- ✓ [Soyabean Oil](#)
- ✓ [Rapeseed Oil](#)
- ✓ [Sunflower Oil](#)

Softs

- ✓ [Coffee](#)
- ✓ [Cocoa](#)
- ✓ [Sugar](#)

Nuts

- ✓ [Hazelnuts](#)
- ✓ [Peanuts](#)

Meat

- ✓ [Beef](#)
- ✓ [Pork](#)

Seafood

- ✓ [Salmon](#)
- ✓ [Tuna](#)

Fruits/Vegetables

- ✓ [Apples](#)
- ✓ [Pears](#)

Energy

- ✓ [Crude Oil](#)

Metals

- ✓ [Aluminium](#)

Plastics

- ✓ [Plastic packaging](#)

Paper

- ✓ [Pulp](#)

Textiles

- ✓ [Cotton](#)

DAIRY

SEASONALITY

| Milk

Commodity profile

Milk is available in many different forms and is **one of the most nutritionally complete foods** available in the market.

In its whole, semi-skimmed and skimmed varieties, it has a very limited shelf life. However, liquid milk can be treated to increase its shelf life such as in condensed, evaporated, UHT and powdered milk.

Milk is also the **major feedstock for the following markets: cheese, dairy powders, cream, butter, whey and lactose.**

- **Whole milk** contains approximately 3% - 4% fat.
- **Semi-skimmed milk** contains between 1.5 and 1.8% fat.
- **Skimmed milk** contains less than 0.1% fat.
- **UHT milk** is subjected to ultra-high temperature processing for a short time to sterilize the milk so it lasts longer.
- **Condensed milk** is made by removing most of the water. Sugar is added for flavour and to increase shelf-life.
- **Evaporated milk** is similar to condensed milk but contains no added sugar.



Milk

Production and trade



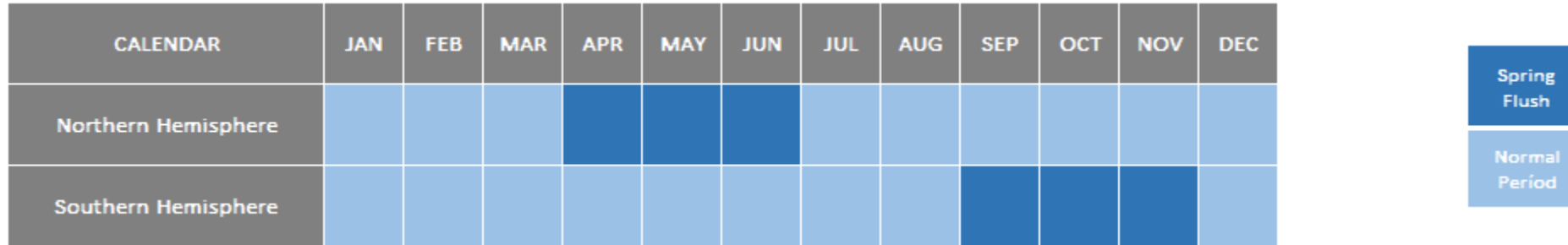
Cow's milk production in the EU totals approximately 144m tonnes per annum. The **major producing countries are Germany (14% of the EU cow's milk production), France (11%), the UK (7%), and Poland (6%)**. Since the formation of the single European market, there has been some growth in the intra-EU trade of liquid milk within mainland Europe. Trade between the UK and continental Europe, however, has been minimal.

In the last 3 decades, **world milk production has increased by more than 50%**, from 500MnT in 1983 to 769MnT in 2013. **India is the world's largest milk producer**, with 18% of global production, followed by the United States of America, China, Pakistan and Brazil.

Main Trading Centers in Europe: Germany, France, UK

| Milk

Periods of peak milk supply



Milk is available all year round. However **quantities fluctuate throughout the year according to weather conditions and grazing availability.**

The spring flush refers to cows being switched from dry feed to spring pasture. The new grass and warmer temperatures in the spring allows cows to be taken out to pasture **leading to an increase in milk production during these months.**

| Milk

Price influencing factors

Milk tends to follow a seasonal price pattern. Prices are usually lower in late spring and early summer, after the peak in supply has been reached, and tend to recover again in late autumn and winter, when the milk supply is less plentiful.

The weather and quality of the dairy cattle feed are highly related to the quality and availability of milk. If typical spring conditions arrive later than usual then the switch from dry feed to open pasture may be delayed, potentially pushing back the peak period in milk production.

Pasture-fed cows produce milk with a higher protein (casein) content. This allows cheese manufacturers to produce more cheese from the same volume of milk and speeds up the manufacturing process due to faster clotting times. More milk therefore tends to be bought by cheese manufacturers in the spring and summer months.

Input costs and feed prices can affect milk production costs. Feed wheat, soyameal and maize gluten are mainly used in dairy feed compounds outside of the spring flush period. Increases in input costs can put increased pressure on processor's cost margins.



| Milk

Production process

Automated milking equipment is used to obtain the majority of milk in developed countries. The milk is sent to dairies where it is received and chilled. The chilled milk is then pasteurised to remove harmful micro-organisms and homogenised to prevent separation.

When raw (whole) milk is left to settle, fat floats to the top and forms a layer known as cream. The cream can be separated from the whole milk to leave behind either skimmed milk (if all the cream is removed) or semi-skimmed milk (if some of the cream is left in the milk). The cream can then be used for further processing in the dairy industry.

While the fat content of most whole milk is 4% or higher, the fat content in most beverage milks has been reduced to 3.4%. The lower fat alternatives, such as semi-skimmed (1-2% fat), or skimmed milk (<0.1% fat) are also available in most markets.



| Butter

Commodity profile

Butter is a dairy product which is made by churning the cream removed from liquid whole milk.

It is **one of the most highly concentrated forms of fluid milk and is considered a staple in most countries.**

As well as being used as a spread, butter is a key ingredient in many sauces, soups, pastries and bakery products. It is also commonly used to season potatoes and vegetables.

Grades/Varieties:

- **Salted/unsalted butter:** Unsalted butter has a fresher, sweeter taste while salted butter has a longer shelf life.
- **Ghee:** To make ghee, milk solids and water are removed from the butter. Ghee has a longer shelf life and can withstand higher temperatures than butter before burning and can therefore be used as a cooking oil.
- In **the US**, butter is graded based on body, texture, flavour and appearance. There are three possible grades: U.S. Grade AA (highest), U.S. Grade A and U.S. Grade B (lowest).



| Butter

Production and trade

Global production of butter (and ghee) amounts to approximately **10m tonnes annually**.

The **main producers are India (40% of world output)**, the US (8%), Pakistan (7%), Germany (5%), France (5%) and New Zealand (4%). Together the EU produces around 1.6m tonnes each year.

All European countries produce their own butter which is usually supplemented from intra-EU trade. Internal market conditions are, therefore, the heaviest influence on price.

New Zealand exports a significant percentage of the butter it produces and accounts for around about 45% of global butter exports which typically range between 800-900,000 tonnes each year. **As such, New Zealand exerts a heavy influence on the world markets.**



| Butter

Price influencing factors

The production and availability of fresh milk has a major effect on the price of butter. There is normally a peak in fresh milk production in the spring months, and as a consequence supplies of butter tend to be more plentiful in the spring/summer months.

If cheese production becomes more profitable than butter, this can give producers an incentive to switch from producing butter into making cheese instead, leading to a possible decline in butter output.

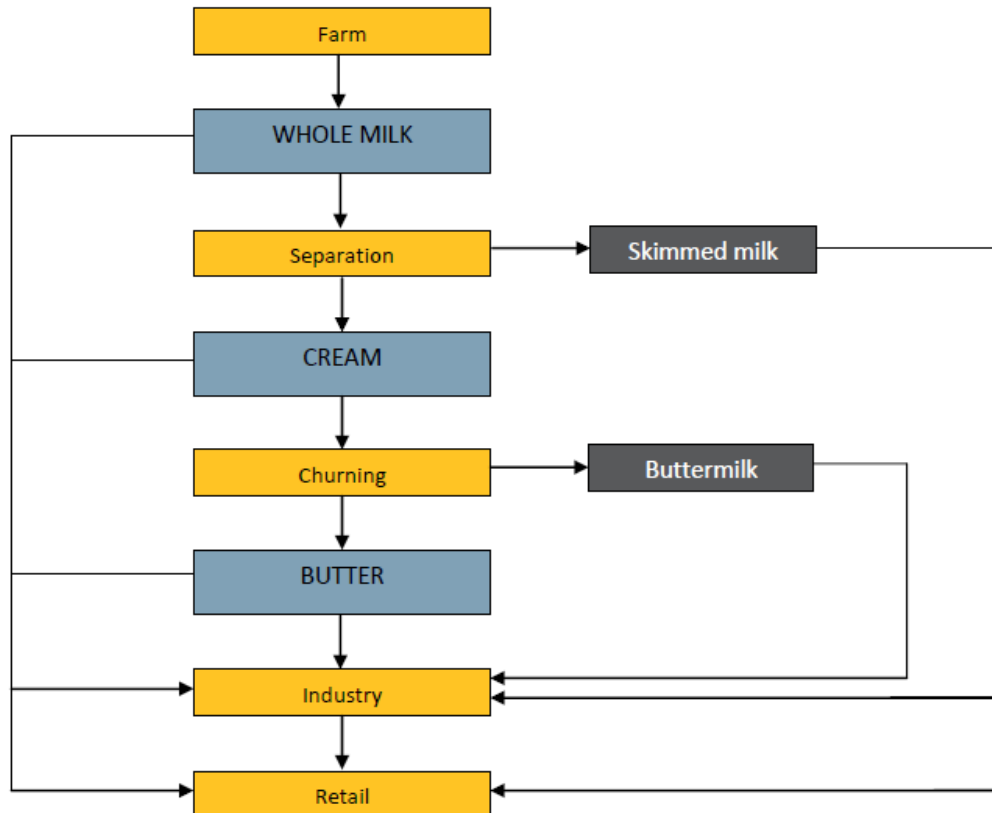
In order to support EU farmers' incomes, **the EC has in place a fixed intervention price for butter.** If the market price falls below the intervention price, producers can sell their butter to national intervention agencies which are obliged to purchase the butter at the intervention price provided the butter meets designated quality standards.

Private storage aid (PSA) is also used by the EC as a tool to remove the usual spring/summer surplus of butter from the market and release it in winter when supplies tend to be lower. Producers usually place their excess butter into storage during the spring and summer and must pay a small daily rate to cover storage costs.



| Butter

Production process



Modern butter-making involves tightly-controlled production methods.

Fresh milk is first inspected for quality and the amount of butterfat (natural fat found in milk) it contains. When whole milk is left to settle, these fat globules float to the top and form a layer known as cream. The cream can be separated from the whole milk to leave behind either skimmed milk (if all the cream is removed) or semi-skimmed milk (if some of the cream is left in the milk). The cream is heated – or ‘pasteurised’ – to reduce the amount of bacteria as bacteria can cause the cream to spoil, potentially shortening the shelf-life of the butter. Once pasteurisation is complete, the cream is agitated – or churned – to separate its constituent fat from the water it also contains.

The fat forms into a solid mass that is made into butter while the watery by-product, which is known as ‘buttermilk’, is used for margarine and other buttery-flavoured spreads as well as in animal feed. Salt can be added to the butter to improve the flavour and increase shelf-life. **Twenty litres of whole milk are needed to produce one kilogram of butter.** This process leaves approximately 18 litres of skimmed milk and buttermilk.

| Eggs

Commodity profile

Eggs are considered an **important and inexpensive food source** packed with protein and energy. The most widely consumed egg is laid by the domestic hen and weighs, on average, 60g.

Eggs are typically eaten whole or used as an emulsifier, binder or coagulant in a variety of foods including quiches, mayonnaise, cakes and baking mixes, and ice cream.

Non-food uses include cosmetics, shampoos and pharmaceuticals such as vaccines and antibiotics.

Eggshells are either brown or white depending on the breed of laying hen although there is no difference in taste or nutritional value between the two colours.

Eggs are also classified as **caged** (from caged hens), **barn** (from hens kept in barns), **free-range** (from hens permitted to roam freely within a farmyard) or **organic** (produced using strict organic practices).



| Eggs

Production and trade

Around 7m tonnes of chicken (hen) eggs are produced in the EU on an annual basis.

The **main producers are France (14% of EU output), Spain (12%), Germany (12%), Italy (11%), the Netherlands (9%) and the UK (9%).**

Approximately 1m tonnes of EU eggs are exported each year. **Netherlands is the top exporter, accounting for 40% of EU shipments.** The country exports around two-thirds of its total egg production.

Almost 80% of UK eggs are sold to the retail and catering sector with the remaining 20% used by food manufacturers. **In continental Europe, around 25% of eggs are sold to the processing industry producing yolk and albumen powder.**



| Eggs

Price influencing factors

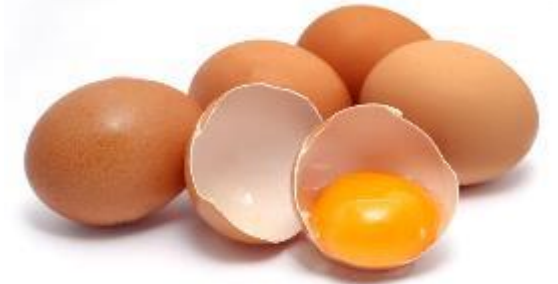
Feed can constitute as much as 75% of the cost of egg production. At least **50% of the feed blend tends to be wheat**, which is required as an energy source for hens. Oilseed meals are also an important protein component and fish oils/meals can be added as these provide the eggs with a high concentration of valuable Omega 3.

Egg yolk and albumen can both be derived from whole liquid egg and sold separately. If more eggs are broken to satisfy higher demand for one of these derivatives, this can lead to ample supplies of the other derivative if it is not also met with increased demand.

Extra heating is normally required over the winter period for hen houses, increasing costs. Any volatility in energy prices can therefore influence production costs.

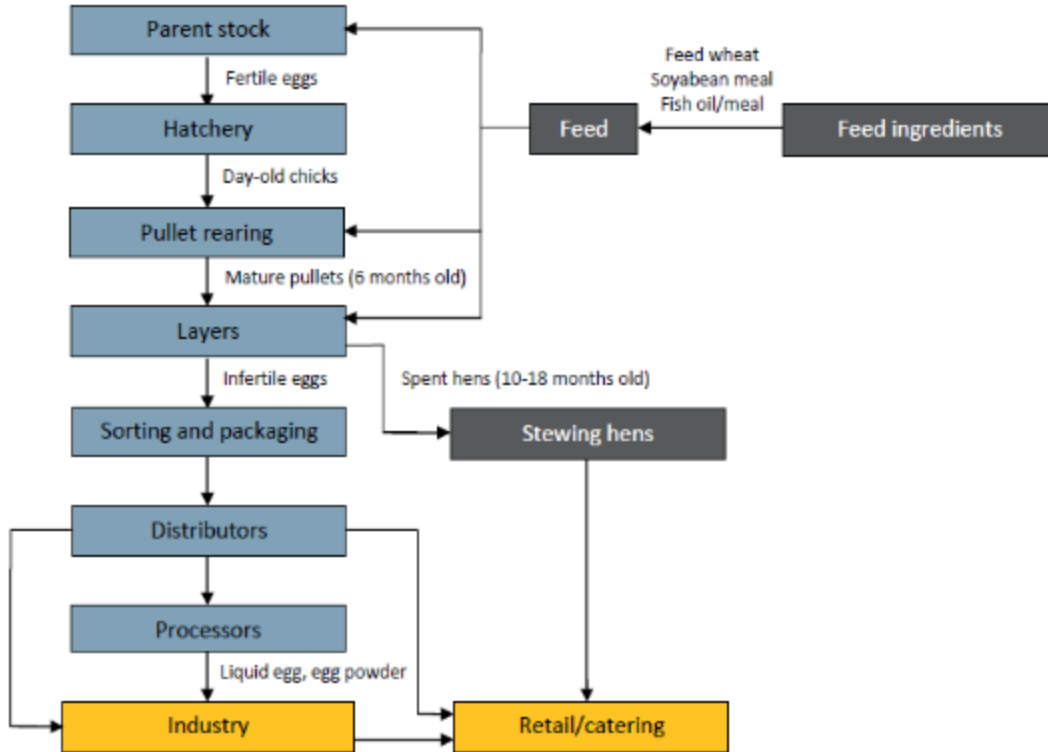
EU regulations, with respect to animal welfare, are constantly evolving. Any changes to legislation can mean that extensive investment has to be made in order to upgrade existing facilities. If countries struggle to meet any new standards by the deadlines implemented this could lead to shortages which may lead to higher egg prices.

If the price of eggs is low this can encourage producers to cull their older hens slightly earlier. This supports prices by reducing the supply of eggs and also cuts down the producers costs as it means there are fewer hens to feed and accommodate. Farmers can also make a small return if the bird is sold on for stewing meat.



| Eggs

Production process



Eggs can be sold in-shell, or alternatively the whole egg, egg yolk or egg white (albumen) can be sold in liquid, frozen or powdered form.

When purchasing in bulk, it can be more convenient to buy eggs in the form of a liquid or powder in order to extend shelf life, ease storage and eliminate the risk of breakage during transit.

In processing liquid egg, eggs are washed and broken and the inner liquid contents are separated. This reduces the weight of the egg by around 15% due to the removal of the eggshell and by a further 5% due to the loss of some albumen which adheres to the eggshell wall. The liquid, which is made up of 2/3rds albumen and 1/3rd yolk, is then filtered, cooled, homogenised, pasteurised, packaged and either refrigerated or frozen.

To turn the egg liquid into a powder it must also undergo fermentation, concentration and spray- or freeze-drying.

GRAINS & CEREALS

SEASONALITY

| Wheat

Commodity profile

Wheat is a cereal grain which is considered to be a staple food in many countries.

It is the third most produced grain in the world after maize and rice. Wheat is used in food production and also as a key ingredient in animal feed. Higher quality wheat is milled into flour and used in products like bread, cakes, biscuits and pasta or reconstituted into breakfast cereals. Low quality wheat is often used in animal feed.

The main classification of wheat is based on protein content. **Gluten is the main protein in wheat.**

Bread wheat is generally between 12-14% protein and **biscuit wheat** generally between 7-9%. **Durum wheat** is a specific subspecies of wheat with a high protein content which is used for pasta.

Feed wheat can have any protein percentage but is usually low as high protein wheat is generally used in the food industry and therefore commands a price premium.



| Wheat

Production and trade

Global wheat production amounts to approximately 683m tonnes annually.

The **main producers are the EU (mainly France, Germany and the UK - 20% of global output), China (18%), India (13%) and the US (8%).**

Globally, exports of wheat and flour amount to around 148m tonnes each year. The **major exporters are the US (20% of world exports), followed by the EU (16%), Australia (13%), Canada (13%) and Russia (10%).**

The main trading centre for EU milling wheat is LIFFE in Paris. Feed wheat is typically traded on LIFFE in London.



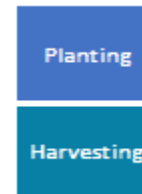
| Wheat

Commodity crop calendar

CALENDAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
EU Winter						Harvesting	Harvesting	Harvesting	Planting	Planting	Planting	Planting
EU Spring		Planting	Planting	Planting		Harvesting	Harvesting	Harvesting				
USA Winter						Harvesting	Harvesting		Planting	Planting		
USA Spring				Planting	Planting			Harvesting	Harvesting			
Australia	Harvesting	Harvesting		Planting	Planting	Planting	Planting			Harvesting	Harvesting	Harvesting

In the northern hemisphere most grains are planted between September and December. Harvest usually occurs in the summer months, between May and August. The crop can be sensitive to a water deficit from February to April, during the flowering period.

In the southern hemisphere, most grains are planted between April and July, with harvesting taking place between August and February.



| Wheat

Price influencing factors

A lack of water during the flowering stage of the crop can have a detrimental effect on output. Frost during the development of spring wheat (planted in spring), can also adversely affect yields. However, around three quarters of the world's wheat is winter wheat (planted in winter), which is resistant to frost.

The wheat market can be driven by milling or feed demand. Any changes in the wider grain market can affect the area cultivated for wheat as other grains can become more profitable.

Exchange rate movements can make wheat more or less expensive to import or export, which can improve or worsen the competitiveness of one country compared to another.

Demand for livestock and meat can also affect demand for grains. A rise in global livestock numbers would lead to a growth in demand for feed grains from the animal feed sector. This could encourage a rise in global feed grain production and milling.

Wheat futures can be perceived as a risky market to invest in. In the absence of major supply-related events, wider macroeconomic developments can significantly impact investors' confidence in the wheat market.



| Wheat

Production process

After harvesting, wheat is milled into flour, a process which essentially separates the three main parts of the grain: **the outer coating (bran), the plant embryo (germ) and the embryo's food store (endosperm).**

Before milling begins the wheat is cleaned and conditioned in order to remove impurities and give each grain a uniform moisture content. Different batches of wheat are then blended together to ensure that the end product is of the required quality. This process is known as gristing.

Next, the wheat goes to breaking. This involves passing the grain through a set of rollers which breaks it up into bran, chunks of endosperm which are mainly bran-free, and a small amount of flour. The endosperm fragments are then passed through smooth rollers up to 12 times in a method known as reduction. Sieving takes place after each roll and only large particles are left for the next set of rollers. The reduction and sieving process reduces the size of the fragments and separates them into four products: white flour, wheat germ, wheat feed and bran. These are sometimes blended back together to give different varieties of flour. For example, wholemeal flour consists of blended white flour, wheat germ and bran.



| Corn

Commodity profile

Maize (also known as corn) is a grain which contains seeds known as kernels.

It is one of the world's most consumed grains, serving as both a staple crop for humans and an ingredient for livestock feed, and is widely cultivated throughout the globe. **Around 65% of total maize production is used for animal feed, 15% for food, and 20% is processed into products such as corn oil, high protein gluten feed, starches, sweeteners and ethanol.**

Some common varieties of maize are detailed below. Maize also comes in a range of colours such as yellow, white and red.

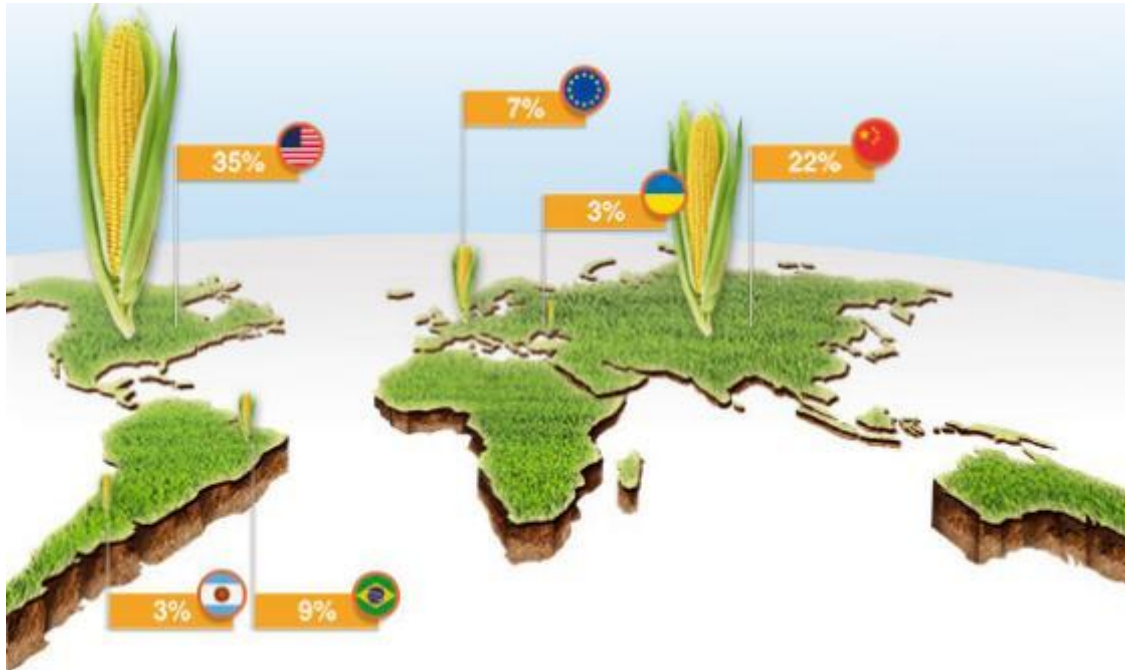
- **Dent or field maize:** Used for livestock feed and for industrial processing (white or yellow).
- **Flint or Indian maize:** Used for feed, processing and popcorn (white, yellow or red- red maize has higher protein levels compared to yellow or white).
- **Sweet corn:** Consumed as a vegetable. It has a higher sugar and lower starch content than other corns (white or yellow).
- **Flour corn:** Used to produce corn flour for baked goods (white).

In the US, maize is graded depending on quality from 1 (highest) to 5 (lowest).



| Corn

Production and trade



Total world production of maize is around 800m tonnes annually.

The US is the world's largest producer, accounting for around 40% of global production, and maize is also the US's largest crop. China, the EU and Brazil are also major producers accounting for 20% , 7% and 6% respectively.

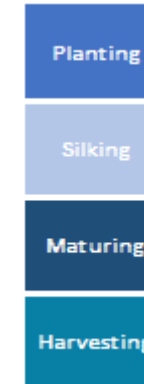
The US is the world's largest exporter (50% of global exports). Argentina (18%) and Brazil (9%) are also major exporters.

The most important futures markets are CBOT in Chicago and LIFFE in Paris. The CBOT number 2 yellow grade is often considered as a world benchmark. Physical prices tend to reflect the movement of futures.

Corn

Commodity crop calendar

CALENDAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Northern Hemisphere				Planting	Planting		Silking	Maturing	Harvesting	Harvesting	Harvesting	
Southern Hemisphere	Silking	Silking	Maturing	Harvesting	Harvesting				Planting	Planting	Planting	



Maize is an annual plant which is geographically adaptable. Planting and harvest times are staggered around the world which helps to act as a price stabiliser.

Maize silks are part of the plant's reproductive system and emerge from the leaves of the ear. Each strand can be pollinated to produce one corn kernel. In the northern hemisphere silking typically takes place around July, while in the southern hemisphere silking usually occurs between January and February..

| Corn

Price influencing factors

Weather can play a major role in determining the price of maize especially during planting and harvesting but can be even more crucial during the silking and maturing stage. Maize is particularly susceptible to drought during silk emergence, just before pollination.

Maize derivatives tend to follow the main maize market. Maize competes against other grains and oilseeds in response to supply and demand factors. In the US, there is strong planting competition with soyabeans and heavy demand from its bio-fuel industry.

Demand for livestock and meat can also affect demand for grains. A rise in global livestock numbers would lead to a growth in demand for feed grains from the animal feed sector. This could encourage a rise in global feed grain production and is particularly important for maize due its large use in the feed industry.

The EU has strict regulations in place regarding the cultivation and use of GM (genetically modified) foods with the exception of maize which is the only GM crop commercially grown in the EU. However, only a small percentage (around 0.6%) of maize grown in the EU is GM. In the US, on the other hand, around 80% of maize produced is GM.



| Corn

Production process

Maize kernels grow around a white, pithy cob to form an 'ear'. In most developed regions, maize is bred to produce a large ear of corn per stalk. However, certain varieties of maize have been bred to produce many developed ears which can be eaten raw. These are known as baby corn.

A wet milling process is used to produce a range of food and feed products, whereby the corn is first cleaned, and then soaked in steep tanks in dilute sulphur dioxide to soften the kernels. The water is evaporated off and nutrients absorbed into the water during the soaking are concentrated to produce corn fermented extractives. The germ from inside the kernel is processed to produce oil and corn germ meal. The rest of the kernel is then screened and separated into bran, starch, and gluten protein.

A dry milling process is used to produce distiller's grains. When the maize is fermented to produce ethanol, around a third of the dry matter can be recovered and further processed in to other feed products. Around a third of the total US maize production is used in the production of ethanol for use as a biofuel.



| Rice

Commodity profile

Rice is one of the most important of the world's cereals. Over half of the world's population subsists in large part on rice, the majority of which is simply boiled then consumed. In addition, broken rice kernels can be used in pet food or ground into flour and used to produce various food items including rice pasta, crisps, cereals and snacks. Rice based products also have several non-food uses in horticultural, livestock, industrial, household and building products.

There are over 40,000 varieties of rice most of which can be roughly divided into two basic types: **long grain (all-purpose) and speciality**.

Long grain rice, when harvested, it is known as rough or paddy rice. Par-boiled (easy-cook) long grain rice is steamed before milling which moves nutrients from the bran into the endosperm and reduces the possibility of overcooking.

Specialty rice varieties include basmati rice used in Indian cuisine, fragrant/jasmine rice, used in Thai and Southeast Asian dishes, and arborio, carnaroli or roma rice, used in risotto and rice puddings. Short/medium grain japonica rice is commonly used in Japanese and Caribbean dishes and can come in a range of colours including red, brown and black. Brewers rice is used to make beer or wine.



| Rice

Production and trade



Globally, around 460m tonnes of milled rice is produced each year. However, **over 90% of all rice is consumed in the countries where it is grown.**

China is the top producer (30% of global output) but exports relatively little (around 0.5% of domestic production). Other major producers include India (22% of world output), Indonesia (8%), Bangladesh (7%) and Vietnam (6%).

Approximately 35m tonnes of rice are exported each year. **Thailand, the biggest exporter**, accounts for around 25% of the world's exports and therefore exerts a major influence on the market. Vietnam is the second largest exporter (20% of global shipments), followed by India (15%), Pakistan (10%) and the US (10%).

In the US, paddy rice futures traded on CBOT are the international benchmark for rice prices.

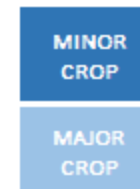
Rice

Commodity crop calendar

CALENDAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
USA						MAJOR CROP	MAJOR CROP	MAJOR CROP	MAJOR CROP	MAJOR CROP		
Thailand						MINOR CROP	MINOR CROP				MAJOR CROP	MAJOR CROP
India				MINOR CROP	MINOR CROP				MAJOR CROP	MAJOR CROP	MAJOR CROP	
Pakistan	MAJOR CROP										MAJOR CROP	MAJOR CROP
Italy/Spain									MAJOR CROP	MAJOR CROP		
Australia			MAJOR CROP	MAJOR CROP	MAJOR CROP							
Brazil	MAJOR CROP	MAJOR CROP	MAJOR CROP	MAJOR CROP	MAJOR CROP							

In the EU, most rice production is concentrated in Italy (51%) and Spain (30%), and most of their output is consumed within the EU. The rest of the EU production is in Greece (7%), Portugal (5%) or France (4%).

The EU produces roughly two-thirds of its total consumption, with the remaining third being imported. All-purpose long grain rice is imported mainly from the US or Thailand, basmati rice originates from India or Pakistan and fragrant jasmine rice also comes from Thailand. Arborio, carnaroli and roma rice varieties are principally sourced from Italy.



| Rice

Price influencing factors

When there are issues with the availability of rice supply, export bans can be put in place by governments in order to control domestic prices. This can have a great effect on international trade as less supply is available in the global market and more demand falls on other suppliers.

The supply and demand situation of wheat and maize can also influence the price of rice as these grains are widely consumed and can be substituted for rice and vice versa.

GM rice products are currently prohibited for trade into the EU. In particular, rice products imported from China must be accompanied by an analytical report to demonstrate that the product does not contain traces of GM rice. This makes the process more costly and can potentially cause disruption to Chinese-sourced imports.

Europe's rice imports are also subject to a number of varying agreements, which determine the customs duties and the volumes that can be imported at a reduced duty.

Since many Asian countries historically price their rice in USD, any **strengthening or weakening of the dollar** will have a direct impact on the value of rice.



| Rice

Production process

Rice is normally grown as an annual crop, although in tropical areas it can survive as a perennial crop and can be ratooned (cut back to stubble and allowed to re-grow).

After rice is harvested, the hard protective husk is removed. Raw rice husk has many uses including animal bedding, mulch and abrasives. The rice husk can also be burnt into ash and used in the steel making, gardening and building industries, or alternatively it can be ground, processed and used as stock feed or pet litter. After the removal of the husk, the rice can be packaged as **brown rice** as it still contains the rice germ and bran layers surrounding the endosperm.

With gentle milling, the rice germ and bran can be separated from the endosperm centre. This polished white starchy endosperm centre is known as **white rice**. Rice bran is often used in cereals and vitamin concentrates due to its high levels of vitamins and minerals, while rice starch can be produced from the endosperm and used as a thickener in sauces and desserts. It is also used in the manufacture of rice syrup. Rice starch makes up 90-93% of the milled dry weight of the endosperm.



| Oats

Commodity profile

Oats are a type of cereal grain grown for both human and animal consumption.

Production of oats is considerably less than other grains. For example, annual oat production amounts to only around 3% of wheat production.

The primary use for oats is in animal feed. For human consumption, they have a variety of uses but are chiefly made into oatmeal and used in porridge and other breakfast cereals or baked goods. Non-food uses include medicinal and cosmetic products.

Oat kernels come in different colours (such as white, grey, tan, yellow and black). **The lighter colours tend to be used for human consumption, whereas the darker colours are mainly used in animal feed.**

In the US, oats are divided into grades 1 to 4, with grade no 1 being the highest quality.



| Oats

Production and trade



Each year, approximately **21m tonnes of oats** are produced globally.

The **major producers are the EU (35% of world output), Russia (21%), Canada (14%), Australia (5%) and the US (5%)**. Major EU producers include Poland, Finland, the UK and Germany.

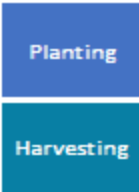
Canada is the top exporter of oats (77% of world exports), whilst the main importer is the US (77% of world imports). Finland is the EU's number one exporter of the grain.

Oat futures are traded on CBOT (Chicago Board of Trade) in the US.

| Oats

Commodity crop calendar

CALENDAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
N. Hemisphere Spring			Planting	Planting			Harvesting	Harvesting	Harvesting			
N. Hemisphere Winter		Planting	Planting	Planting		Harvesting	Harvesting	Harvesting	Harvesting	Harvesting		
Australia				Planting	Planting	Planting				Harvesting	Harvesting	Harvesting



In the northern hemisphere, spring oats are planted in late March to early April and are harvested in late summer to early autumn.

Winter oats are planted in autumn and harvested in mid to late summer.

| Oats

Price influencing factors

Oats are resistant to cold and are largely unaffected by frosts and snow. However, they can go dormant in high summer heat, so for spring oats it is crucial to plant as soon as possible for good yields. There is a lower risk of high temperature dormancy occurring during winter planting.

Oats, which are generally considered to be a minor crop, must compete for planted area against other major grains and oilseeds. In the US for example, oats tend to compete with maize, whose total acreage in the country typically amounts to more than 30 times that of oats.

Demand for livestock and meat can affect demand for grains. A rise in global livestock numbers would lead to a growth in demand for feed grains from the animal feed sector. This could encourage a rise in global feed grain production and is important for the oats market due its large use in the feed industry.

The supply and demand situation of other feed grains can also influence the price of oats as they can be substituted for oats in animal feed and vice versa.



| Oats

Production process

The oats are firstly harvested using a combine harvester or swather (windrower) before being cleaned of any stones, weeds or other materials.

The next stage is hulling. The oats are passed through a spinning machine where they are propelled against the side. The force of the impact separates the hull from the groat (hulled oat).

Once hulled, exposure to the air can cause the oat groats to begin enzymatic activity which causes them to go rancid. To prevent this, they are heated in a kiln (oven).

Next, the groats are separated into different sizes and they then undergo either flaking or milling. In flaking, the groats are passed onto two large rollers which spin in opposite directions. This produces rolled oats. There are two kinds of milling: whole flour milling (where the groats are ground into a fine powder known as whole oat flour), and oat bran milling (where the oat bran is separated from the flour to create oat bran and debranned oat flour).

Oat flour can be used in baking as an alternative to wheat flour.



VEGETABLE OILS

SEASONALITY

| Olive oil

Commodity profile

Olive oil is mainly produced around the Mediterranean basin where the olive tree originated. Globally, around 90% of all olives produced are crushed to extract the oil with the remaining 10% used for table olive production.

Olive oil production accounts for around 2% of total world vegetable oil output. It is widely used in foods such as margarine, spreads, salad dressings and also as a cooking oil. Non food uses include medicinal products, cosmetics and soaps.

- **Virgin olive oil:** Produced using only physical or mechanical means with no chemical treatment.
- **Extra-virgin olive oil:** Deemed to be the highest quality (i.e. least acidic) virgin olive oil. It contains no more than 0.8% acidity (i.e. no more than 0.8g of free fatty acids per 100g) and is judged to have superior taste.
- **Lampante olive oil:** Virgin olive oil with acidity over 3%. It is not suitable for food use unless refined and is mainly used in the industrial market. The high acidity can result from poor quality olives or increased exposure to heat and air.
- **Refined olive oil:** Olive oil which has been chemically treated to reduce the strong olive taste and lower the acidity to around 0.3%.
- **Pomace olive oil:** Obtained from the ground pits and flesh left after crushing using solvents. Not usually sold at retail.



| Olive oil

Production and trade



Approximately 3.39m tonnes of olive oil are produced annually.

The **major producers** are **Spain (44% of world production), Italy (22%) and Greece (12%)**.

The **main exporter** is **Spain, accounting for around 40% of world exports**, followed by Italy (23%) and Tunisia (14%).


The **US and Italy are the biggest importers**, accounting for 39% and 13% of world shipments respectively.

Lampante olive oil is traded on the MFAO (Mercado de Futuros del Aceite de Oliva) in Jaen, Spain.

| Olive oil

Commodity crop calendar

CALENDAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Northern Hemisphere				BLOSSOMING					GREEN OLIVE HARVEST			BLACK OLIVE HARVEST
Southern Hemisphere			GREEN OLIVE HARVEST			BLACK OLIVE HARVEST				BLOSSOMING		



Once mature (after around five to ten years), olive trees can go on to yield fruit for hundreds of years.

In the northern hemisphere (e.g. Spain, Italy, Greece), olive trees blossom around April. Green olives are picked around September or they are left to ripen and harvested as black olives in December.

In the southern hemisphere (e.g. Argentina, Peru, Australia), olive trees blossom around October. Green olives are picked around March or they are left to ripen and harvested as black olives in June.

| Olive oil

Price influencing factors

Olives reach their full size in autumn but may not fully ripen from green to black until late winter. The fruit may have a little more oil at this point but it is risky to wait this long. As winter progresses there is an increasing risk that the fruit will be damaged by frost.

Olive oil is part of the Protected Designation of Origin (PDO) scheme in the EU. It ensures that only products genuinely originating in a certain region are allowed to be labelled as such. Oils produced within this scheme tend to achieve higher prices.

Italy imports oil produced in Greece and Spain and re-exports it labelled as “Produced in Italy”. The origin of the oil is not specified and as such it cannot be labelled as a PDO. The prices of these oils therefore tend to be lower.

Olive oil has received a boost in recent times as consumers became aware of the health benefits attached to its consumption. It is rich in monounsaturated fat which has been identified as having potential health benefits.

If necessary, whenever there is a surplus supply of olive oil in the EU, the European Commission (EC) may decide to offer Private Storage Aid (PSA) to EU producer countries. PSA is used as a tool by the EC to remove any surplus in supply at times when the market price is low in order to try to support the market.



| Olive oil

Production process

Olive trees usually produce their first crop after around five years although it is usually up to ten years before they reach maximum yield.

After the olives are harvested, the first stage of the process is to clean and stem the olives and remove any other waste such as stones and twigs. Under-ripe or green olives can produce bitter oil and overripe olives can produce rancid oil so it is essential the olives are harvested at the right time to produce the best quality oil.

After harvest, the olives are crushed into a paste. Traditionally this was done with millstones, but more advanced machinery is now often used. The paste is then malaxed (softened by kneading) or mixed. This allows the small droplets of oil in the paste to combine and form bigger droplets which aid extraction.

The majority of the oil is then separated from the water and pulp. This was originally done using a press, but is now carried out using a centrifuge in modern facilities.

The remaining substance after extraction is known as pomace and still contains small amounts of oil which can be obtained using chemical solvents.



| Palm oil

Commodity profile

Palm oil is a vegetable oil derived from the pulp of palm fruit.

It is **the world's most produced edible oil and accounts for around half of total exports of oils and fats.**

Palm oil and its derivatives are key ingredients in both food and non-food products. Food uses include frying oils and vegetable fats in margarine and biscuits. Non-food uses include soap, candles, biodiesel, and fatty acids in rubber and glycerol.

Crude palm oil is the unprocessed form of oil taken directly from the fruit. The crude oil is often refined, bleached and deodorised into RBD palm oil, which can then be further fractionated into olein and stearin.

Olein is a liquid used as a cooking oil and is the most in-demand form of palm oil.

Stearin is a solid used in the manufacture of non hydrogenated margarines (which are healthier than the usual hydrogenated (hardened) margarines made from most other vegetable oils), as well as soaps and candles.



| Palm oil

Production and trade

Approximately 50m tonnes of palm oil are produced every year, making palm oil the largest of all vegetable oil markets.

Palm oil can be harvested year-round and is produced primarily in Indonesia and Malaysia due to the tropical climate of the regions.

Indonesia is the largest producer, responsible for approximately 50% of world production. Malaysia is the second largest producer with around 35% of output.

The fruit is mainly processed in the country of origin, and therefore Malaysia and Indonesia export crude palm oil rather than the actual palm fruit. Both countries export roughly equal amounts of palm oil, together accounting for around 90% of global shipments.



| Palm oil

Price influencing factors

Oil palms require lots of sunshine and rain in order to produce the best quality fruit. A lack of sunshine or rain is more likely to affect the oil content of the fruit rather than stunt the overall fruit growth. Palm oil production will be adversely affected nine months after a period of low rainfall.

Production often falls slightly during the month of Ramadan as workers in Indonesia and Malaysia, which are predominantly Islamic countries, take extended leave.

Competitive vegetable oils such as soyabean oil, rapeseed oil and sunflower oil can influence the price of palm oil. Palm oil also tracks the price of crude oil (petroleum) as it can be used as a feedstock for biofuel. However, because of its low crystallisation point (12°C), it only tends to be used as a biofuel in warm climates.

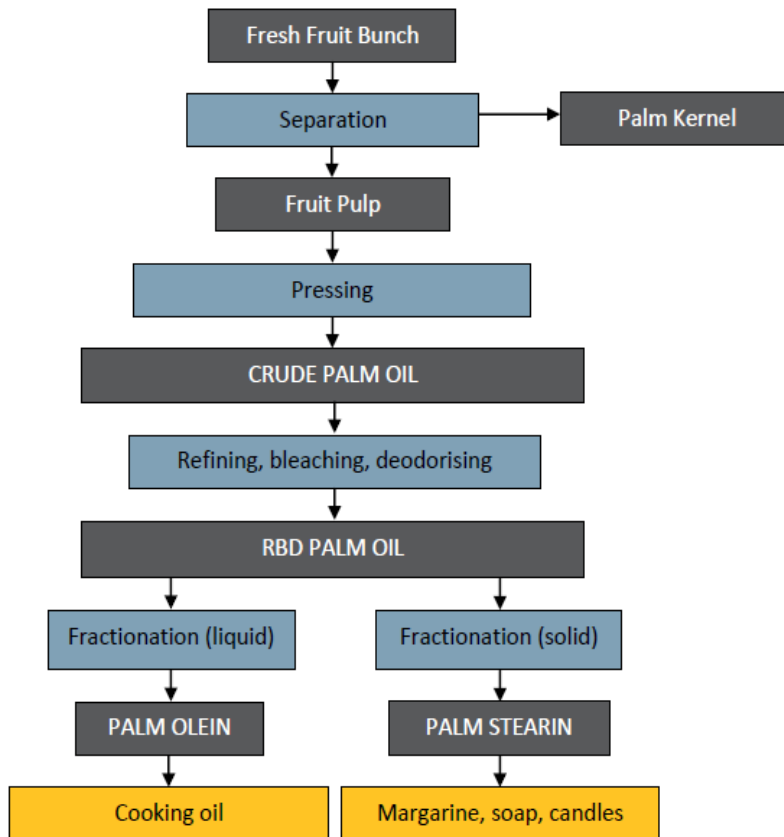
With only two key producing countries (Indonesia and Malaysia), palm oil prices are highly susceptible to the effects of governmental and political influences. For example, export tariffs can make one country's palm oil more or less attractive than its competitor.

Environmental NGOs consider the expansion of palm oil plantations to be the biggest cause of deforestation in Southeast Asia. In Indonesia and Malaysia, it is proving increasingly difficult to get the permission needed to plant new oil palms on unused, suitable land. This may exert some upward pressure on prices in the future.



| Palm oil

Production process



Once planted, it takes approximately five years for palm trees to bear fruit that is of sufficiently high quality to extract oil. However, once mature, the economic life of an oil palm tree can be between 25 and 30 years.

Oil palms yield, on average, between 3.5 and 5 tonnes of palm oil per hectare, which is between 5 and 10 times the yield of other oilseed crops such as soyabeans, rapeseed or sunflowers. Each tree bears 8-12 fruit bunches annually, each of which contains somewhere between 1000 and 3000 fruits. Palm oil is extracted from the pulped flesh of the fruit bunches, whilst palm kernel oil is extracted from the kernel or seed within the fruit. **For every 100 kg of fruit bunches, typically 22 kg of palm oil and 1.6 kg of palm kernel oil can be extracted.**

There are two methods for extracting oil from the palm fruit flesh. Chemical extraction involves the use of solvents, and is quicker and more effective than the traditional pressing method. The kernel can also be crushed to extract palm kernel oil and meal (used in feed).

| Soybean oil

Commodity profile

Soybean oil is a bland, odourless vegetable oil extracted from soyabeans. It is the second most produced edible oil, after palm oil, accounting for around a quarter of the world's vegetable oil production. Soyabean oil is primarily used in the food industry for products such as frying oil, margarine, bread, biscuits, ice cream, mayonnaise and salad dressings. Non-food usage includes items such as paints, biodiesel, candles and soaps.

- **Crude soyabean oil:** Soyabean oil in its most natural form, before it has been processed.
- **Degummed soyabean oil:** Soyabean oil which has been removed of any gummy substances or impurities.
- **Refined, bleached and deodorised (RBD) oil:** Soyabean oil which has been treated to improve shelf life and appearance, and remove any unpleasant odours.
- **Hardened soyabean oil:** Soyabean oil which has been converted into a semi-solid fat in order to ease larger scale use in the food industry, permit the use of higher temperatures during cooking and improve the oil's shelf-life.



| Soybean oil

Production and trade



World production of soyabean oil amounts to around **44m tonnes annually**.

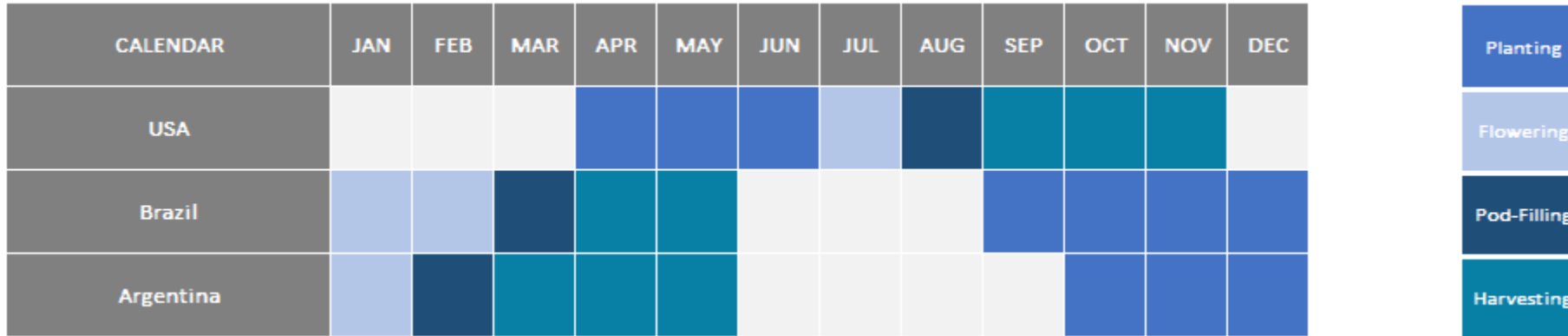
Historically the US has always been the world's largest producer, however, since 2011 China have overtaken the US and account for approximately 26% of global output. The US accounts for 20% of global output. Other major producers include Brazil (16%) and Argentina (16%).

The main trading centre for soyabeans is CBOT (Chicago Board of Trade) in the US but other important trading centres are in China, Japan, Brazil and Argentina. European prices tend to be driven by CBOT.

World exports of soyabean oil amount to around 9m tonnes annually. **Argentina is by far the top exporter, accounting for approximately half of all global exports**, with Brazil (16%) and the US (10%) also playing a large role.

| Soybean oil

Commodity crop calendar



In August, soybeans in the US enter a key yield-determining phase known as pod-filling. The crop tends to be harvested between September and November.

In South America, pod-filling usually takes place around February while the harvest falls between March and May.

| Soybean oil

Price influencing factors

If the **price of competitive crops such as maize, wheat or cotton** is comparatively higher at the time of planting, soyabean acreage may be reduced, resulting in a decline in potential soyabean output. This tends to subsequently support the price of soyabean oil.

Poor weather can have a detrimental effect on output. Late season frosts can reduce bean size and oil levels, particularly if they occur before the plant has reached full maturity. Dry conditions during the flowering and pod-filling period can also cause yields to fall.

The prices of competitive vegetable oils such as palm oil, rapeseed oil and sunflower oil can influence the price of soyabean oil. In addition, soyabean oil is influenced by the price of crude oil as it can be used as a feedstock for biodiesel.

An increase in global livestock numbers usually leads to a growth in demand for soyabean meal from the feed sector and encourages a rise in global soyabean production and crushing. This yields more soyabean oil as a by-product and may exert a downward pressure on soyabean oil prices.

The EU has strict regulations in place regarding the cultivation and use of GM (genetically modified) foods. This can potentially cause disruption to domestic soyabean oil supplies as many producing countries have increased plantings of GM soyabeans. Indeed, **nearly all soyabeans grown in the US are now GM.**



| Soybean oil

Production process

Soybeans are crushed using an expeller press, which typically extracts about two thirds of the seed's oil. The remaining oil can be obtained using a technique called solvent extraction. The chemical used in this process is called hexane. Crushed soybeans yield around 18%, by weight, of oil.

The oil extraction process produces an oil cake as a by-product, which can be ground to make soyabean meal, a protein rich flour typically used in animal feed.

After cleaning, crude soyabean oil undergoes a process called degumming which removes the gums and other contaminants. An important by-product from this process is soya lecithin which is used as an emulsifier in many products.

The oil is then neutralised to remove any free fatty acids. This process yields acid oil as a by-product, a key ingredient used in the manufacture of soaps and detergents.

Finally the soyabean oil is bleached and deodorised in order to improve the general appearance and remove any unpleasant odours.

After refining, soyabean oil can be hardened (hydrogenated) to ease large scale use.



| Rapeseed oil

Commodity profile

Rapeseed oil, also known as canola oil, is a vegetable oil extracted from rapeseed. It is the **third most produced edible oil**, after palm and soyabean oil, accounting for around 1/8th of the world's vegetable oil production. Rapeseed oil is primarily used in the food industry for products such as frying oil, margarine and salad dressings. Non-food usage includes items such as biodiesel, lubricants, candles, printer inks and cosmetics.

- **Crude rapeseed oil:** Rapeseed oil in its most natural form, before it has been processed.
- **Degummed rapeseed oil:** Rapeseed oil which has been removed of any gummy substances or impurities.
- **Refined, bleached and deodorised (RBD) oil:** Rapeseed oil which has been treated to improve shelf life and appearance and remove any unpleasant odours.
- **Hardened rapeseed oil:** Rapeseed oil which has been converted into a semi-solid fat in order to ease larger scale use in the food industry, permit the use of higher temperatures during cooking and improve the oil's shelf-life.

Rapeseed oil is naturally high in a substance called erucic acid, which can be harmful if consumed by humans or animals. Canola oil is a special low erucic acid cultivar of rapeseed bred naturally from rapeseed in Canada in the early 1970s. Canola stands for Canada Oil Low Acid. Today however the term "canola" is used worldwide to refer to varieties of rapeseed oil with 2% or less erucic acid in the oil. Erucic acid traditionally makes up 40-50% of the rapeseed oil content.



| Rapeseed oil

Production and trade



The main producers of rapeseed oil are the EU (39% of global output), followed by China (23%) and Canada (11%).

World production of rapeseed oil amounts to around 23m tonnes annually.

Canada is by far the top exporter of rapeseed oil, accounting for two thirds of all global exports.

European prices for rapeseed oil tend to be driven by the price of rapeseed on LIFFE, Paris. Rapeseed is also traded on the ICE Winnipeg exchange, as well as in Australia.

| Rapeseed oil

Commodity crop calendar

CALENDAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
EU							Harvesting	Planting	Planting	Planting		
Canada (Spring)			Planting						Harvesting	Harvesting		
Canada (Winter)						Harvesting			Planting	Planting		
China				Harvesting	Harvesting				Planting	Planting		
Australia					Planting	Planting					Harvesting	Harvesting

Planting

Harvesting

Canada produces two types of rapeseed, known as spring and winter canola. Winter canola is comparatively higher yielding. It is planted in September and harvested in June while spring canola is sown in March and harvested between September and October.

| Rapeseed oil

Price influencing factors

Poor weather can have a detrimental effect on output in producing countries. Frosts which occur before the plant has reached full maturity can reduce seed size and oil levels. Dry conditions shortly before harvesting can also cause yields to diminish.

Competitive vegetable oils such as palm oil, soyabean oil and sunflower oil all influence the price of rapeseed oil due to the high degree of substitutability. In addition, rapeseed oil is affected by crude oil as rapeseed oil can be used as a feedstock for biodiesel, particularly in the EU where around 70% of rapeseed oil produced is used to make biodiesel.

In many countries which produce vegetable oil, it is mandatory for a fixed percentage of biofuel to be blended into fuels prior to retail sales. Whenever biofuel mandates are altered in these countries, such as Canada or the EU, this may affect both the global availability of, and also the demand for, rapeseed oil, and subsequently influence prices.



| Rapeseed oil

Production process

Crushed rapeseed yields around 40%, by weight, of oil. Firstly the rapeseed is cleaned and treated using mild heat to ensure the seeds contain the right moisture levels. The seeds are then flaked (ruptured) and further heated to ensure optimum oil extraction.

The cooked seed flakes are passed through an expeller press which uses friction and continuous pressure from its screw drives in order to extract oil. Expeller pressing usually only manages to extract about two thirds of the oil from the seed. Oil producing companies typically use a technique called solvent extraction to extract a further 30% of the seed's oil. The chemical used in this process is called hexane.

The oil extraction process produces an oil cake as a by-product, which can be ground to make rapeseed meal, typically used in animal feed.

Crude rapeseed oil can be degummed to remove impurities and then refined, bleached and deodorised. Refining removes impurities from the oil by water precipitation, bleaching removes its unattractive colour by passing the oil through clay, and deodorisation uses steam distillation to remove any adverse odour or taste.



| Sunflower oil

Commodity profile

The sunflower plant produces seeds which can be consumed whole, although the majority (around 90%) are crushed to extract oil.

Sunflower oil makes up around 8% of the vegetable oils market. It has a number of food uses such as frying oil and margarine and is often used as the main oil in foods such as biscuits and crisps.

In terms of non-food uses, high oleic sunflower oil is the only variety of sunflower oil with a shelf-life sufficient for use in cosmetic products.

Sunflower oil contains three types of fatty acid: saturated (palmitic and stearic), polyunsaturated (linoleic) and monounsaturated (oleic). **Healthier oils tend to be higher in monounsaturated and polyunsaturated fats and lower in saturated fats.** The composition of sunflower oil can range between 4-9% palmitic acid, 1-7% stearic acid, 48-74% linoleic acid and 14-40% oleic acid. Specific types of sunflower oil are:

- **High linoleic sunflower oil:** Approx. 20% oleic, 69% linoleic and 11% palmitic/stearic acid
- **High oleic sunflower oil:** Approx. 85% oleic, 5% linoleic and 10% palmitic/stearic acid
- **Mid-oleic sunflower oil:** Approx. 65% oleic, 26% linoleic and 9% palmitic/stearic acid



| Sunflower oil

Production and trade



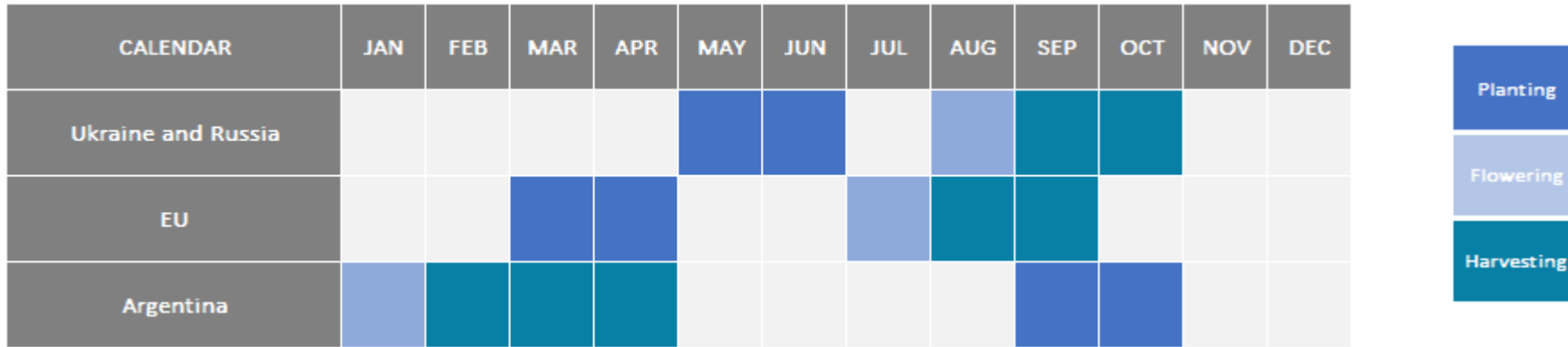
Approximately 14 million metric tonnes of sunflower oil are produced annually, with **the majority of production coming from Ukraine (24% of world output), Russia (20%), the EU (primarily France, Spain, Romania, Hungary and Netherlands; 19%) and Argentina (10%).**

The **Ukraine and Argentina are the main exporting countries**, accounting for approximately **46% and 13% of global trade respectively.**

The main trading centre in Europe is Rotterdam.

| Sunflower oil

Commodity crop calendar



Sunflower seeds are planted in late spring/early summer, flowering approximately two to three months later.

They are normally harvested in autumn. Autumn frosts can assist in the drying out of the crops after a growing season of approximately 120 days.

| Sunflower oil

Price influencing factors

Sunflowers require lots of sunshine in order to grow. Although in comparison to other grains they appear to be relatively drought tolerant, poor sunshine and drought conditions can affect the growth of sunflowers, leading to supply shortages.

Sunflowers are tolerant to extreme temperatures, particularly low temperatures, although the **oil percentage drastically reduces if the seeds are planted during a period of high temperature.**

Competitive vegetable oils such as soyabean oil, rapeseed oil and palm oil can influence the price of sunflower oil. Equally, all vegetable oils track the price of crude oil as they can be used as a feedstock for biodiesel.

Although sunflower seed oil is normally considered too expensive to be used as biodiesel, **waste sunflower oil from cooking can be converted economically into biodiesel.**

Government-imposed trade barriers can influence the availability of sunflower seeds for export. In the past, Argentina and Russia have both imposed trade bans in order to protect their domestic stocks.



| Sunflower oil

Production process

The general steps for extracting oil are seed preparation and cleaning, dehulling, pressing of the seed, degumming, refining, bleaching, and finally deodorising.

After being cleaned and dehulled, sunflower seeds are crushed using an expeller press that exerts pressure on the seeds in order to extract oil. Crushed sunflower seeds typically yield around 40%, by weight, of oil.

After extraction of the oil, the by-product (sunflower seed cake) can be ground to produce sunflower seed meal which can be used in animal feed.

Waxes and gums are removed from the oil (degummed) in order to ensure that the oil remains liquid in cold temperatures during refrigeration. The oil is then refined, bleached and deodorised. Refining removes impurities from the oil by water precipitation, bleaching removes its unattractive colour by passing the oil through clay, and deodorisation uses steam distillation to remove any adverse odour or taste.

The refined sunflower oil can be hardened (hydrogenated) to ease large scale use.



SOFTS

| Coffee

Commodity profile

Coffee beans are the seeds of the coffee plant, a shrub native to tropical Africa. In terms of value they are the **second most commonly traded commodity after crude oil** and are mainly used to produce coffee, one of the world's most popular hot beverages. A small minority of coffee beans are also used for flavouring in confectionery.

There are two main varieties of coffee - **Arabica** (about 60% of world coffee production) and **Robusta** (40%).

Arabica coffee: This cultivar has a mellow flavour, usually described as sweet, round, slightly acidic and chocolaty with pleasant bitter notes. The cultivation of **Arabica is more cost demanding than Robusta which is reflected in its higher market price**. The caffeine content varies from 0.8% to 1.7%.

Robusta coffee: This variety of coffee has a more bitter flavour and is widely considered to be inferior to Arabica in its taste and aroma. **Most of this variety is used for low-priced and instant coffees**. The caffeine content varies from 1.6% to 2.8%.



| Coffee

Production and trade

Global production of coffee beans is around 130m 60-kg bags each year.

Arabica production amounts to around 80m 60-kg bags. **Brazil and Colombia produce the majority of Arabica coffee** making up about **44% and 14% respectively** of global production. In Brazil however, the majority of Arabica produced is grown at lower altitudes and is mechanically harvested and therefore considered to be of lesser quality. For that reason, **Colombia is the major supplier of high-quality Arabica beans**. Other important Arabica producers are Ethiopia (5%), Guatemala (5%), Peru (5%) and Honduras (4%).

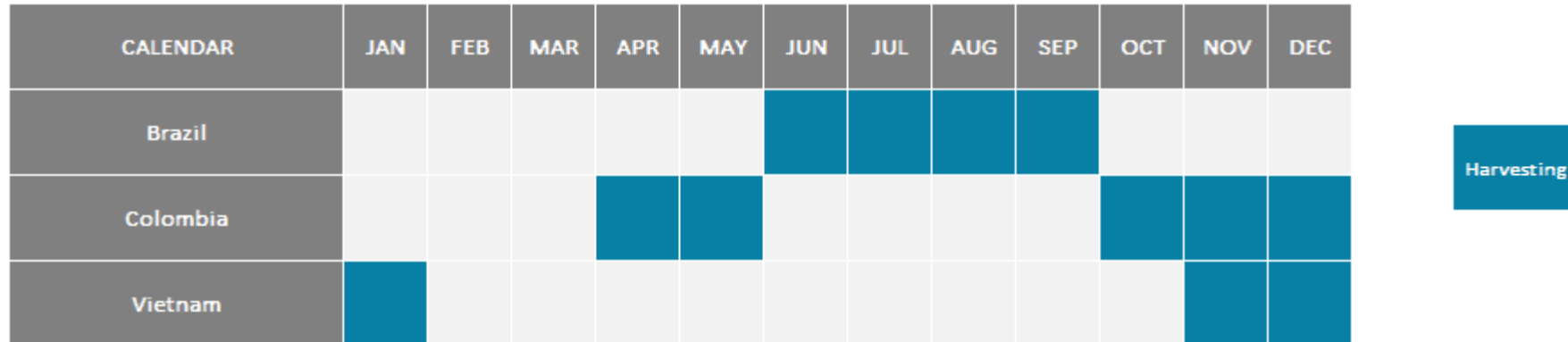
World Robusta output is about 50m 60-kg bags a year. **Leaders in the Robusta market are Vietnam, Brazil and Indonesia** accounting for around **35%, 23% and 16% respectively** of the world's Robusta production.

Brazil is the largest exporter of coffee (33% of world exports) followed by Vietnam (16%) and Colombia (7%). Two major trading centres for coffee are the ICE (for Arabica) in New York and LIFFE (for Robusta) in London.



| Coffee

Commodity crop calendar



The **number of times coffee can be harvested during the year varies and depends mainly on the climate** in which it is grown. Regions with latitudes of 16-24°, where the seasons are divided into wet and dry, provide one harvesting season. At equatorial regions such as Colombia with latitudes lower than 10° coffee is usually harvested twice.

Arabica coffee in Brazil follows a two year (biennial) cycle of alternating higher and lower productivity. The country produces around 20% more coffee in a higher yielding year of its Arabica production cycle.

If Arabica and Robusta are grown in the same region, **Arabica will generally be harvested later in the season** as it requires higher altitudes and colder climates.

| Coffee

Price influencing factors

Coffee crops are susceptible to unfavourable weather. Arabica beans can be damaged by harmful frost in Brazil during the period of May-July. Similarly, Robusta can be affected by floods or droughts in Southeast Asia.

Both varieties, **Arabica and Robusta, show a high degree of price correlation.** If Arabica is affected by frosts in Brazil and its price on the global market rises, the price of the Robusta will often rise as well. This is **due to a substitution effect** since an increased price for Arabica may spur demand for cheaper Robusta and vice versa.

In comparison to Robusta, however, **Arabica coffee is more exposed to fertilizer price fluctuations** as it **requires more intensive cultivation.**

The **price of coffee is heavily influenced by transportation costs** since it is grown in remote areas of the world and largely consumed elsewhere.

As the middle class population continues to expand in emerging markets such as **China and India**, there has been a **growing demand for “gourmet” Arabica coffee** in these regions.



| Coffee

Production process

Coffee plants begin producing fruit after three to four years. They need another three years however to reach full fruit production. The life of a coffee tree can exceed 100 years. Arabica coffee is usually cultivated in milder tropical regions of America, Africa and Asia at higher altitudes. Robusta on the other hand, can easily thrive in harsh environments such as tropical rainforests.

When the fruit of the coffee tree is ripe, it is usually picked by hand, although it can be harvested mechanically. It is then de-fruited, dried, sorted, and sometimes also aged, before it is roasted to give it its characteristic aroma and brown colour.

Depending on the temperature and time during the roasting, coffee beans vary in colour and taste. The more intensive the roasting process the darker the colour of coffee. The length of the roasting also affects coffee's taste. Longer roasting increases coffee's bitterness but decreases its acidity.

Coffee can also come decaffeinated. The most common method to achieve this involves steaming, soaking and then rinsing the coffee beans in either methylene chloride or ethyl acetate.



| Cocoa

Commodity profile

Cocoa beans are the fermented and dried seeds of the cocoa tree.

When ground, **the beans yield two key ingredients of chocolate: cocoa butter**, which gives chocolate its smooth texture, and **cocoa powder**, used to add a chocolate flavour and colour to foods.

Over 95% of cocoa butter is used in chocolate, with most of the remainder used by the cosmetics industry. Cocoa powder is used in flavourings, baking products and beverages.

- **Cocoa bean:** The fermented and dried seed of the cocoa tree, from which cocoa butter and powder are extracted.
- **Cocoa butter:** Derived from cocoa beans. A key ingredient used to make chocolate melt in the mouth.
- **Cocoa powder:** Also obtained from cocoa beans. Used to add a chocolate flavour to chocolate products.



| Cocoa

Production and trade



Around **70%** of cocoa is grown in West Africa, with **Ivory Coast** alone producing about a third of the world crop.

Ghana and **Indonesia** are also major producers responsible for about **21%** and **14%** of the world's supply respectively.

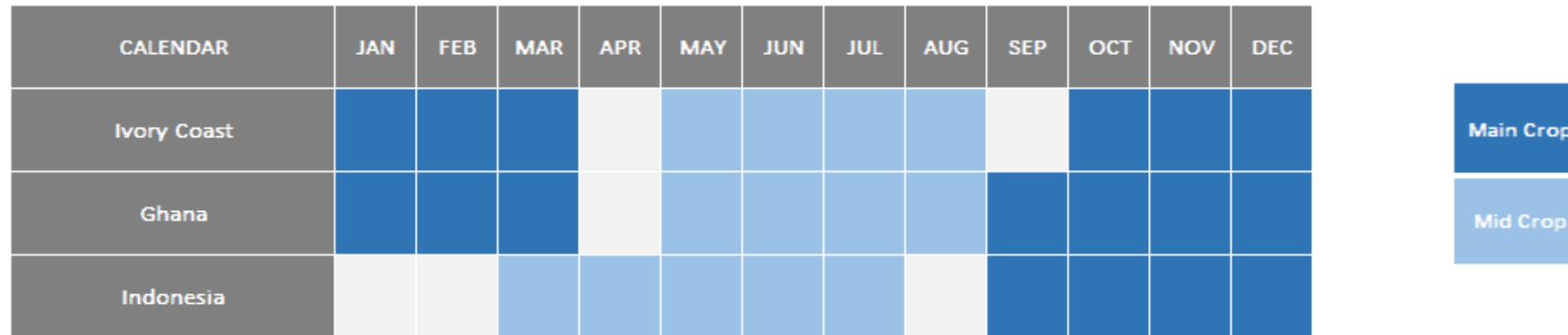
Annual global cocoa bean production is around 4m tonnes.

Cocoa beans are mainly traded on two world exchanges, LIFFE in London and the Intercontinental Commodity Exchange (ICE) in New York.

The **Ivory Coast** is the **biggest exporter of cocoa**, exporting nearly 75% of their production annually, around 1m tonnes.

| Cocoa

Commodity crop calendar



Unlike many other crops, the cocoa harvest is not confined to one short period. **Each cocoa pod ripens at different times and the harvest is therefore spread over several months twice a year.**

The **timing of the harvest varies depending on the producing country's climate and the variety of cocoa.** In countries with a pronounced wet and dry season the main crop occurs five to six months after the start of the wet season.

The percentage of crop harvested in the main crop season and the mid-crop season varies from country to country. The biggest differential between main and mid crop harvests is in Africa where the mid-crop accounts for only 15%-20% of the total harvest. In other countries the differential is not as large.

| Cocoa

Price influencing factors

Cocoa trees are usually grown close to the Equator in mild and humid climates. Regular rainfall is essential as the trees are highly sensitive to drought. They are also very susceptible to attacks by insects and disease. Due to low soil fertility in many regions of Africa, **regular applications of fertiliser are required in order to achieve optimum yields.**

Ivory Coast has a long history of political instability. This can potentially pose a problem for the international market as outbreaks of war can cause disruption to production and transportation within the country.

The **price of cocoa is heavily influenced by transportation costs** since it is grown in remote areas of the world and largely processed and consumed elsewhere. The strength of the USD also has an effect on the value of cocoa in many countries as the major cocoa producers largely trade in USD.

In **emerging markets such as Asia, with its growing middle class population, consumption of chocolate products (in particular those made from cocoa powder) is on the rise.** If this increased demand for cocoa is not met with a growth in global production, this could put pressure on the world's cocoa supplies and help to keep prices supported.

Cocoa butter and cocoa powder are both ground from cocoa beans and sold separately. If more cocoa is ground to satisfy higher demand for one of these derivatives, this can lead to ample supplies of the other derivative if it is not also met with increased demand.



| Cocoa

Production process

Cocoa trees typically grow to 12 metres in height and produce approximately 30 usable fruit pods a year, each around 30cm long. Together these pods yield enough beans to make around one kilogram of dark chocolate.

When the pods are ripe, they are carefully removed from the tree using a machete. This must be done by hand as machines can cause damage to flowers or unripe pods.

After the beans have been removed from the pod, they are fermented for up to seven days and then dried for one to two weeks. The beans are then cleaned and shelled to reveal the nib. The husk, which makes up about 20% of the weight of the cocoa bean, can be used as a fertiliser or fuel.

The remaining nibs are roasted and then ground to produce cocoa liquor/mass (cocoa powder particles suspended in cocoa butter). The cocoa liquor is pressed to extract cocoa butter leaving behind the solid material called cocoa cake. This is broken up and pulverised to form cocoa powder. **Cocoa powder constitutes about 40% of the total weight of the cocoa bean. Cocoa butter also represents 40% of the bean.**



| Sugar

Commodity profile

Sugar is the **most commonly used sweetener in the world**. It is extracted commercially mainly from **sugar beet and sugar cane**. Sugar beet is produced predominantly in temperate climates and sugar cane is produced in tropical climates.

Sugar is used widely in confectionery and desserts. It is used for sweetening and can act as a preservative at sufficiently high concentrations. Sugar is a key ingredient in a range of foods such as biscuits, cakes, confectionery, jams and ice cream.

- **White refined sugar:** Refined sugar is made by dissolving raw sugar, purifying with phosphoric acid and then filtering through activated carbon. It is processed into granulated sugar which has been dried to prevent clumping.
- **Confectionery grade:** Produced by grinding refined sugar to a fine powder. Icing sugar is produced in the same way. A small amount of anti-caking agent may be added to prevent clumping.



| Sugar

Production and trade



The main producers of sugar in the world are **Brazil (21% of global output)**, **India (16%)**, the **EU (mainly France, Germany and Poland, 10%)**, China (7%), Thailand (6%) and the US (4%). World production amounts to 170m tonnes per annum.

Brazil is by far the largest sugar exporter – it accounts for **42% of world exports**. It is followed by Thailand (15%), Australia (5%), India (4%) and the EU (4%).

Sugar is traded on a range of futures exchanges across the globe. Chief amongst these are LIFFE in London and ICE in New York. However, both the EU and the US have protected their domestic sugar markets which means that sugar prices within these markets are not directly related to the pricing seen on these futures markets.

| Sugar

Commodity crop calendar

CALENDAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Brazil - Sugar Cane					Planting	Planting	Planting	Planting	Planting	Planting		
Australia - Sugar Cane	Harvest						Harvest	Harvest	Harvest	Harvest	Harvest	Harvest
EU - Sugar Beet			Planting	Planting	Planting				Harvest	Harvest	Harvest	Harvest

The **sugar cane rootstock is left as part of the harvesting process** and so **does not need to be replanted on a frequent basis**. The sugar content of sugar cane is highest at the base of the harvested cane and so the placement of the cut is crucial in obtaining the highest sugar yield. Sugar cane can be harvested by hand or by machine. Machine cut sugar cane must be processed more rapidly as a higher degree of damage is done to the sugar cane during harvesting.

Sugar beet is a root vegetable and is planted and harvested annually. If left un-harvested, the root produces flowers and seeds in the next season decreasing the size of the root.

Sugar cane contains higher concentrations of sugar than sugar beet and it is therefore, where sugar cane is grown, cheaper and easier to produce sugar from sugar cane. **Without the production of sugar beet**, from the areas of the world where sugar cane is not produced, however, **there would be immense strain on global sugar supplies**, and consequently, the world price of sugar would be pushed higher.

| Sugar

Price influencing factors

The EU sugar market is part of the Common Agricultural Policy. As such, **production is subsidised and also subject to annual quotas**. Historically there have also been a range of other market interventions, including reference prices and import and export quotas, which have **combined to increase the cost of sugar within the EU above the world price**.

Since 2007, the EU sugar market has been in a process of reform, with reductions in reference price and liberalisation of some import and export rules, with the **aim of bringing the EU sugar price more in line with the rest of the world**.

Sugar cane and beet can be fermented to produce ethanol, an alternative fuel to petrol. This affects the amount of processed sugar from the main producing countries, particularly Brazil, as either sugar or ethanol can be produced but not both from the same crop. **Between 50-60% of Brazil's sugar cane crop is typically used to produce ethanol**.

Molasses and sugar beet pulp are by-products of the sugar refining process, and are used for a range of purposes such as animal feed, paper, yeast and amino acid production. These by-products can also **be used in the generation of alcohols including ethanol**.



| Sugar

Production process

Sugar usually refers to sucrose, also called table sugar. It is produced from plants, chiefly sugar cane and beet.

Sugar cane is harvested by cutting the canes just above ground level. The roots are left and will grow new stalks or canes by the next harvest. The rootstock can be reused for up to ten seasons before it is replanted.

After harvesting, the cane is crushed to extract the juice which contains 10-20% sucrose. The juice is then sieved to remove impurities before being mixed with lime which raises the acidity of the solution and encourages other impurities to precipitate out. The solution is then heated and centrifuged repeatedly to obtain sugar. The liquid remaining after the final centrifuge is known as molasses.

Sugar beet is a root vegetable with a high sucrose content tuber. It is harvested annually and the beets are then washed and sliced into thin strips which are soaked in water to extract the sugar. The sugar solution is then limed to remove impurities and heated to evaporate the water and leave sugar crystals. Molasses is again produced as a by-product in the sugar refining process.



NUTS

SEASONALITY

| Hazelnuts

Commodity profile

Hazelnuts (also known as filberts or cob nuts), are the nuts of the Filbert or Common Hazel trees, which are native to Europe and Western Asia.

Hazelnuts are sold in a variety of ways, as whole nuts both in and out of shell, as well as broken or ground into a flour or paste.

Processed hazelnuts are used extensively in the confectionery and baking industries, for instance to make praline (a combination of sugar and hazelnuts) and mixed with chocolate to make spreads.

Turkish hazelnuts are categorized into two main types: **Levant (Ordu)** and **Giresun**. Levant are the most common variety, grown almost everywhere where hazelnuts are produced. Giresun are larger, fatter hazelnuts grown only in a very small area in Turkey.

In Italy, the highest quality hazelnut is **Tonda Gentile**. This tends to be grown in the part of Piedmont most famous for its hazelnuts..



| Hazelnuts

Production and trade



Hazelnuts are sold on either an in-shell or shelled basis. In-shell volumes are typically twice those of the shelled hazelnuts.

Global production of hazelnuts (in-shell) ranges between approximately 0.6-1.0m tonnes each year.

By far the largest grower of hazelnuts in the world is **Turkey (77% of global output)** followed by the EU (15%), the US (4%) and Azerbaijan (3%).

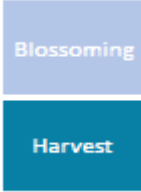
Italy is the main producer of hazelnuts within the EU (81% of EU production), followed by Spain (11%), France (4%), Poland (2%) and Greece (2%).

Turkey is also the world's main exporter, accounting for around 83% of total world shipments. Turkey mainly exports shelled hazelnuts and processed products. **The US is a key supplier of in-shell hazelnuts to the EU.**

| Hazelnuts

Commodity crop calendar

CALENDAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Northern Hemisphere	Blossoming	Blossoming						Harvest	Harvest	Harvest		Blossoming
Southern Hemisphere		Harvest	Harvest	Harvest		Blossoming	Blossoming	Blossoming				



Blossoming and pollination occurs in winter in the northern hemisphere (where the vast majority of commercial hazelnuts are grown).

A mix of different varieties tend to be grown side by side since hazelnut cultivars cannot typically self pollinate and so require cross-pollination.

Wind carries the pollen from catkins (male flowers) to small red female flowers, where pollination occurs. The flower then remains inactive until spring at which point the nuts start to develop.

Hazelnuts in the northern hemisphere are harvested between August and October.

| Hazelnuts

Price influencing factors

Unlike most other fruiting trees, hazelnut blossoming and pollination occurs in the middle of winter and this is a key period when drought or frosts can damage a whole year's supply.

Relatively large hazelnut crops are often followed by comparatively smaller ones. This is because the trees need to recover from large yielding years with a season of lower output. Such biennial cropping is quite common for tree nuts and fruit. Large crops tend to be called “on-years”, whereas the subsequent smaller crops are known as “off-years”.

Hazelnuts, once harvested, can be stored for a number of years, with the nuts developing a sweeter flavour over time. Grower co-operatives therefore tend to stockpile large harvests and release them slowly to prevent a sudden fall in prices.

As Turkey is by far the biggest global producer of hazelnuts, Turkish prices largely set the benchmark for those from the rest of the world.



| Hazelnuts

Production process

Hazelnut trees take about six years to develop to a stage where they are ready for commercial production. Well managed orchards should remain active for about 40 years or more.

Hazelnuts are harvested annually in mid-autumn. Under commercial conditions most growers wait for the nuts to drop on their own, rather than use equipment to shake them from the tree.

The growers then harvest the nuts using a machine that picks them up from the ground and separates them from the leaves. They are usually washed and dried, then sorted by size.

Some nuts are processed to remove their shells while others (particularly those from the US) are sold on an in-shell basis.

Roasting hazelnuts alters their nutritional value (reducing the amount of omega-3 fatty acids), but significantly extends their shelf life and many say, improves on their raw flavour. By blanching shelled hazelnuts, processors can remove the darker skin thereby creating a paler nut.



| Peanuts

Commodity profile

Peanuts, or groundnuts, are a legume native to central South America which are **often sold whole (usually shelled and then roasted or salted) direct to consumers**. They are high in nutritional value, providing over 30 essential nutrients and are a major ingredient in mixed nuts due to their low cost in comparison to other nuts.

Peanuts can also be processed into peanut butter and peanut oil. Non food uses include bleach, paints, dyes, medicines and cosmetics.

Peanuts are sold by a count per ounce rather than by their individual weight. For example, if it takes 40-50 peanuts to make up an ounce the price is quoted as 40/50, so the higher the count the smaller the peanuts.

There are numerous varieties of peanuts but the four major cultivated groups are:

- **Runner:** Increasingly popular due to their high yields, good flavour and better roasting characteristics. They tend to be the preferred choice for manufacturers of peanut butter with 54% of all runner peanuts being used for this product.
- **Virginia:** Larger than most varieties and popular for processing, salting, roasting and confectionary.
- **Valencia:** Coarse and sweet, they are often roasted and are also the preferred variety for boiled peanuts in the Southern United States.
- **Spanish:** These have a higher oil content, and therefore are primarily used for peanut oil, candies and peanut butter.



| Peanuts

Production and trade



Globally, 26m tonnes of peanuts are produced each year.

China is the world's top producer accounting for 40% of global supply each year. India is the second largest producer (15%), followed by Nigeria (8%) and the US (5%).

Global peanut exports amount to just over 1.7m tonnes per annum. **Argentina is the world's top exporter (26% of world exports)**. China is the second largest exporter (20%), then India (17%) and the US (13%).

The main EU trading centre is Rotterdam.

| Peanuts

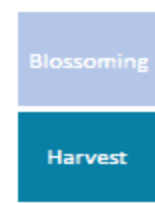
Commodity crop calendar

CALENDAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
USA				Blossoming	Blossoming				Harvest	Harvest	Harvest	
China				Blossoming	Blossoming				Harvest	Harvest	Harvest	
India (Summer)					Blossoming	Blossoming	Blossoming		Harvest	Harvest	Harvest	Harvest
India (Winter)			Harvest	Harvest					Blossoming	Blossoming	Blossoming	
Southern Hemisphere			Harvest	Harvest	Harvest					Blossoming	Blossoming	

In the US and China, peanuts are traditionally harvested from mid September to mid November, whilst in India, peanuts are harvested from September to mid December for the summer crop, and from the beginning of March until the end of April for the winter crop.

The nuts are best stored in the shell as their quality quickly deteriorates after shelling. Unshelled peanuts can be stored for approximately nine months if refrigerated and will keep indefinitely if frozen.

Shelled peanuts, on the other hand, will keep for only three months if refrigerated but still indefinitely if frozen.



| Peanuts

Price influencing factors

Cold weather, in particular frosts in major producing areas, can severely impact on the yields of peanuts. Should frosts occur, it is likely the peanut plant will die and harvests will be much lower, driving the price up if demand remains strong from the markets in Europe and East Asia.

Consumer concerns regarding nutritious foods are a significant factor affecting peanuts. Due to their high calorie and fat content, peanuts have become less desirable as consumers search for healthier options. The demand for peanuts has therefore lowered in some regions.

Peanuts are susceptible to contamination during both growth and storage. Poor storage can result in infection, and the release of a toxic substance called aflatoxin. Contamination of large quantities of peanuts can cause the price to rise. However, the industry has many practices in place designed to prevent this.

In order to maximise yields, fertilisers containing phosphorus and potassium are required, and depending on the price of these fertilisers, the price of peanuts can be driven up or down. As peanuts are legumes they can capture nitrogen directly in nodules on their roots and therefore do not need additional nitrogen-containing fertilisers.

The peanut crop has to compete for planted acreage with other crops such as cotton, maize and soyabeans. Compared to soyabeans, peanuts are more resistant to dry conditions. However, production costs are almost three times higher for peanuts than for soyabeans.



| Peanuts

Production process

Peanuts differ from most crops because they flower above ground but fruit below the ground. Peanut seeds are planted two inches into the soil and sprout after 10 days, provided the soil is warm. The flower blooms around 30 days after the seed has sprouted and 30-40 days after this, shoots (called pegs) form and enter the soil. Once the crop has matured (110-170 days from planting), and when the soil is neither too wet nor too dry, the peanuts are harvested.

At the time of harvesting, peanuts contain 25%-50% moisture and must be sun-dried to 10% moisture in the field before being separated from the plant using a combine harvester. The farmer then takes the peanuts to be sold at a buying station while the plant tops are used to make hay.

In order to remove the outer shells, peanuts are placed in slotted drums. Inside, the nuts rub together, which allows the shells to break and the kernels to fall out through small holes at the bottom of the drum.

The peanuts are cleaned again and then blanched (removal of the reddish skin). Finally the peanuts are sold and processed into their final product.



LIVESTOCK

SEASONALITY

| Beef

Commodity profile

Beef is the **third most consumed meat in the world**. It is one of the principal meats used in European and American cuisine and is **becoming increasingly important in developing countries** such as Brazil, Russia and China as demand for high protein food there increases.

Beef can come as a number of different cuts, or it can be ground into mince. The better cuts are usually obtained from the steer as the heifer tends to be kept for breeding. The meat from older cows and bulls is generally tougher and so is often used for mince.

Deadweight beef is graded according to its conformation, which is determined by the visible shape of the carcass, where the top, loin and shoulder of the carcass are taken into account. The conformation of the carcass is graded E, U+, -U, R, O+, -O, P+ or -P where E is the most muscular and -P is the least.

Carcasses are also graded by a visual assessment of their fat class, where they are graded in increasing fatness from 1 to 5. Grades 4 and 5 are also subdivided into L and H, standing for leaner and fatter.

The R3 grade is one of the most common grades of carcass and is widely quoted. It has a good conformation and is not too fat or too lean.



| Beef

Production and trade



The EU produces almost 8m tonnes of beef per year with the **main producers being France (19%), Germany (15%), Italy (14%) and the UK (12%).**

Therefore those markets are the main trading centres and their prices are relevant to get a market trend for different beef cuts.

The EU imports around 500 thousand tonnes of beef per year and exports 160 thousand tonnes per year. These figures exclude trade between member states and results in the **EU being a net importer of beef.**

Brazil is the main exporter to the EU accounting for almost 60% of the EU's beef imports.

| Beef

Price influencing factors

In many parts of the EU, particularly where pasture is scarce, feed costs are a large part of the cost of beef. There are many different feeds used in the production of beef depending on where in the world the beef is being produced and the quality of the intended final product.

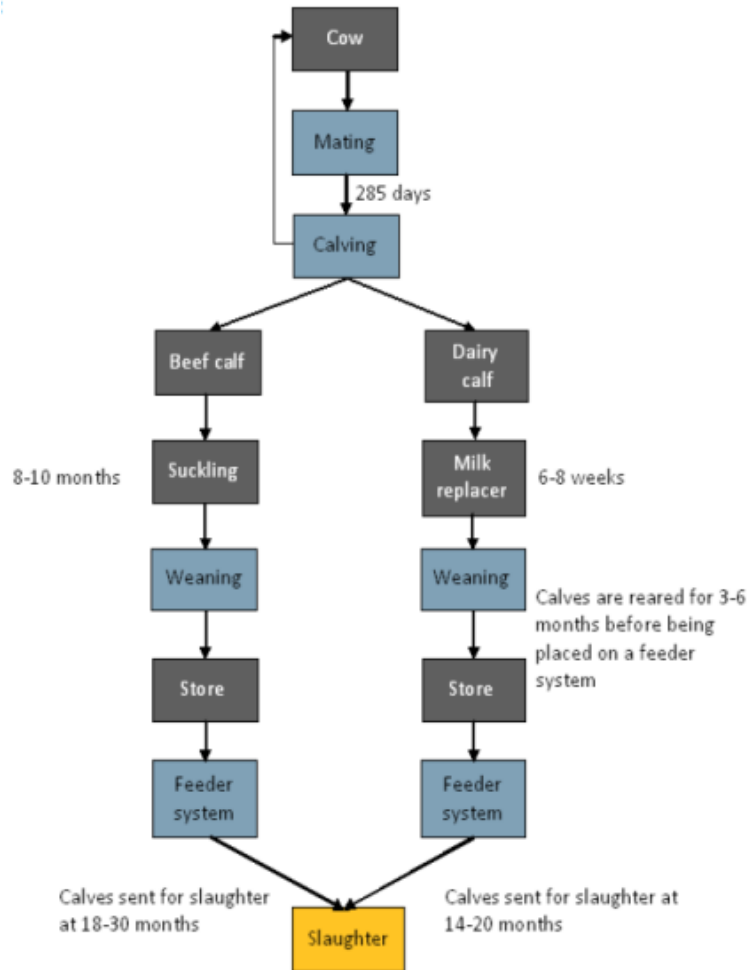
Tariffs and quotas affect the price of beef in the EU. It is much less expensive to produce beef in more sparsely populated places like South America or Australia so keeping high tariffs and quotas on beef from other sources keeps the EU producers competitive. Any changes in these tariffs can cause dramatic changes to the beef price.

Disease in herds of cattle can affect the price of beef as restrictions on movements of cattle or even the sale of beef can be imposed. Large numbers of cattle may also need to be culled, reducing the availability of beef. Negative publicity and food scares for beef can also reduce demand.



| Beef

Production process



Cattle that are to be used for beef can come from one of two sources, pure bred beef cattle or as a by-product from the dairy industry.

Cattle that come from the dairy sector are usually either dual purpose breeds or are cross breeds between a dairy cow and a beef sire. These are usually brought to a beef farm between 2 weeks and 3 months of age. After being on the fattening farm for 3-4 weeks they are weaned before putting them onto a feeder system to fatten and finish the calf. They are typically ready for slaughter at around 14-20 months.

Pure bred beef calves usually stay with the beef cow for 8-10 months before being weaned and placed on a feeder system where they are fattened and finished. The calves are usually slaughtered when they are 18-30 months old.

Animals ready for slaughter are transported to an abattoir where they are slaughtered. The carcass is then divided into quarters with the hind quarter containing the most desirable cuts. The less desirable cuts go to make products like minced beef.

| Pork

Commodity profile

Pork is the second most consumed meat in the world, after poultry, despite its consumption not being allowed in some cultures.

Demand for pork is particularly high in China and Europe.

There are a wide range of products which are made from the meat of pigs. However, these products fall into three broad markets: **fresh pork, processed pork and bacon**. Each market uses pigs of different weights as varying fat contents are required.

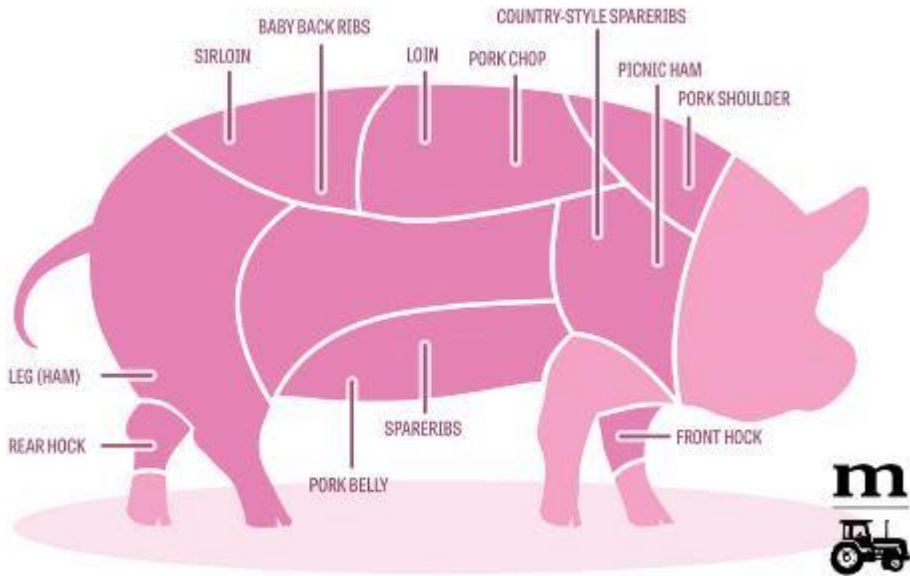
Pig carcasses are graded according to the amount of lean meat as a percentage of the dressed carcass weight. **Carcasses with a higher percentage of lean meat are considered the most desirable.** The grades are as follows:

- Grade S: >60% lean meat
- Grade E: 55%-60% lean meat
- Grade U: 50%-55% lean meat
- Grade R: 45%-50% lean meat
- Grade O: 40%-45% lean meat
- Grade P: <40% lean meat



| Pork

Production and trade



The EU produces around 23m tonnes of pork per year with the biggest producers being Germany (24% of EU output), Spain (15%), France (9%), Poland (8%) and Denmark (7%).

Therefore those markets are the main trading centres and within the EU their prices are the most relevant to get a market trend for different pork cuts.

Globally around 102m tonnes of pork is produced each year with the EU being the second largest pork producer in the world (22% of global output), after China (49%).

Global exports amount to around 6.7m tonnes each year. The US is the world's top exporter of pork (34% of global exports), followed by the EU (32%) and then Canada (17%).

| Pork

Price influencing factors

The majority of pigs in the EU are fed on feeds, the cost of which contributes up to 75% of the typical price of a pig. This means that EU pork prices in particular are heavily influenced by the price of grains and meals.

As the EU is a net exporter of pork, the **ability of the EU to find markets for exports** can heavily affect the internal price of pork.

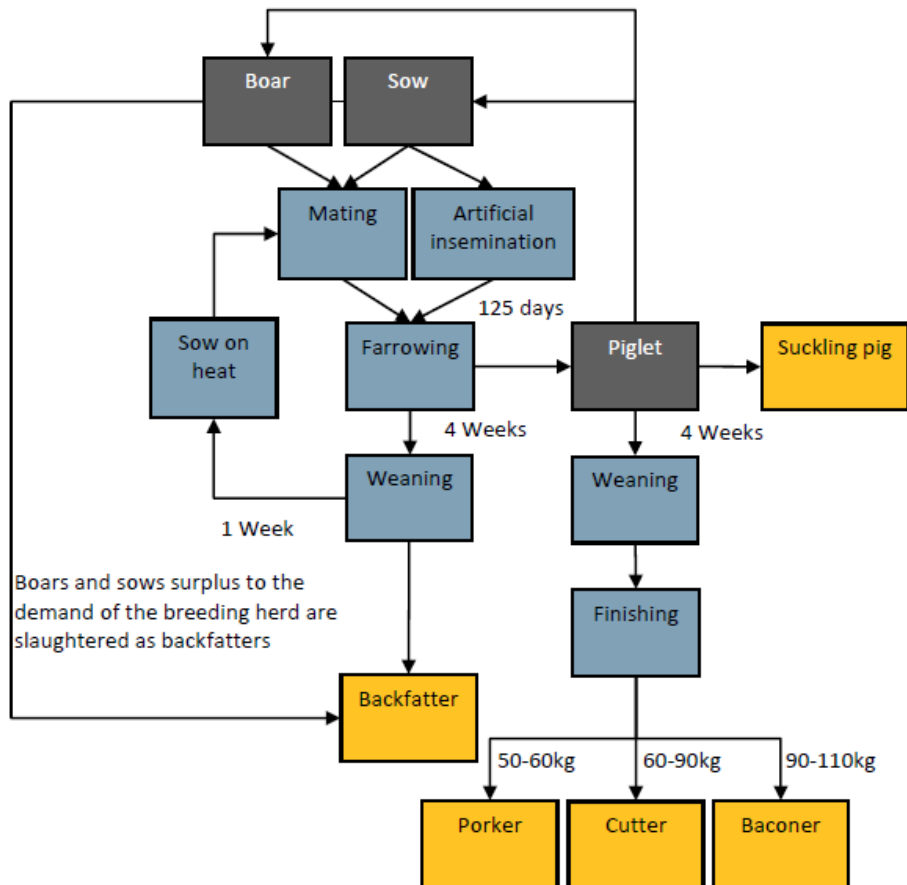
Disease in the pig herd can influence prices as restrictions of movement of pigs can be imposed. If certain diseases are detected it can result in large numbers of pigs having to be culled which reduces the supply of pork. Negative publicity and food scares can also lower the demand for pork.

An **EU ban on the use of sow stalls**, which are used to confine sows for the gestation period of their piglets, is set to come into effect at the end of 2012. Extensive investment will therefore have to be made in order to upgrade existing facilities.



| Pork

Production process



Pig production begins with a breeding sow (female pig) either being mated with a boar (male pig) or artificially inseminated. The gestation period for a pig is around 125 days and the average litter is between 8-10 piglets. The piglets are suckled for up to 5 weeks before being weaned. Piglets slaughtered during this time are known as suckling pigs, the meat of which is prized as it is very tender.

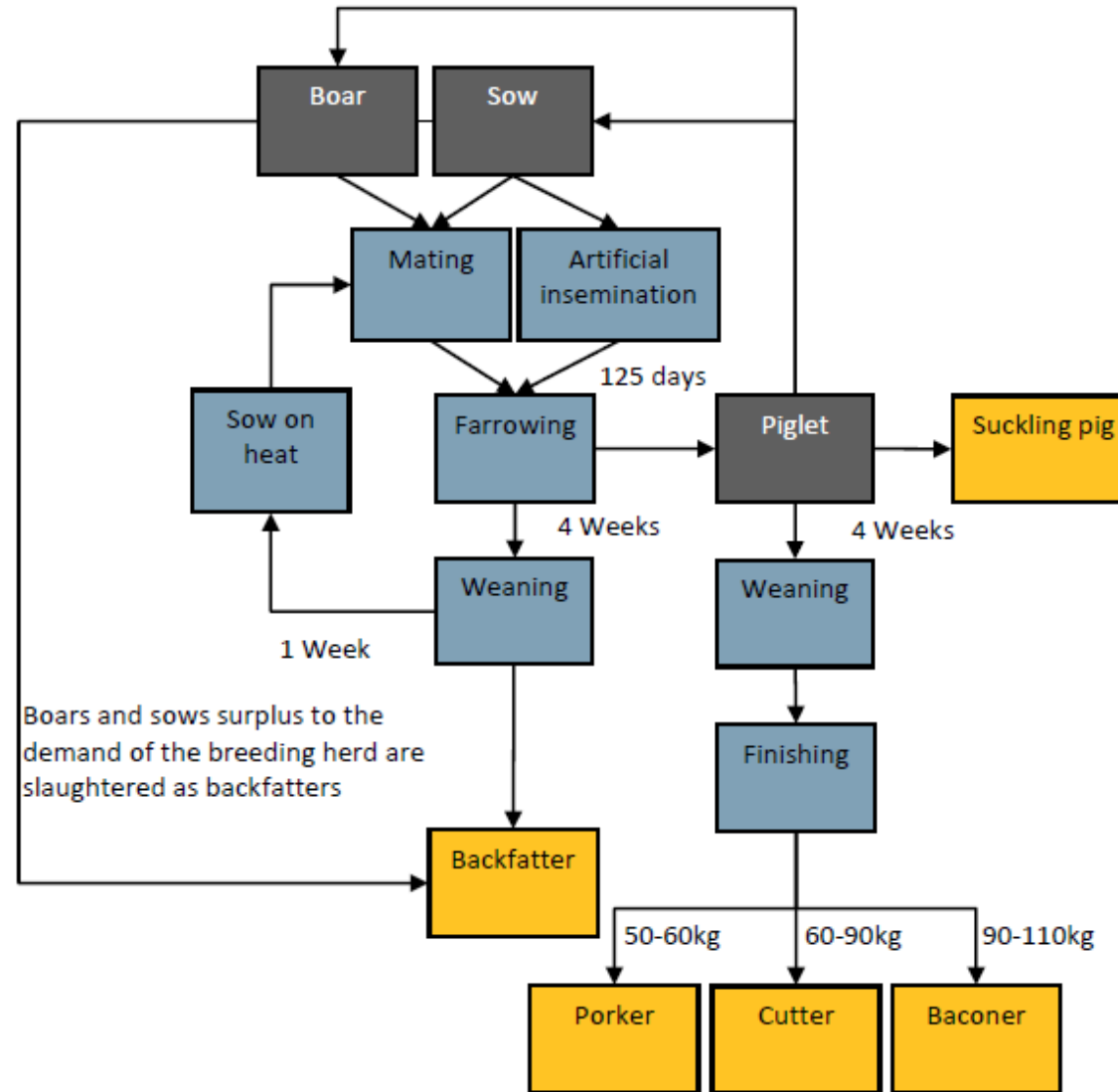
Pigs which are to be used as fresh pork are typically slaughtered when they reach around 55kg liveweight.

Pigs to be used in processing are grown until they are around 70kg and those used to make bacon and ham are grown until they are approximately 100kg before being slaughtered.

Modern farming techniques allow the fresh and processing pigs to become bigger before slaughter. Boars and sows that are no longer financially viable in the breeding herd are slaughtered as backfatters.

| Pork

Pig production cycle



SEAFOOD

SEASONALITY

| Salmon

Commodity profile

Salmon is classified as **an oily fish** and is considered to be **very healthy as it has a high protein content and contains high levels of omega-3 fatty acids and vitamin D.**

Compared with other seafood, global production of salmon is small and accounts for around 4% of total world seafood supplies.

Approximately 75% of all salmon supplied to the fish industry comes from a farmed source. Atlantic salmon is the main variety of farmed salmon.

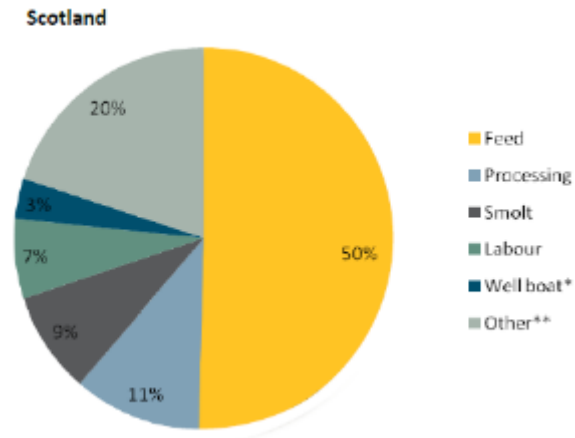
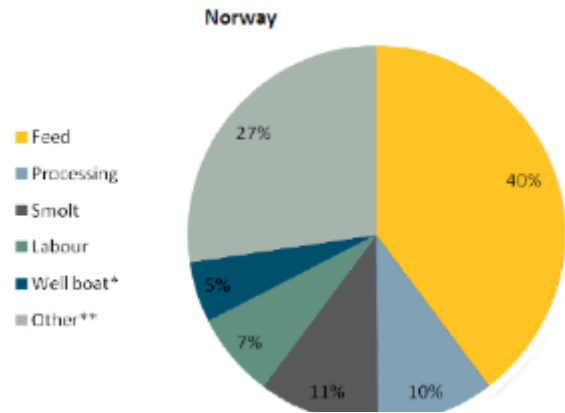
The most common varieties of salmon are:

- **Salmo salar (Atlantic salmon):** Found in the North Atlantic and North Pacific Oceans and rivers that flow into them. More than 95% of all the marketed Atlantic salmon is farmed, predominantly in Norway, Chile, Canada and the UK.
- **Oncorhynchus nerka (Sockeye salmon):** Found in the North Pacific. If landlocked they are called kokanee salmon.
- **Oncorhynchus keta (Chum salmon):** A Pacific salmon. It is widespread, especially in Alaska where it is usually the least commercially valuable of the wild salmon species.
- **Oncorhynchus gorbuscha (Pink salmon):** The smallest and most abundant of all Pacific salmon. Most commonly found in Alaska.



| Salmon

Production and trade



The annual production and world catch of farmed and wild caught salmon together amounts to 2.61m tonnes (of which 1.6m tonnes (63%) is farmed and 0.98m tonnes (37%) is wild caught).

Farmed production is largely based in Norway (53% of world output), Chile (24%), the UK (mainly Scotland - 9%) and Canada (6%).

Wild salmon is primarily caught by the Russia (41% of world catch), US (35%) and Japan (21%).

France is the largest market for salmon in Europe.

The Fish Pool Index is a synthetic market price for fresh Atlantic salmon. It is calculated by taking into account various factors including the selling price of salmon farmers, purchase price of exporters and customs data.

| Salmon

Price influencing factors

The cost of feed contributes to around 40-50% of the cost of farmed salmon and is therefore the major factor determining the price of the final product. Any effects on the supply of oily fish such as mackerel, pilchard, capelin and menhaden from which the feed is made will influence the cost of the salmon.

Disease outbreaks can be rife in much of world aquaculture, including farmed salmon. Outbreaks of disease can drastically cut the supply of salmon from the affected country, sometimes for several years. Trade bans imposed upon countries which have suffered disease outbreaks can further limit supply.

Global prices for salmon tend to follow the same trend. If one country is unable to meet demand for salmon, other countries can step in to fill the gap, causing their salmon prices to rise as a result.

Several countries have recently increased the amount of salmon they import, including Japan. As global demand for imported salmon increases, salmon producers will have to step up production in order to limit any price rises.

As farmed salmon has become more popular there has been dramatic growth in farmed supply. The price of farmed salmon can influence the price of wild salmon, although wild salmon is widely considered to be of higher quality.



| Salmon

Production process

When farming salmon, the salmon are first hatched from eggs and the alevins (newly-hatched salmon) are raised on land in fish tanks. When they reach the stage of smolt (at 12-18 months) the fish are transferred to sea cages or net pens, which are anchored in sheltered bays or fjords (as in Norway). They are fed pelleted feed for between 12 and 24 months, after which they are then harvested.

Salmon are carnivorous and are usually fed compound fish feeds consisting of a mixture of fish meal and fish oil (made from small oily fish) and some wheat by-products, soybean meal or feather meal. Over 50% of all the world fish oil production goes into feed fed to farmed salmon. In order to ensure farmed salmon flesh matches the colour of wild salmon they are fed the carotenoid pigments astaxanthin and canthaxanthin, which they would usually receive in their diet in the wild.

Salmon are caught seasonally in the wild with strict quotas. Commercially fished salmon species are found throughout the Atlantic and Pacific Oceans. Wild salmon are in season from June through to December. Out of season, wild salmon are typically only available frozen.



| Tuna

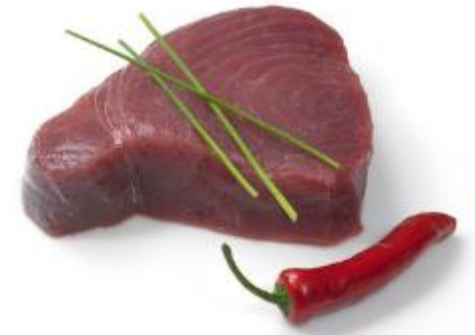
Commodity profile

Tuna accounts for around 8% of the global fish catch and is also farmed as part of aquaculture.

Fresh tuna is primarily consumed as steak or sushi. Japan, in particular, prizes high quality fresh tuna as sashimi (raw fish). **In Europe, tuna is most commonly sold in supermarkets in cans** with the fish preserved in spring water, brine (salt water) or vegetable oils such as sunflower or olive oil.

Commercially fished tuna consists of six species:

- **Skipjack tuna** (58%): most common canned tuna in the world. It is a small tuna, measuring up to 1m in length. They are common in tropical waters and are found in large schools containing up to 50,000 fish.
- **Yellowfin tuna** (25%): found in tropical and subtropical oceans usually in surface waters. Smaller sizes are similar to skipjack but this species can grow up to 2m long and weigh up to 140kg.
- **Bigeye tuna** (9%): is a sashimi fish and looks very much like yellowfin, but has a milder flavour. They are found in tropical and temperate oceans. Their length can exceed 2m and weigh more than 180kg.
- **Albacore tuna** (6%): can be found throughout the Atlantic, Pacific and Indian Oceans as well as in the Mediterranean Sea. The largest of the species can grow up to 1.3m in length and weigh up to 40kg.
- **Bluefin tuna** (1%): has the darkest and fattiest meat of the tuna species. They can grow to 3m in length and weigh up to 450kg. Bluefin can fetch more than USD 100,000 per fish in Tokyo's fish markets where it is primarily used in sushi and considered a delicacy. This species has been overfished and is now protected because of its low numbers.



| Tuna

Production and trade



The annual world catch of tuna lies at around 4.5m tonnes.

The **main trawlers of tuna are Japan (15% of the world catch), Taiwan (3%), Indonesia (3%) and Philippines (3%).**

Much of the canning occurs in South East Asia but also in Spain and Central America.

Tuna and mackerel sharks are the only species of fish that can maintain a body temperature higher than that of the surrounding water. An active and agile predator, the tuna has a sleek, streamlined body, and is among the fastest-swimming pelagic fish – the yellowfin tuna, for example, is capable of speeds of up to 75 km/h

| Tuna

Price influencing factors

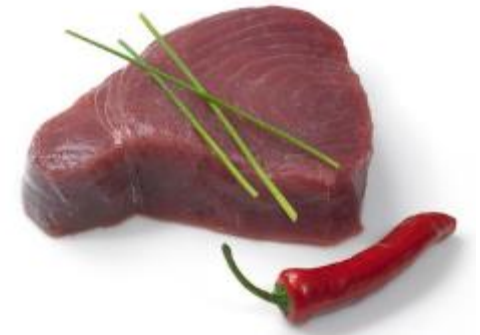
Fuel is the main influencing factor for the price of tuna. At times of peak fuel costs, boats tend to stay in harbour and as a result there is a greatly reduced catch. When the boats do go out, the cost of fuel tends to be reflected in the price of tuna.

For canned tuna, fillers such as sunflower oil make up around 20-25% of the ingredients and as such can greatly influence the price of the final product. The cost of packaging such as steel or aluminium can also affect the price.

As Asian countries develop, the cost of labour rises. Not only does the cost of labour affect the cost of tuna but it can also result in increased duties on shipping into Europe as products from countries with higher labour rates are often met with higher import taxes.

During the third quarter of the year, which is the main sashimi tuna season in Japan, there is a higher demand for tuna, especially for bluefin and bigeye species.

Tuna which has been fished using sustainable methods and has been granted Marine Stewardship Council (MSC) certification tends to attract a price premium.

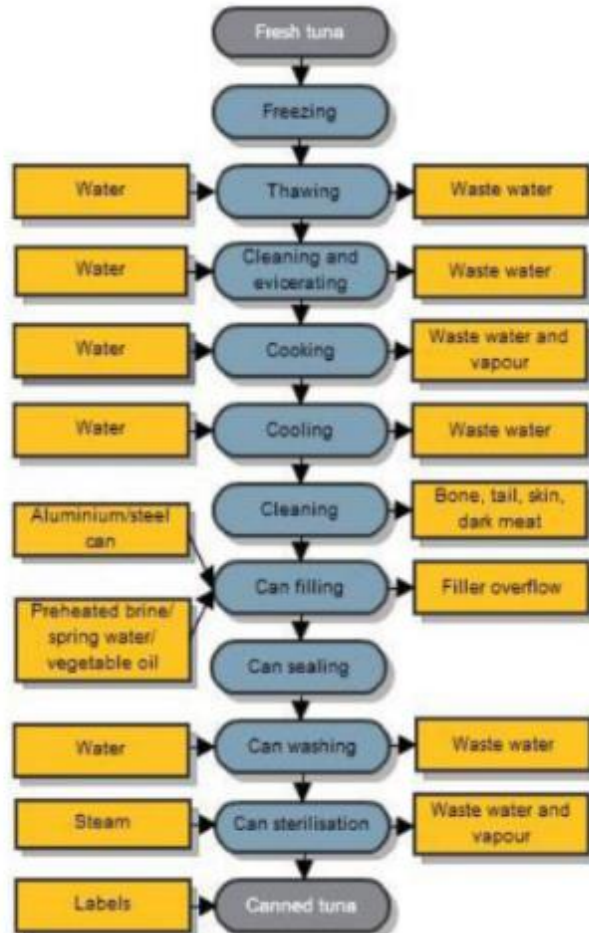


Tuna

Production process

Canning process:

More than half of the caught skipjack tuna is destined for canning. The tuna is usually gutted by hand, and then cooked for between 45 minutes and 3 hours. Next they are cleaned and filleted, canned and sealed. The dark lateral meat can be used for pet food.



Wild tuna are mainly caught with longlines, purse seines, and in less developed countries, pole-and-lines.

Longlines are fishing lines up to 100km long which consist of a long main line suspended between two buoys with secondary lines attached at regular intervals. These secondary lines are hooked and baited with fish. A purse seine is a very large net which can catch a whole school of tuna in one go. Net fishing for tuna has been subject to consumer pressure to become less harmful to by-catch, particularly dolphins.

The method of fishing for tuna has an effect on the price of the tuna, with tuna caught by longline commanding a higher price than tuna caught by purse seine.

Tuna farming began in the 1990s with bluefin tuna proving to be the most commonly farmed species. Japan is by far the biggest consumer of bluefin tuna. Tuna aquaculture takes place in huge offshore pontoons up to 25km out at sea and usually down to 40m in depth. Bluefin tuna are farmed with the aim of reducing the fishing pressure on the overfished wild Atlantic and Pacific bluefin species.

FRUITS & VEGETABLES

SEASONALITY

| Apples

Commodity profile

Apples grow on small deciduous trees and are one of the most cultivated tree fruits in the world. There are more than 7,500 varieties of apple grown around the globe, with different cultivars picked for use in a variety of different products.

Around 80% of apples produced globally are eaten fresh with most of the remaining 20% processed into products like apple juice and other beverages.

Apple pectin, a by-product of the juicing industry, is a thickening agent used in the food industry.

The **most common apple variety grown in the EU is Golden Delicious**, accounting for around a quarter of the total number of apples produced. This is also a popular variety in North America.

Other commonly produced varieties within the EU are Gala (around 10% of EU output), Idared (7%), Red Delicious (7%) and Jonagold (6%).



| Apples

Production and trade



Globally there are around 62m tonnes of apples produced each year.

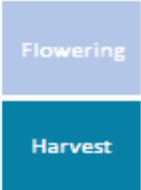
China is the top producer of apples in the world, producing over 33m tonnes (54% of the world's supply). The EU is the second biggest producer with almost 11m tonnes (17%). The **biggest single producer in the EU is Poland** producing over 3m tonnes of apples per year.

Global exports of apples amount to just over 5m tonnes. The **EU is the world's top exporter**, exporting over 1m tonnes of apples every year (22% of global exports). China is the second largest exporter again exporting over 1m tonnes (21% of global exports) per year.

| Apples

Commodity crop calendar

CALENDAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Northern Hemisphere			Flowering	Flowering	Flowering		Harvest	Harvest	Harvest	Harvest		
Southern Hemisphere	Harvest	Harvest	Harvest	Harvest					Flowering	Flowering	Flowering	



In the northern hemisphere, apples are typically harvested between July and October while in the southern hemisphere, the apple harvest usually spans from January to April.

Apples can be stored for several months in chambers with high concentrations of carbon dioxide and high air filtration to delay ripening and are therefore available all year round.

| Apples

Price influencing factors

The weather can influence the price of apples throughout the apple growing season. Damage to the trees can be caused by frost in the earlier stages of flowering, which will reduce the yield of fruit. Poor weather in later stages of flowering can reduce the numbers of pollinators which can also reduce the yield of fruit.

Apple trees are susceptible to a number of pests and diseases which are generally treated with fungicides and pesticides. The prices of these chemicals can be large influencing factors on the price of apples. If these are not used, pests and diseases can reduce the yield and quality of crops, as well as damaging the trees.

Apples are still most commonly harvested by hand as the use of machinery during the picking and handling of the fruit can cause bruising. Labour costs at the time of harvesting can therefore influence the price of the apples. Machinery which harvests the apples without bruising is in the process of being developed.



| Apples

Production process

Though apple trees can be grown from seeds the more usual way of propagating them is by asexual grafting to produce trees genetically identical to the parent. A cutting is taken from an existing parent tree and grafted to a rootstock tree. The tree will then grow to the size allowed by the rootstock and bear fruit of the variety of the grafted cutting.

Apple trees take around four or five years to produce their first apples and must be pollinated by the pollen of another variety in order to produce fruit. Apple growers provide pollinators to orchards during flowering each season, the most common of which are honey bees although queen bumble bees are sometimes used.

The amount of fruit that can be harvested from a tree depends on its root stock and how large it is allowed to become. It also depends on the conditions in the season and the amount of fruit produced per tree can be anywhere between 40 and 200kg.

Apples are harvested before they are fully ripe and can be stored for several months in chambers with controlled atmospheres. This reduces the concentration of ethylene gas which can cause the fruit to over-ripen.



| Pears

Commodity profile

Pears, like apples, are members of the rose family of trees. The main type of pear now cultivated is the European pear, of which it is estimated that there are more than 2,500 varieties worldwide, with most originating in the 18th and 19th centuries from France and Belgium.

Pears are split into summer, autumn and winter pears depending on when they are harvested. **Around 90% of the pears produced globally are eaten fresh with most of the remaining 10% going into products like pear juice and desserts.**

Pears grow to a large range of shapes, from the traditional pear shape (pyriform) to more round varieties that resemble apples. With almost 2,500 known varieties, there are also many different flavours, textures, shapes and sizes to choose from, but the main commercial types of pears are more recognizably “pear” flavoured, shaped and textured as this is generally what the consumer expects and prefers.

The **most widely produced pear in the EU is the Conference pear**, which accounts for over 34% of the total number of pears grown in the EU. It is also a popular variety globally. In **North America, the most commonly produced pear is the Williams pear** also known as the Bartlett pear. Asian varieties such as Su and Ya still dominate China’s production.



| Pears

Production and trade



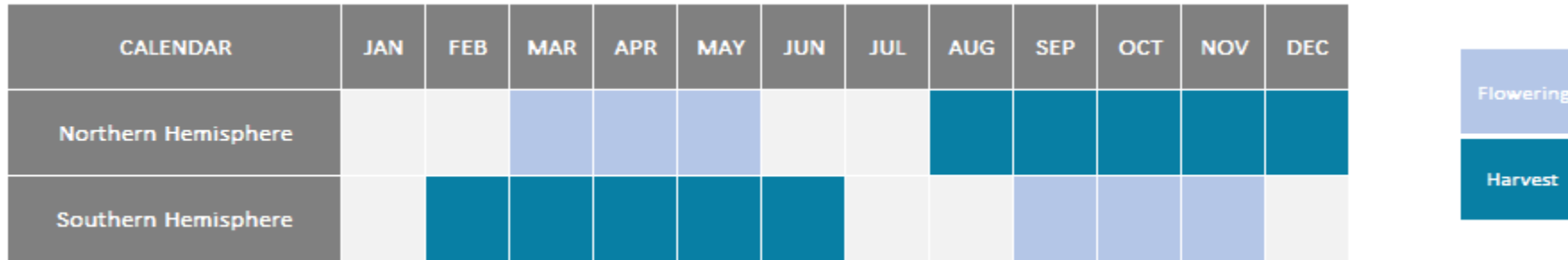
Globally there are around 21m tonnes of pears produced each year.

China is the world's top producer, producing over 15m tonnes (72% of the world's supply) each year. The EU is the second largest producer with over 2.6m tonnes (12%) each year. The **largest producer within in the EU is Italy**, producing over 0.7m tonnes per annum.

Global exports of pears amount to almost 2m tonnes each year. **Argentina is the world's top exporter**, accounting for almost 0.5m tonnes of shipments every year (27% of world exports). China is the second largest exporter, exporting over 0.4m tonnes (24%) per year.

| Pears

Commodity crop calendar



In the northern hemisphere, pears are typically harvested between August and December, while in the southern hemisphere, the pear harvest usually spans from February until June. This is longer than the period in which apples are harvested as distinct varieties are harvested in summer, autumn, and winter.

Pears can be stored for several months in chambers with high concentrations of carbon dioxide and high air filtration to delay ripening and are therefore available all year round.

| Pears

Price influencing factors



The weather can influence the price of pears throughout the pear growing season. Damage to the trees can be caused by frost in the earlier stages of flowering, which will reduce the yield of fruit. Poor weather in the later stages of flowering can reduce the activity and numbers of pollinators which can also reduce the yield of fruit.

Pear trees are susceptible to a number of pests and diseases which are generally treated with fungicides and pesticides. The prices of these chemicals can be a large influencing factor on the price of pears. If these are not used, pests and diseases can reduce the yield and quality of crops, which may increase costs, as well as damaging the trees.

Pears are still most commonly harvested by hand as the use of machinery during the picking of the fruit can cause bruising. Labour costs at the time of harvesting can therefore influence the price of the pears. Machinery which harvests the pears without bruising is in the process of being developed.

| Pears

Production process

Although pear trees can be grown from seeds, the more usual way of propagating them is by asexual grafting to produce trees genetically identical to the parent. A cutting is taken from an existing parent tree and grafted to a rootstock tree. The tree will then grow to the size allowed by the genetics of the rootstock and bear fruit only of the variety of the grafted cutting.

Pear trees will generally take 4-6 years after planting to bear fruit and should be planted in pairs to encourage cross pollination as this is required for them to produce fruit. A high number of pollinators are required when the tree is blossoming to produce a good yield of fruit. These are usually supplied by producers at the time of blossoming in the form of honey bees.

When fully ripe, pears are soft and can be easily damaged. They are therefore usually picked and stored before they reach this stage and ripened on removal from storage as and when required. **Once ripened, pears have a shelf life of only 2-3 days as their flesh is much softer than that of apples, which have a shelf life once ripened of around 8-9 days.**



ENERGY

SEASONALITY

| Crude oil

Commodity profile

Crude oil is a flammable liquid that consists of a mixture of hydrocarbons (organic elements) that have developed over millions of years in geological formations in the Earth's crust. It is also commonly referred to as **'petroleum'**.

Crude oil is an important source of energy in the modern world.

It is distilled into many derivatives and is the feedstock for a wide range of industries including transportation fuels, electricity, industrial chemicals, plastics and lubricants.

There are hundreds of different types of crude oil products. The most important properties that define a value of oil are its density and sulphur content.

Depending on density, there is a distinction between **'light'** and **'heavy'** crude oil. Oil with low content of sulphur is called **'sweet'**, and oil with high sulphur content is referred to as **'sour'**.

The most widely recognised trading classifications of crude oil used as pricing benchmarks internationally are: North Sea Brent crude, North America's West Texas Intermediate crude (WTI), UAE Dubai crude and OPEC Reference Basket.



| Crude oil

Production and trade



Global crude oil production amounts to approximately 32bn barrels per annum.

Around 100 countries produce crude oil. **Saudi Arabia and Russia are the largest producers with 13% and 12% share respectively**, followed by the US (9%), Iran (5%) and China (5%).

The main trading centres for crude oil futures are ICE London and NYMEX (New York).

The Organisation of Petroleum Exporting Countries (OPEC) supplies approximately 40% of oil production and 50% of exports. OPEC is a group of some of the world's most oil-rich countries that coordinate their oil production strategies to influence world supplies. Together, these countries control approximately three quarters of total world proven oil reserves. **The members of OPEC are Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.**

| Crude oil

Price influencing factors

Governments of oil-rich countries can have a predominant influence on the global oil supply exercised through state-own oil companies and, in some cases, membership in OPEC. Almost 80% of world proven oil reserves are currently held by national oil companies with limited access to investors.

In addition to having control over the operation of national oil companies, **governments of oil-rich countries can influence world oil supplies by changing financial regulations** such as tax structures, forcing investor-owned oil companies to change their production plans or form alliances with national companies.

A high degree of crude oil reserves and production are concentrated in the Middle East and Africa, a region highly prone to political instability, which can lead to volatility in crude oil prices.

The pace of global economic growth, and particularly the situation in China and the US, the world's largest oil consumers, is crucial in determining oil demand. Also, demand for oil tends to decline when prices reach levels that are thought to be unsustainably high.

As most significant crude oil sources are located far from the major markets, the availability of a reliable transportation infrastructure has a significant impact on prices.



| Crude oil

Production process

Crude oil is a non-renewable source of energy. It occurs naturally and it is derived from the remains of animals and plants that lived millions of years ago in a marine environment. Crude oil production can be divided into five major processes: exploration, drilling, extraction, transportation and refining.

Crude oil reserves are developed both onshore and offshore. Exploration involves geologists conducting surveys to search for geological structures that may form oil reservoirs. Once oil reservoirs are identified, the oil wells are drilled into the earth, and the well is then reinforced with a steel pipe. Crude oil is then extracted through the well with the application of increased pressure and other oil recovery methods.

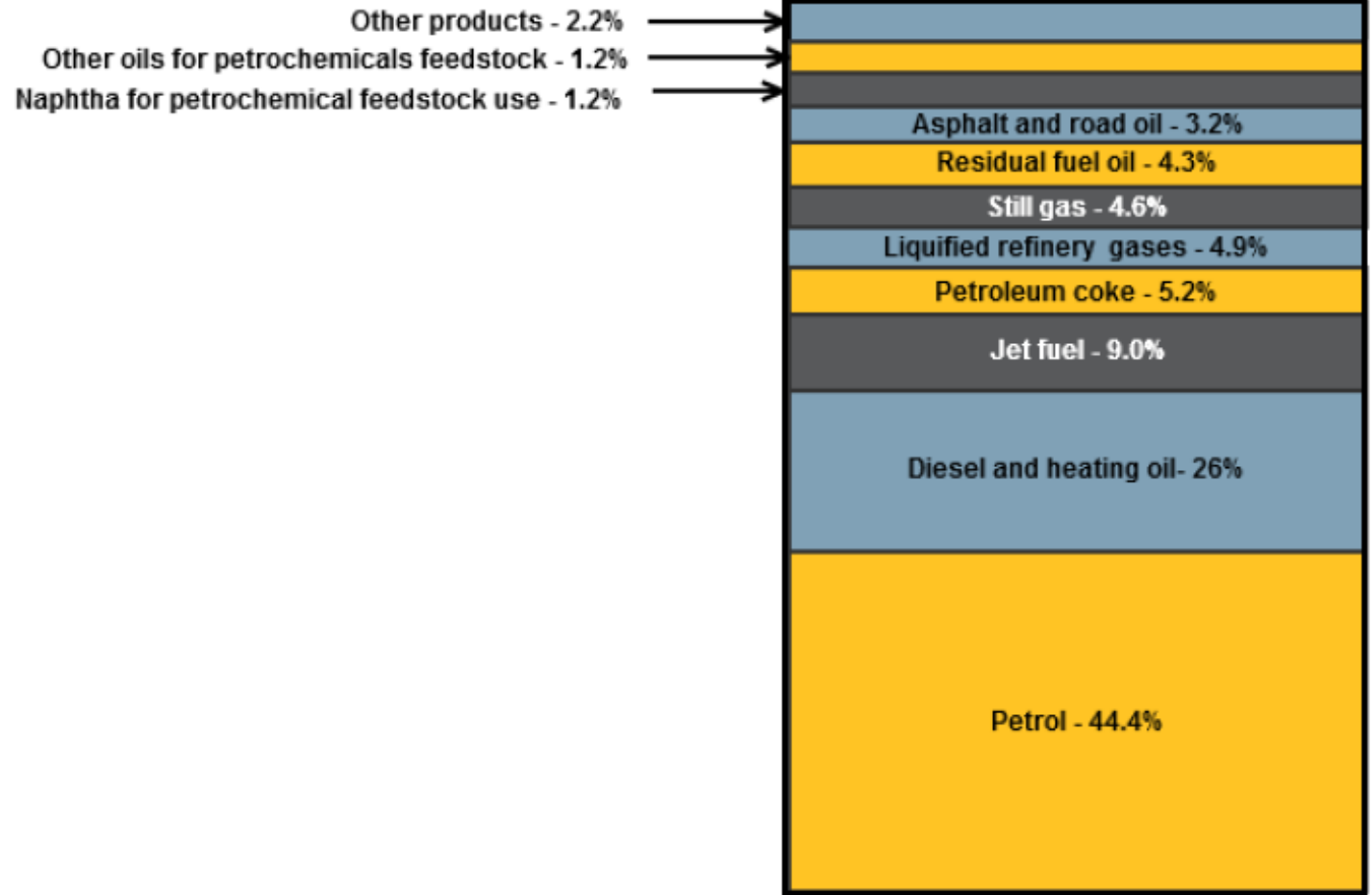
After crude oil is removed from the ground, it is sent to a refinery by pipeline, tanker or barge. At the refinery, different fractions (parts) of the crude oil are separated into petroleum products through a process of fractional distillation. The most commonly used finished products are diesel, heating oil, jet fuel and petrol.

Crude oil is measured in barrels (one barrel is equivalent to 42 US gallons or approximately 159 litres).



| Crude oil

Products of crude oil refining



METALS

SEASONALITY

| Aluminium

Commodity profile

Aluminium is a light silver-coloured metal which, when alloyed, has an excellent strength-to-weight ratio, corrosion resistance and the ability to be easily shaped. **It is the second most widely used metal after steel.**

Aluminium is used in a wide range of applications including building and construction, air, sea and road transport, packaging, electronics as well as electricity transmission. Its reactive properties also make it a useful powdered catalyst in explosives.

Grades/varieties:

- **Aluminium ingots:** for rolling into sheet products or foils or casting into a shape.
- **Aluminium foil:** 0.01mm thickness for kitchen (household) foil. 0.006mm for foil laminates (e.g. tetrapack boxes, which are a laminate of foil, paper and plastic).
- **Die-cast aluminium:** produced as a result of a metal-casting process that forces molten metal under high pressure into a mould cavity.



| Aluminium

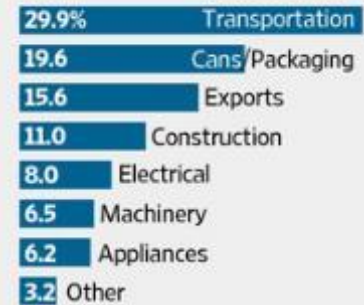
Production and trade



Put the Pedal To the Metal

The auto industry plans to increase its use of aluminum.

What aluminum is used for:



¹End use of U.S. shipments totaling 23.7 billion pounds, 2012

Source: Aluminum Association
The Wall Street Journal

Global aluminium production amounts to around 45m tonnes annually.

China is responsible for the largest share of output (almost 42%), followed by Russia (9%), Canada (6%), the US (4%) and Australia (4%).

Russia, Canada, Netherlands and Australia are all major aluminium exporters. The largest aluminium markets are located in North America, Europe and East Asia.

The LME (London Metal Exchange) is the primary aluminium futures market. The International Aluminium Institute (IAI) is the largest industry body and represents over 80% of world primary aluminium production.

| Aluminium

Price influencing factors

Stock levels of aluminium, tracked on the LME, can influence the market. High stock levels tend to exert downward pressure on prices, and as a result, any rise in prices is likely to be dampened until stock levels are depleted. Low stock levels tend to make the price more volatile.

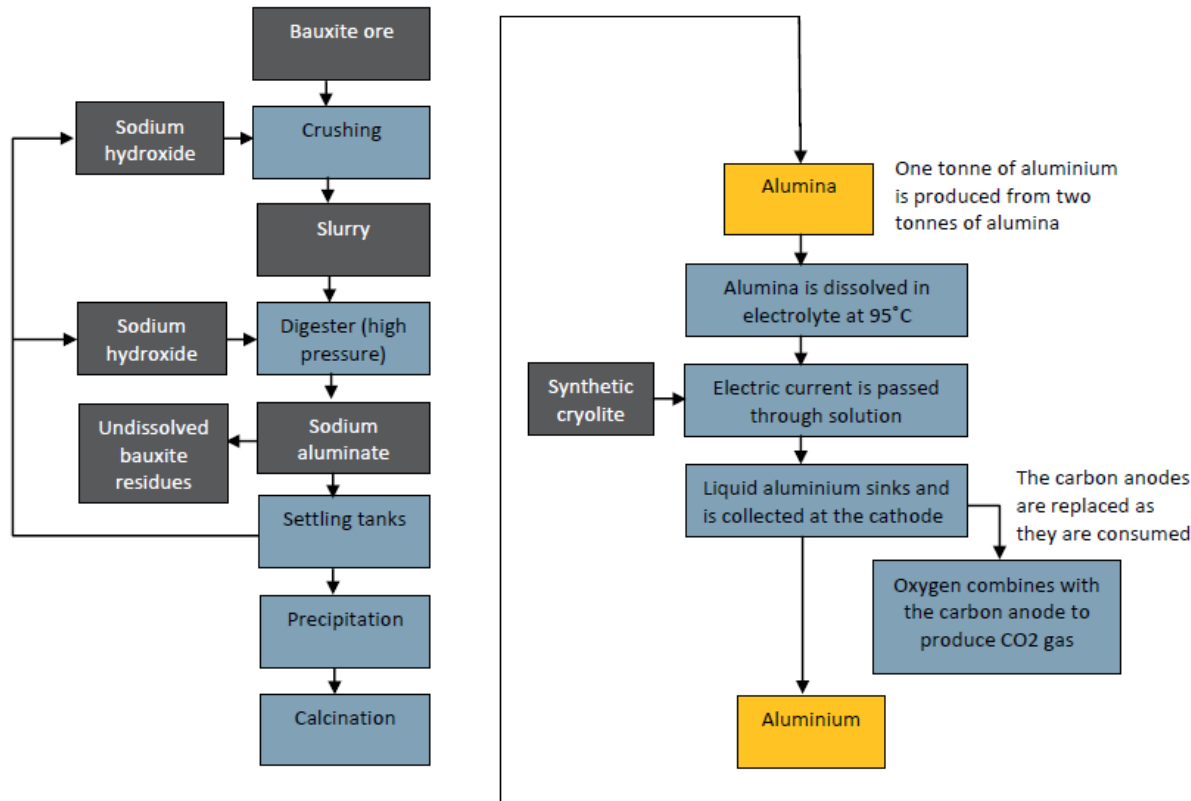
Since aluminium production from ore is energy intensive, it is particularly vulnerable to energy price movements. Many aluminium producers are therefore sited close to hydroelectric projects.

Aluminium is 100% recyclable. Recycled aluminium requires only 5% of the energy needed to produce virgin aluminium. However, recycling is limited by scrap collection and availability.



| Aluminium

Production process



Although aluminium is the most common element in the earth's crust, it does not naturally occur as a pure element. It is produced from bauxite ore (primary aluminium) and scrap (recycled aluminium).

About two thirds of global aluminium production uses bauxite ore as a feedstock. The production of aluminium from bauxite ore is an expensive process that requires large amounts of electricity. As a result, the majority of primary aluminium production is located in countries with access to cheap electricity, with refining operations often situated near hydroelectric power sources. Bauxite is mined, refined into alumina (aluminium oxide) and then electrolytically reduced in a smelting process into aluminium metal.

The remaining third of global aluminium is produced by re-melting recycled consumer and manufacturing scrap. Aluminium can be significantly strengthened by the addition of appropriate alloying elements (copper, magnesium, manganese, silicon, etc.) and subsequent heat/work treatments.

PLASTICS

SEASONALITY

| Plastic packaging

Commodity profile

Packaging is responsible for the largest share of plastics usage worldwide and plastic packaging is second only to paper in the flexible packaging materials industry.

The most commonly used plastics for packaging are **polyethylene** (or **PE**, including low density (LDPE), linear low density (LLDPE) and high density (HDPE)), **polypropylene (PP)** and **polyethylene terephthalate (PET)**. These plastics are used in a range of packaging including crates, pallets, plastic bags, film, bottles, food containers and trays.

Depending on the process and end-use application, there is a broad variety of plastic grades produced for packaging purposes.

For LLDPE, LDPE and HDPE, the most typical grades are: film, blown film (film for frozen products, seal film), **injection moulding** (jars, containers), and **blow moulding** (bottles, containers).

For PET, **bottle grade** material is most relevant (as opposed to **textile grade**). Widely used grades for PP include both **injection and film**.



| Plastic packaging

Production and trade



Global production of plastics amounts to around 265m tonnes, and it has been steadily increasing over the past two decades.

As a region, **Asia dominates global production with over 40% of global supply. China is the largest producer with a 24% share of global production, followed by Europe and North America with just over 20% each.**

The packaging sector accounts for almost 40% of total plastics demand in Europe and for about quarter of all plastics produced in the US. **Asia and Europe are also the largest exporters of plastics.**

Global demand per capita is expected to grow steadily at an annual rate of about 4%, primarily driven by strong growth from emerging economies in Asia and new EU Member States.

| Plastic packaging

Price influencing factors



The price of crude oil is a significant cost factor in plastic production as all modern plastics are produced from feedstocks derived from petrochemicals.

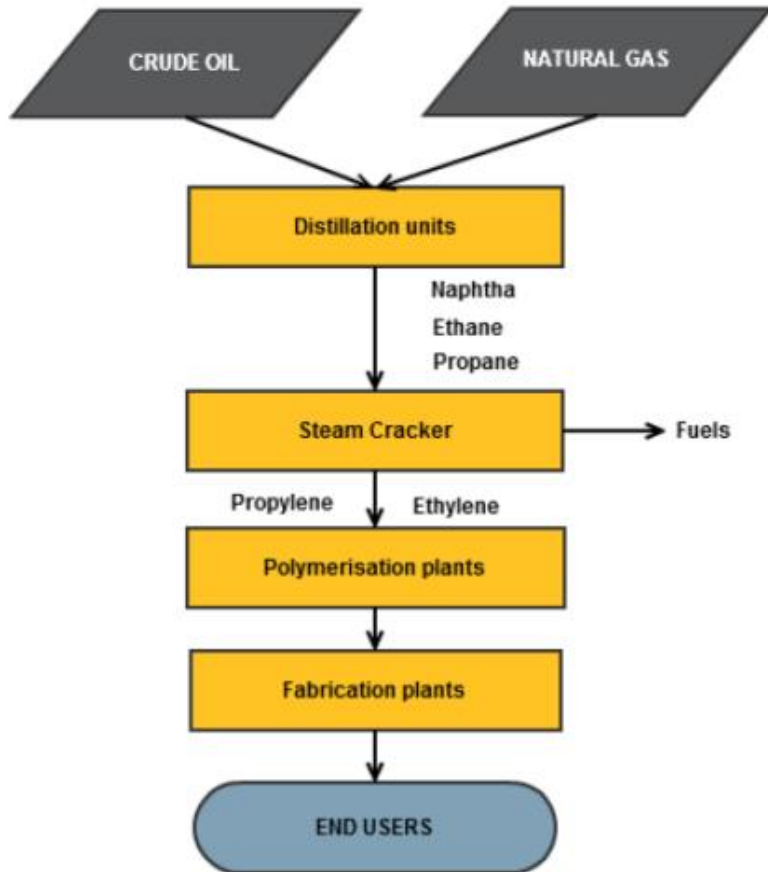
The plastics industry is vulnerable to outages and technical problems which, along with regular maintenance periods, can cause production disruptions.

The plastics industry is highly responsive to fluctuations in the price differential between major producing regions (Asia, Europe and North America). When prices diverge between two or more markets, industry players are quick to take advantage of the price difference, re-routing supply to the market where the prices are highest.

Plastics are also used widely in other applications. For example, PET is also used in the textile industry, although it is commonly referred to as polyester for textile application. When demand for polyester rises in the textile industry, it absorbs a higher share of raw material, thereby reducing the availability of feedstock for packaging.

| Plastic packaging

Production process



Most plastics today are derived from petrochemicals. The sources of petrochemicals are crude oil or natural gas that are subsequently processed into naphtha and natural gas liquids (such as ethane and propane), and then into intermediate monomer feedstocks, such as ethylene and propylene.

These monomers are converted into polymers to which chemical additives are often added to achieve certain characteristics. For example, plasticisers are used to increase the polymer's flexibility. Plastics can also be reinforced at this stage through adding glass or carbon fibres to increase their strength and stability.

Finally, the plastics are moulded or shaped into their final form. The most common methods are extrusion and injection moulding. Extrusion involves first softening the plastic and then forcing the material through a shaped die. It can produce a variety of forms including tubes and sheets. Injection moulding is a process where one or more extruders force molten plastic into a cold mould where it sets to the required shape. Injection blow moulding is used to produce hollow plastic bodies, such as bottles.

PAPER

SEASONALITY

| Pulp

Commodity profile

Pulp is the main feedstock used in the manufacture of paper and paperboard. Depending on the source, pulp can be classified as either virgin or recovered. The majority of **virgin pulp** is manufactured from wood chips. The remainder (about 5-10% of global virgin pulp production) is derived from alternative sources such as cotton, hemp, bamboo or straw. **Recovered pulp** is made from recycled material such as used packaging, recovered office paper or newsprint.

Depending on the type of the wood used, pulp can be classified as:

- **Softwood pulp:** Produced from softwood trees such as pine, spruce, fir or larch. Softwood pulp with its longer fibres is better suited for strong packaging and lightweight paper. It is also used to make fluff pulp (for use in nappies).
- **Hardwood pulp:** Produced from hardwood trees such as acacia, aspen, birch, eucalyptus or maple. Hardwood pulps are denser but have shorter fibres and so their products are weaker in comparison to those made from softwood pulp.

Wood pulp can also be classified according to the process by which it is created:

- **Chemical pulp:** Bleached and unbleached sulphate (kraft) pulp, sulphite pulp and soda pulp.
- **Mechanical pulp:** Stone groundwood (SGW), pressurised groundwood (PGW) refined mechanical pulp (RMP) and thermomechanical pulp (TMP).
- **Semi-chemical pulp:** In this method, pulp is made using both chemical and mechanical treatments. Examples include chemimechanical pulp (CMP), chemi-thermomechanical pulp (CTMP) and neutral sulphite semi-chemical pulp (NSSC).



| Pulp

Production and trade

Global production of wood pulp is around 170m tonnes per annum.

The five largest producers are the **US (30% of world production), Europe (27%), Canada (11%), Brazil (7%), Sweden (7%) and Finland (6%).**

The largest exporter of wood pulp is Europe (30%) followed by Canada (18%), Brazil (17%) and the US (16%).).

Paper Types:

- **Newsprint** is a relatively low-cost paper composed of 75% recycled paper and 25% wood chips (virgin pulp). It is mostly used for newspapers, publications and sketch pads.
- **Printing-writing paper** is a thin sheet made by pressing moist fibres together, and is commonly used for paper. It is made from wood chips (virgin pulp), although the use of deinked recycled paper is rising due to its improved quality.
- **Recovered paper**, also called waste paper, is a pre or post -consumer paper material, which has already been used or discarded from paper and paper product manufacturing lines
- **Paper based packaging** is used in the majority of warehouses and for distribution in a wide range of industries. A common feedstock material for paper based packaging is wood pulp, although the use of recovered paper and board as a feedstock is rising.



| Pulp

Price influencing factors

From the supply side, the price of wood pulp is directly affected by the cost of the pulpwood used to produce it.

Pulpwood prices can be strongly influenced by weather conditions, as strong winds and storms can destroy large areas of standing timber and may thereby reduce the volume of production in subsequent years.

Energy costs can vary from 15% to 30% of the cost of pulp production so pulp and paper mills are often sit in areas where the cost of energy tends to be lower, such as near to hydroelectric plants.

From the demand side, the price of the wood pulp is influenced by demand for paper which can be affected by consumer preferences. In developed countries for example, the demand for printing and writing paper is shrinking whilst the demand for tissue and speciality paper is gradually growing.

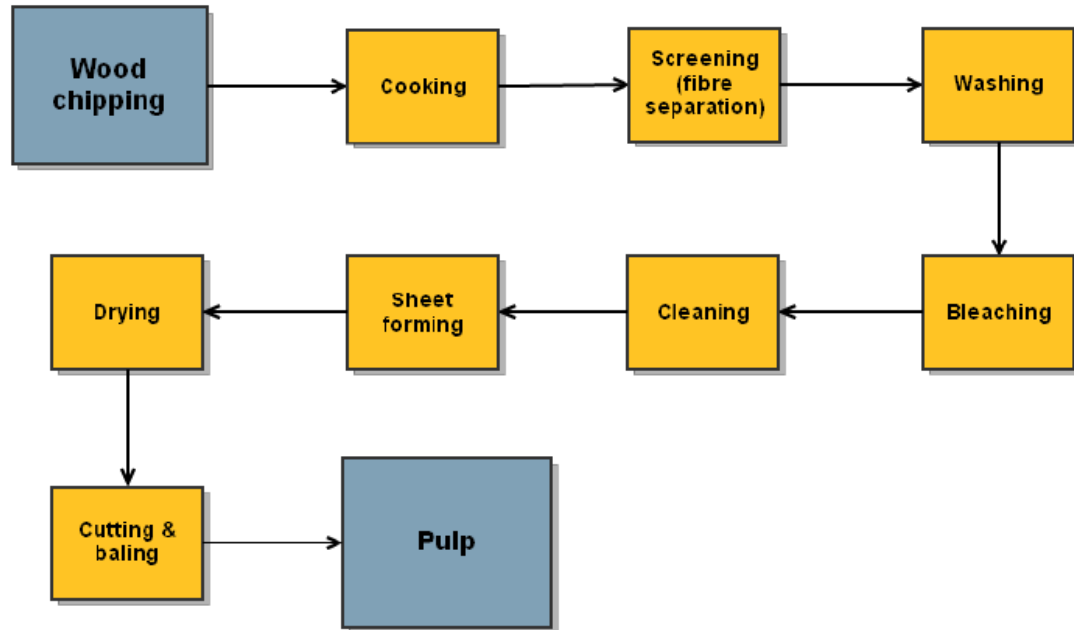
In the near future the demand for hardwood pulp is expected to grow faster than for softwood pulp as there has been a trend in recent years for paper manufacturers to substitute the more expensive softwood pulp for cheaper hardwood pulp.

The environmental impact of pulp and paper production is significant, and there are increasing concerns about deforestation and pollution as a result. Increasing regulation has raised the cost of production but has also led to a trend towards sustainability and increased recycling of pulp and paper products.



| Pulp

Production process



The wood and the other materials used to make pulp are made up of a range of components. The aim of the pulping process is to break down the structure of the source material and release its constituent parts. There are a variety of chemical and mechanical processes which have been designed to do this.

The most common chemical process is the sulphate (kraft) method in which the pulp is produced by 'cooking' wood chips in a mixture of sodium hydroxide and sodium sulphide, known as white liquor, under pressure to separate out the cellulose fibres. The resulting pulp is then collected, washed to remove the chemicals, rolled into sheets and dried. Two other processing methods which use different chemicals for fibre separation are the sulphite and the soda method.

Mechanical pulping involves grinding the wood chips to produce pulp. Softening the wood chips using heat and pressure prior to grinding is called thermomechanical pulping (TMP). To further increase the yield of TMP, chemicals can be added during the process, resulting in chemithermomechanical pulp (CMTP). Pulping methods which utilise chemicals are typically more expensive than purely mechanical pulps but they do produce a smoother, more refined product.

TEXTILES

SEASONALITY

| Cotton

Commodity profile

Cotton is a textile fibre grown annually in tropical and subtropical regions. It is produced in around 75 countries and accounts for over **40% of all fibres produced globally**.

The cotton seed pods, known as **cotton bolls**, consist of cottonseeds covered in cotton fibres. The fibres are used in the textile and paper industries as well as for pharmaceutical and chemical applications. **Cottonseed** is crushed to yield oil, used for culinary purposes and meal, used as feed for animals.

Depending on the length of the staple fibres, cotton can be divided into three major groups:

- **Fine fibre** – (staples longer than 3cm, high luster): American Pima, Egyptian, Sea Island, Eastern African, Sudanese and Peruvian
- **Medium fibre** (staples 2 - 3cm long): American Upland (US) - accounts for about 90% of the world cotton market
- **Short fibre** (staples 1 - 2 cm long; coarse): Indian, Chinese



| Cotton

Production and trade



Annual global production of cotton reaches about 25m tonnes.

China is the main producer (26% of world production), followed by India (23%), the US (16%) and Pakistan (8%). As well as being the largest producer of cotton, China is also the world's largest consumer of this fibre.

The US is the largest worldwide exporter (38% of global exports), followed by India (20%), Brazil (8%) and Australia (5%).

The established futures market is the New York Cotton Exchange but new trading exchanges have recently started in Asia, notably in China, like CZCE (Zhengzhou). In Europe, the trading focus is the Bremen Exchange (Germany).

| Cotton

Price influencing factors

Climate and weather patterns can affect cotton prices. Flooding and droughts can reduce cotton production, and subsequently push prices up in the global markets. Successful cultivation of cotton requires a long frost-free period, plenty of sunshine, and a moderate rainfall, usually from 600-1,200mm per annum.

After harvesting, cotton bales can be stored for long periods of time (between two and ten years depending on humidity conditions).

High prices for cotton can lead to substitution for other materials such as wool or polyester, depending on the end market. Man-made fibres are a particular threat for the cotton market as they can be cheaper than cotton and are usually more durable.

If global cotton prices are high, countries may ban cotton fibre exports in an attempt to protect domestic cotton supplies and maintain the competitiveness of their textile industry. This would cause the price of cotton in that country to fall but would act to support prices elsewhere.

The price of other agricultural commodities such as grain can impact on cotton prices, as farmers can switch relatively easily from planting cotton to grain if they suspect that the profitability of cotton is going to drop in the next season.



| Cotton

Production process

The cotton bolls are either picked by hand or harvested mechanically. Then they are brought to the ginnery, where the fibres are separated from the seeds in a machine known as a cotton gin. Inside the gin the cotton bolls pass through several stages of processing such as drying and cleaning. In one hour the machine can process up to 15 tonnes of cotton bolls.

In the next stage, while seeds are sent to the oil mill for crushing, cotton fibres are brought to the cotton mill, where they are spun into thread and passed on to be woven into cloth. A wide variety of different colours, patterns, thicknesses, tightnesses and even amount of threads per inch are possible by using different weaves.

Almost the entire harvested cotton crop is processed to be used in various industries with only about 5% wastage. Approximately 35% of the crop is lint (cotton fibres) used mainly for the textile industry, which utilises only longer fibres, while shorter fibres are sent for pulp and paper production. About 60% of the crop consists of seeds, which are reused for planting or are crushed and processed further for use in the food and feed industries.





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