

A Global Perspective of Potato Processing

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World Potato Markets
in association with PotatoesUSA



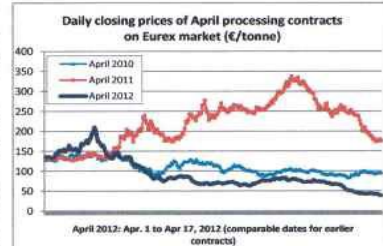
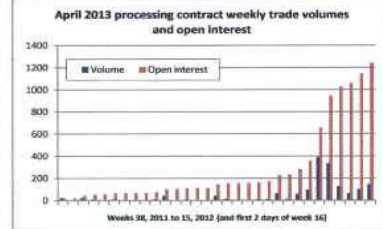
French area surprise

With nine days of *Eurex* futures market trading before the expiry of the April 2012 contract, time is running out for any significant physical market improvement. But futures traders are still reluctant to close out their positions. The contract settled today at €39/tonne, €1/tonne above the estimated cash value, with 3 201 contracts still open. Trading in June contracts is now exceeding that of April and there has also been more interest in the April 2013 position. The only bright point on the EU market has been a further surge in Spanish prices. Belgian stocks at April 1 were 410 000 tonnes larger than last year, according to *PCA/Fiwap*.

France's appalling export season should have resulted in a sharp cut in maincrop ('conservation') plantings but initial estimates from *Agreste* indicate a small increase, which will limit the price recovery in the coming season if the yield is close to trend. France's ware export gloom extended into February, with the total for the season likely to be 350 000 tonnes smaller than in 2010/11. While sales to Spain should be improving, France's export quotations give no sign of this.

There should be a strong revival in North American production this year, prompted by the high prices achieved in 2011/12. The Canadian crop could be more than 12% larger than last year while the US autumn crop could be 9% larger following last year's 6.1% increase. But lower prices could however dampen the expansion next year.

Demand for US fries remained strong in February despite the rising product price. The 12-month total exceeded 850 000 tonnes product weight for the first time. Canada's fry exports are growing strongly again and regaining some of the losses from 2010 and 2011. While the US and Canada dominate the Philippines fry market, Belgium is improving its position. Indonesian ware imports almost doubled over the 12 months to January 31.



The market for processed raised to €51.8/tonne Netherlands were also s

Fry manufacturing requ traded on the free buy n

Weekly producer price predominantly firm to fl

German weekly produce	
	2012
Mar 13	94.6
Mar 20	92.9
Mar 27	92.5
Apr 3	92.5
Apr 10	92.5
Apr 17	94.2
Apr 24	?
May 1	?

Netherlar

Still no turn in

Physical market prices a close out their positions side are still hoping for index now steady at €38.4/tonne.

Physical market buyers are having to pay €40-45/tonne for good quality potatoes, although poor quality stocks are fetching €20-25/tonne and sometimes even less. The only change in the regional market quotations over the week to today was a small reduction at Goes for processing. The processing average is therefore only €40/tonne compared with €40.625/tonne last week while the export average is unchanged at €39.375/tonne.

Dutch regional market quotations, 2011/12 (€/tonne, £/tonne)					
A. FRIES		B. EXPORT			
Goes	Enschede	Goes	Enschede	€1+	£1
Apr 17 € 35 - 47.5	Apr 12 € 35 - 42.5	Apr 17 € 37.5 - 45	Apr 12 € 30 - 45	1.214	
£ 29 - 39	£ 29 - 35	£ 31 - 37	£ 25 - 37		
Apr 10 € 37.5 - 47.5	Apr 5 € 35 - 42.5	Apr 10 € 37.5 - 45	Apr 5 € 30 - 45	1.209	
£ 31 - 39	£ 29 - 35	£ 31 - 37	£ 25 - 37		
Apr 3 € 35 - 47.5	Mar 29 € 35 - 45	Apr 3 € 37.5 - 45	Mar 29 € 32.5 - 42.5	1.201	
£ 29 - 40	£ 29 - 37	£ 31 - 37	£ 27 - 35		
Mar 27 € 35 - 50	Mar 22 € 37.5 - 45	Mar 27 € 37.5 - 47.5	Mar 22 € 35 - 45	1.196	
£ 29 - 42	£ 31 - 38	£ 31 - 40	£ 29 - 38		

Yesterday's Rotterdam market ex grading station prices were also unchanged. The best that can be said is that at least most of the packing grades are still being quoted.

World Potato Markets

Essential weekly international potato and potato product trade, production and price information.

www.worldpotatomarkets.com

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Around the world of potato processing in a lot less than 90 minutes.

First stop is near to home. North America.

Let's start close to home

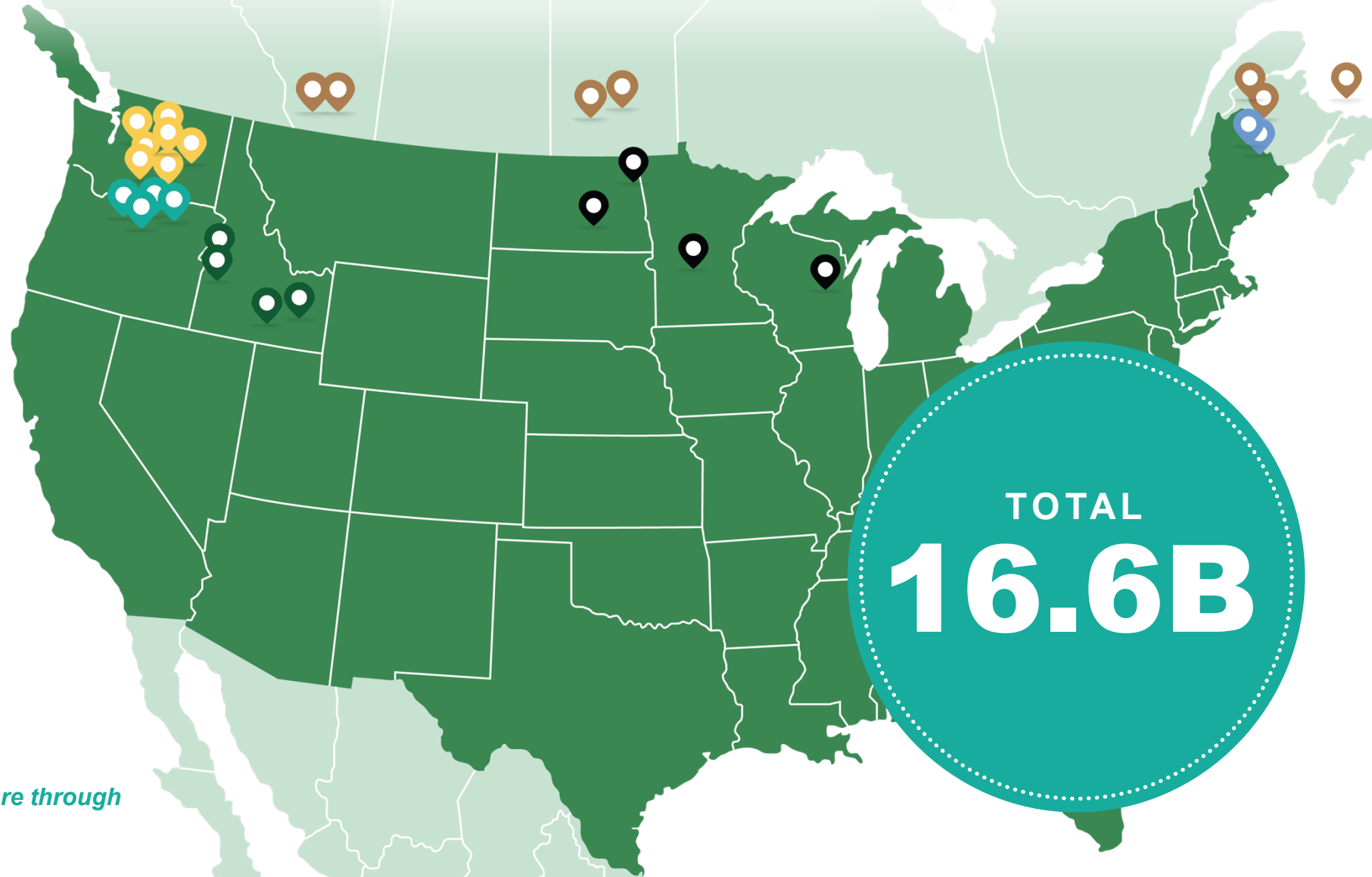
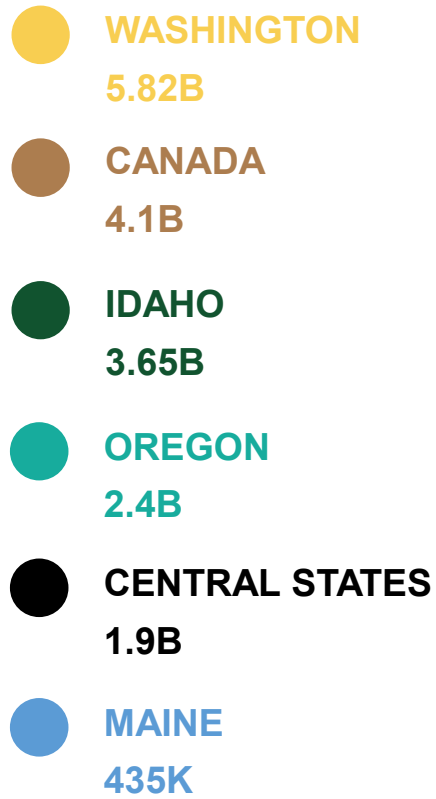
North American French fry processing plant capacities in billions of pounds a year.

STATE/REGION/COUNTRY	VOLUME OF POTATOES USED	FINISHED PRODUCT	NUMBER OF PLANTS
Washington	81 billion	5.184 billion	7
Idaho	53 billion	3.386 billion	4
Oregon	37 billion	2.368 billion	4
Central States	31.3 billion	1.878 billion	4
Maine	7.5 billion	0.435 billion	2
USA	209.8 billion	13.251 billion	21
Canada	58.210 billion	3.346 billion	7
Total North America	268.01 billion	16.587 billion	28

Source: PotatoesUSA

North American Frozen Potato Plant Capacity

(CWT)



TOTAL
16.6B

Capacity measured in pounds. Figures are through 2022 + known increases through 2026.

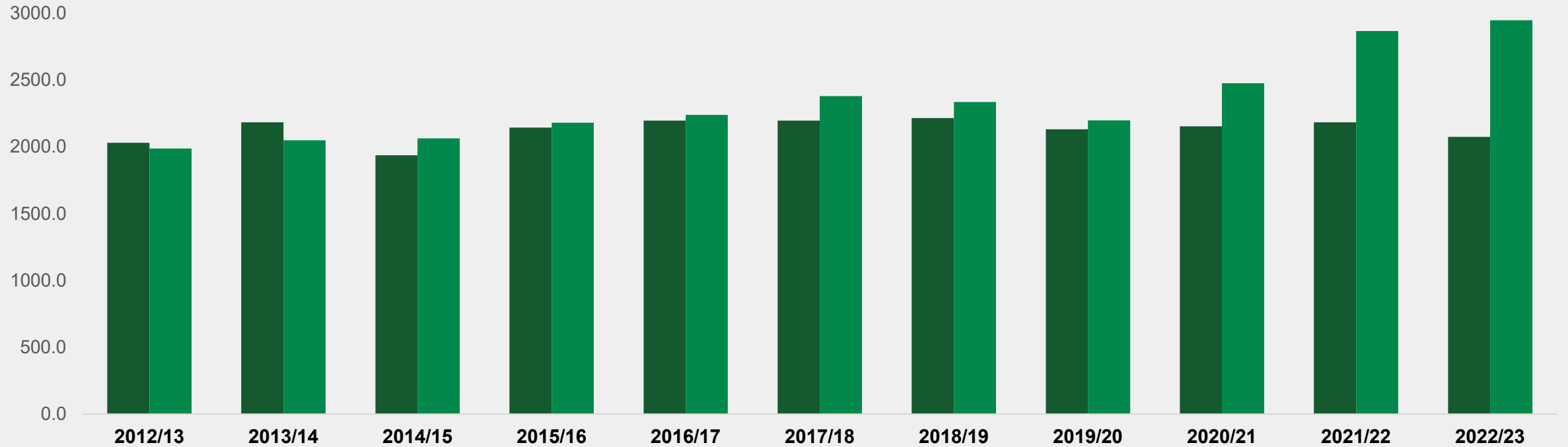
Planned Expansions

	COMPANY	LOCATION	CAPACITY
For 2023 Crop Year	Simplot	Moses Lake, Washington	170 million lb
April / May 2024	Lamb Weston	American Falls, Idaho	350 million lb
June 2025	McCain	Coaldale, Alberta, Canada	250 million lb
Late 2025 / Early 2026	Simplot	Moses Lake, Washington	450 million lb
2026?	?	Alberta, Canada	450 million lb
2026 / 2027	A European player	Midwest	300 million lb
Potential Increase			1.970 billion lb
Possible % Increase by 2026/27			12%

Source: PotatoesUSA

U.S. & Canada Fry Exports

(M lbs. / Year to Date)



US exports worth US\$1.434 billion in 2022/23

Canada exports worth US\$1.736 billion in 2022/23

Source: WPM & Trade Data Monitor LLC



Next stop across the Atlantic to Europe.

Belgium

Netherlands

France

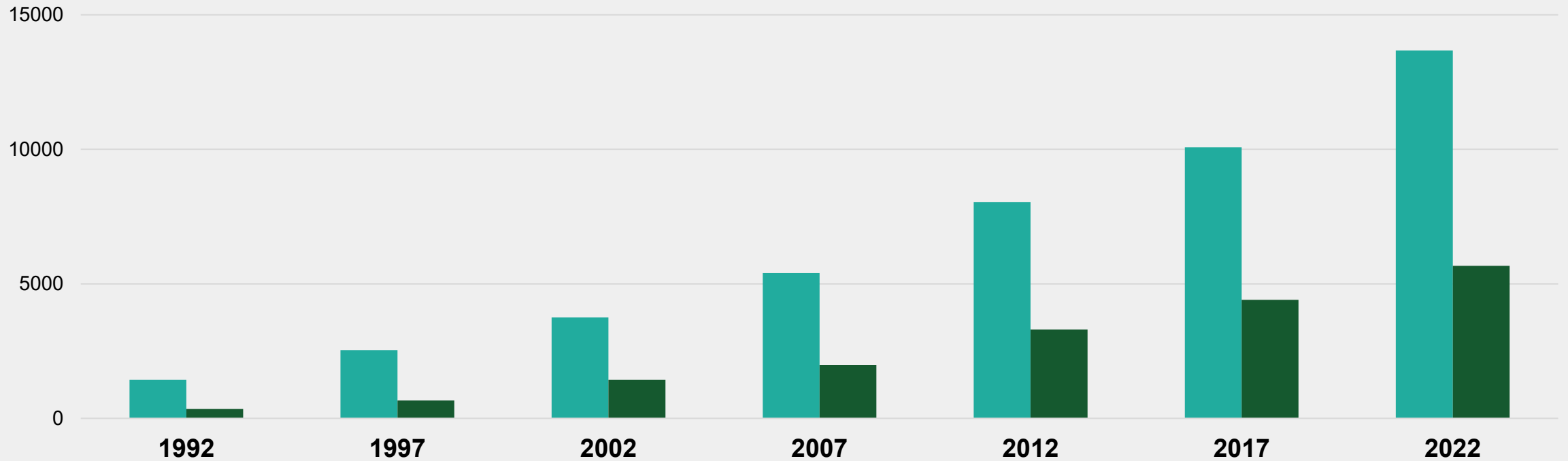
Germany

Poland

UK

Other European countries

Belgian Processing Potato Usage & Fry Output (M lbs.)



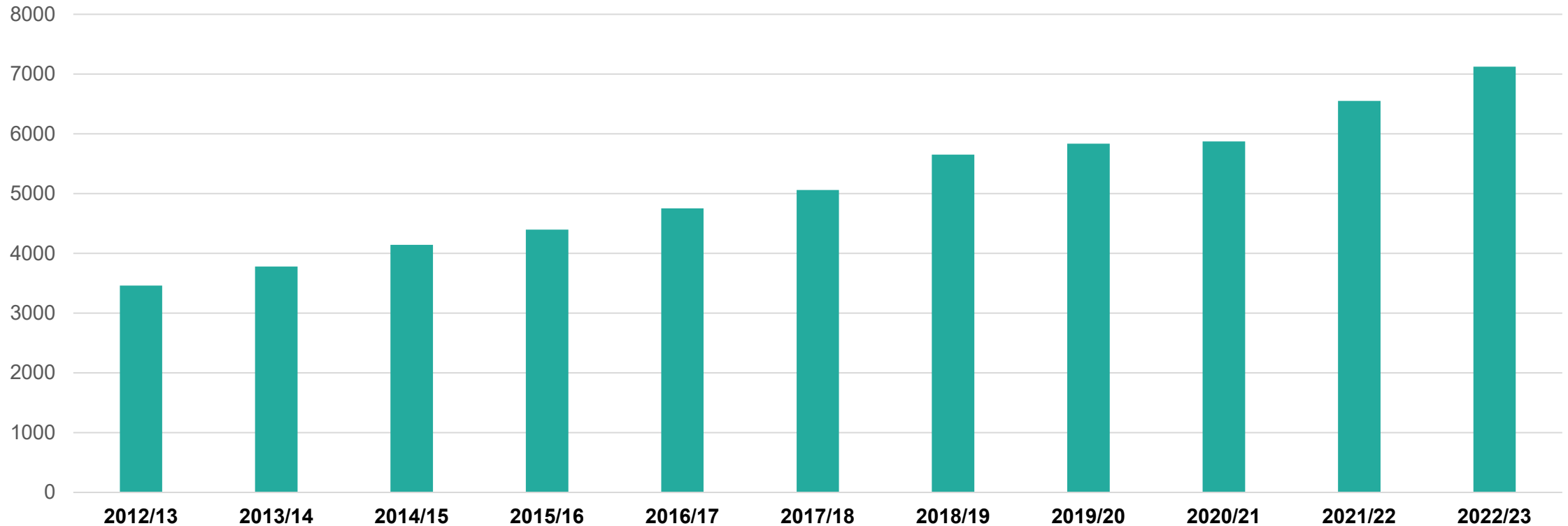
Source: Belgapom

Potato Usage Fry Output

Belgian Fry Exports

(M lbs. / Years to June)

WPM & Trade Data Monitor LLC



Source: WPM & Trade Data Monitor LLC

Exports worth US \$4.130 billion in 2022/23

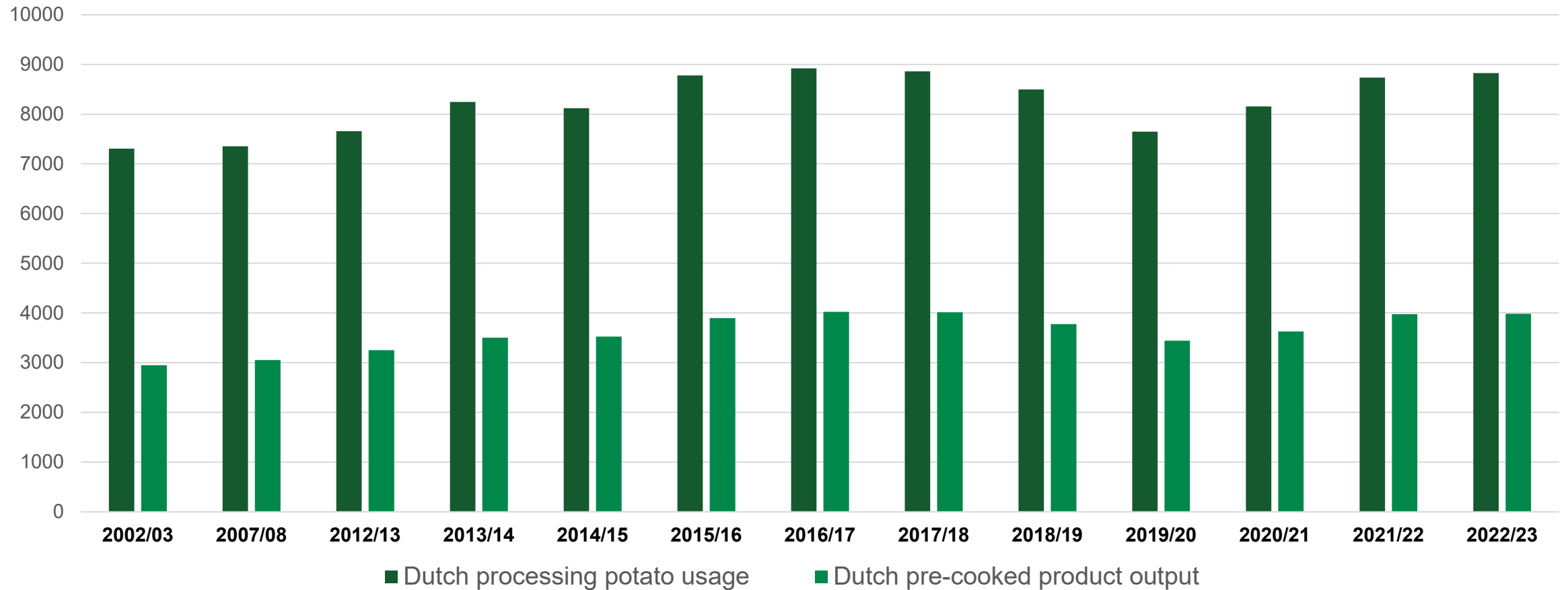


Belgian Processing Key Facts

- 21 plants, including two opened in the last 18 months by Lutosa (part of McCain) and Dutch-owned Aviko
- National investment of \$315 million in 2022
- Largely operated by Belgian or Dutch companies
- Largest company Clarebout bought rival Mydibel in 2023
- Processing potato usage has increased by 80% in last decade
- Very difficult to grow more potatoes in Belgium, so expansion is taking place by Belgian companies outside the country

Netherlands Processing Potato Usage and pre-cooked processed product output

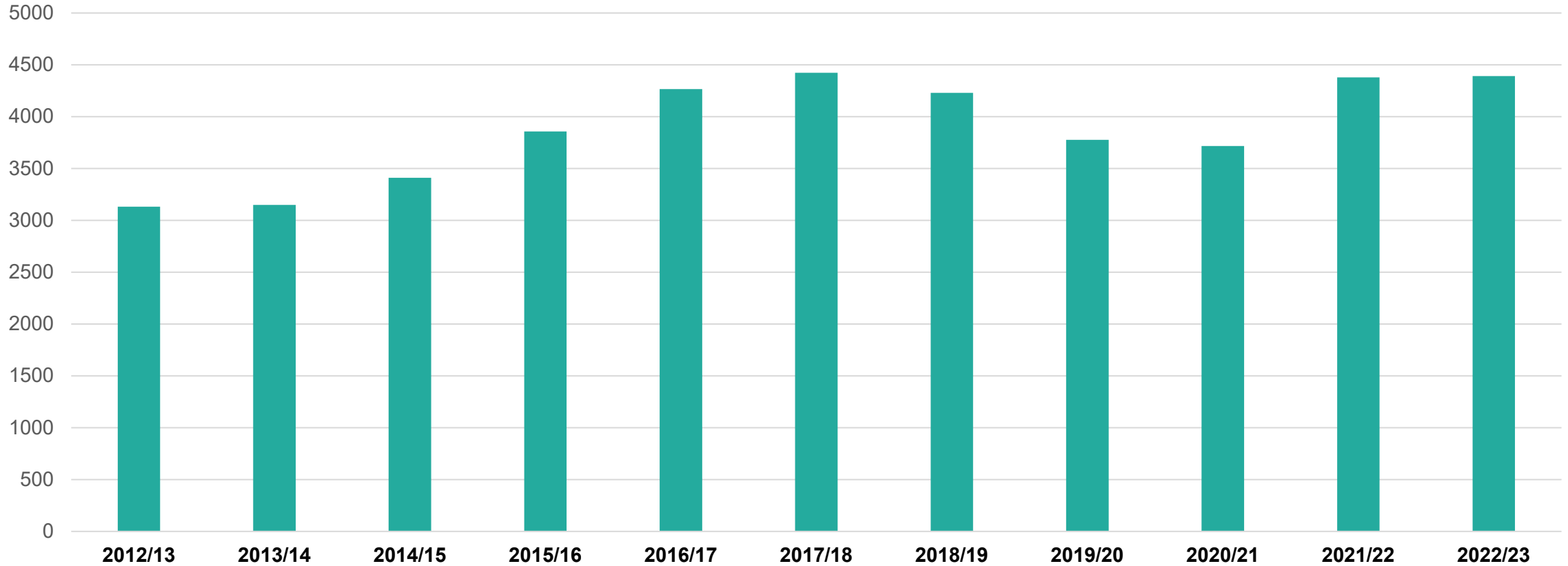
(M lbs.)



Source: VAVI

Dutch Fry Exports

(M lbs. / Years to June)



Exports worth US \$2.696 billion in 2022/23

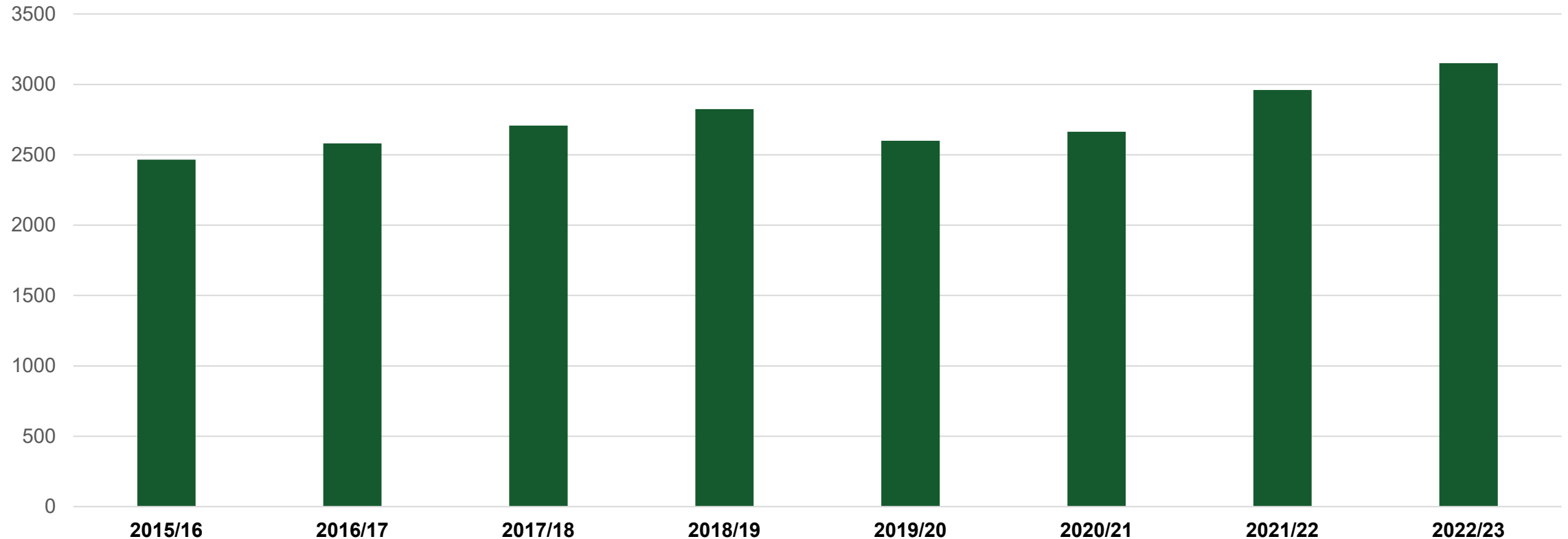


Netherlands Processing Key Facts

- 15 plants owned by members of processing organisation VAVI which represents 95% of Dutch processing
- There have been upgrades of plants but little expansion recently
- There is pressure on the Dutch potato area as the government seeks to protect the environment and growers lengthen rotations.
- Very little room for future expansion

French Processing Potato Usage

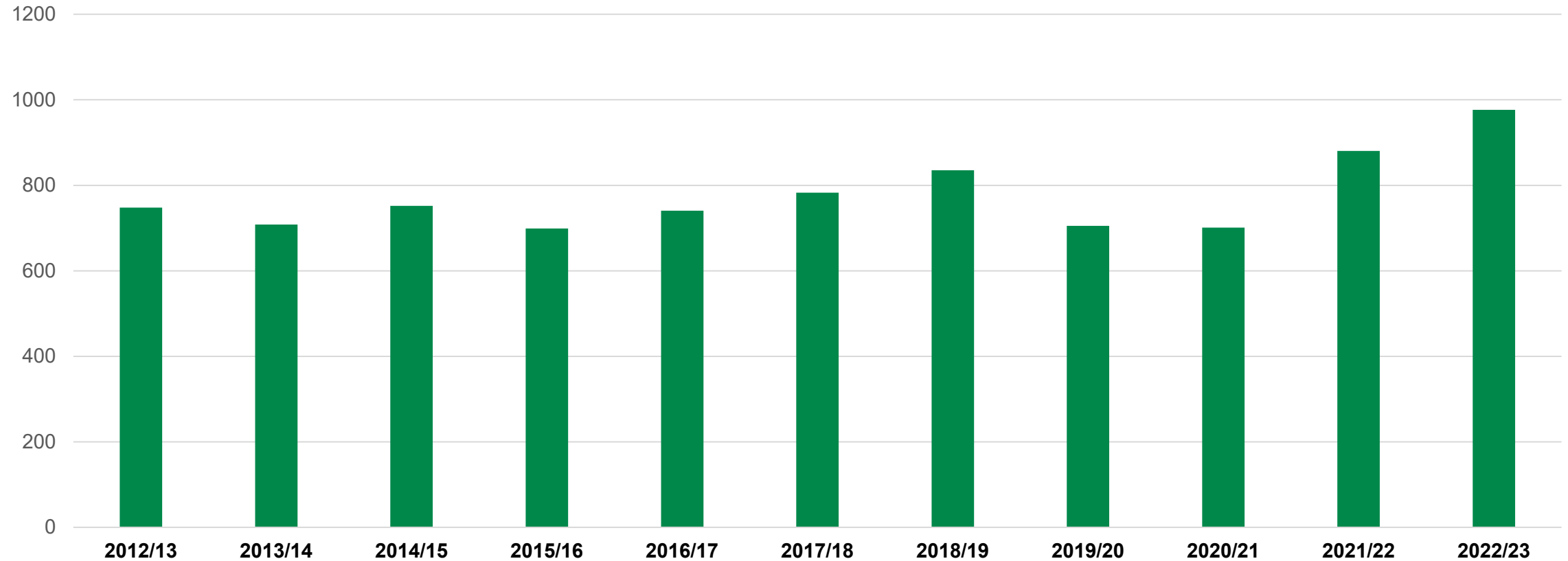
(M lbs. / Years to July)



Source: GIPT

French Fry Exports

(M lbs. / Years to June)



Exports worth US \$610 billion in 2022/23

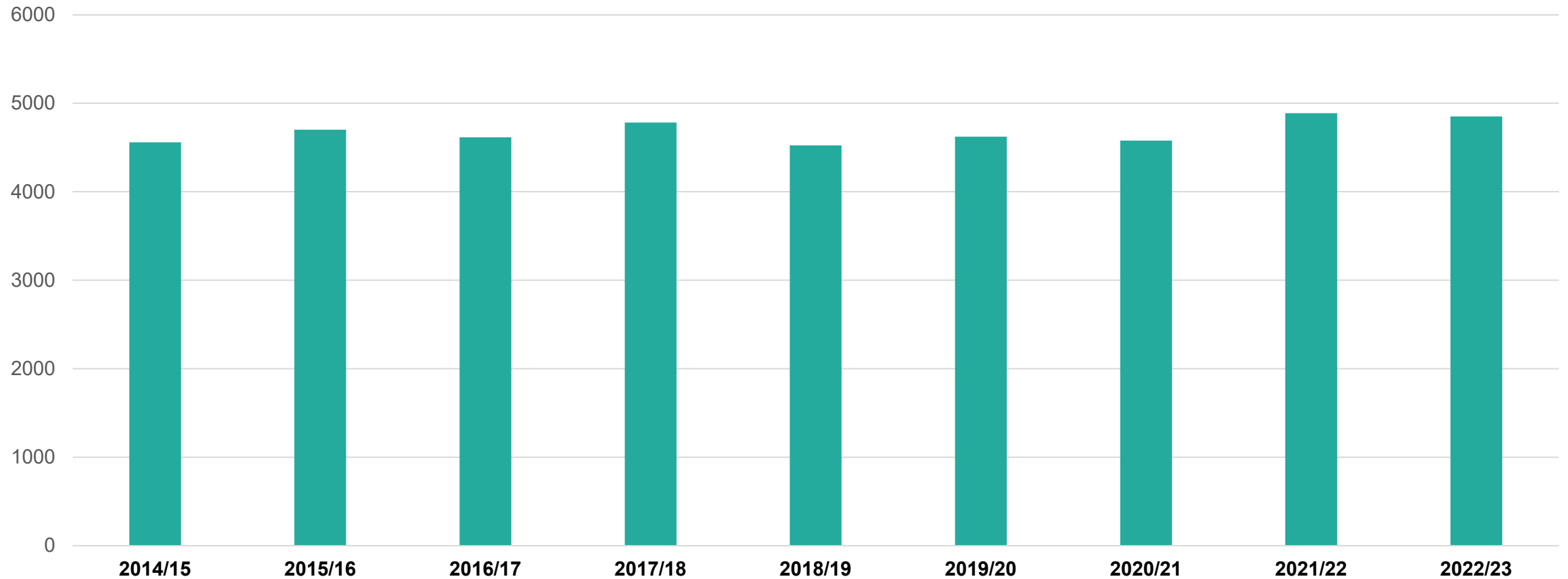


France Processing Key Facts

- 3 McCain plants plus own label producers
- The country in North-West Europe with the most potential for expansion
- A plant using more than 660 million pounds of potatoes a year is just opening in Dunkirk, 20 miles from the Belgium border. It is owned by Belgian company Clarebout with two operating locations in Belgium
- Fellow Belgian company Agristo has announced it will open a new fry plant in France, within 50 miles of the Belgian border

German Processing Potato Usage

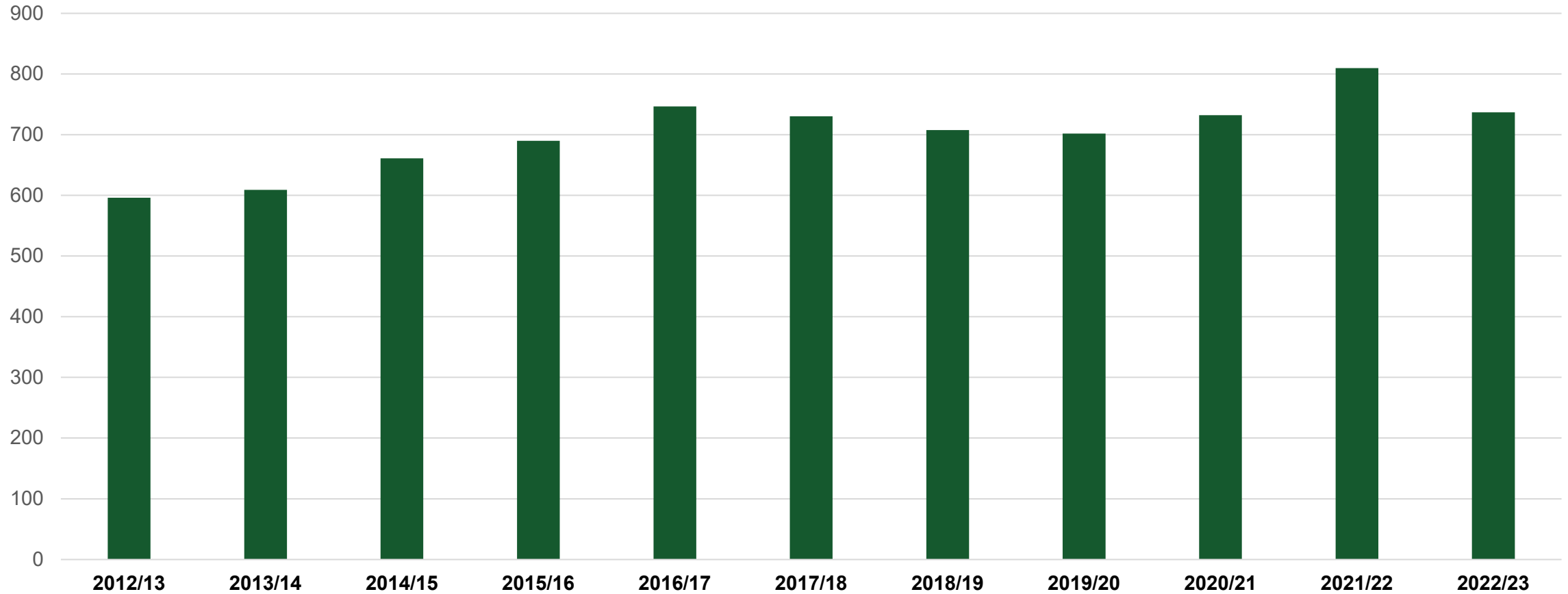
(M lbs.)



Source: AMI & Destatis

German Fry Exports

(M lbs. / Years to June)



Source: WPM & Trade Data Monitor LLC

Exports worth US \$460 million in 2022/23



Germany Processing Key Facts

- 18 processing plants including dehydrators
- Processing is focused on the home market rather than exports
- Potato production has slipped over recent years

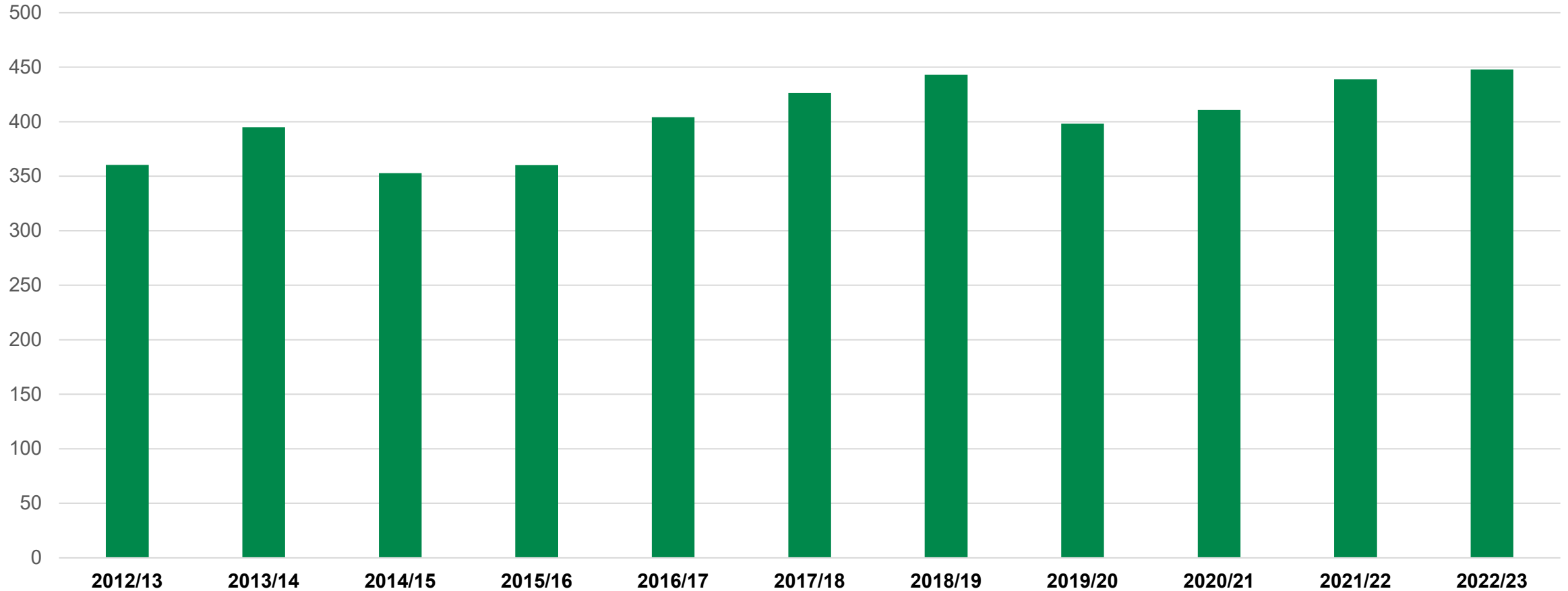


Poland Processing Key Facts

- There are three main fry processing plants plus six plants owned by major dehydrators. Fry plants include McCain and Dutch processor Farm Frites
- Processing potato usage fell 15% between 2016/17 and 2022/23 seasons

Polish Fry Exports

(M lbs. / Years to June)



Source: WPM & Trade Data Monitor LLC

Exports worth US \$250 million in 2022/23

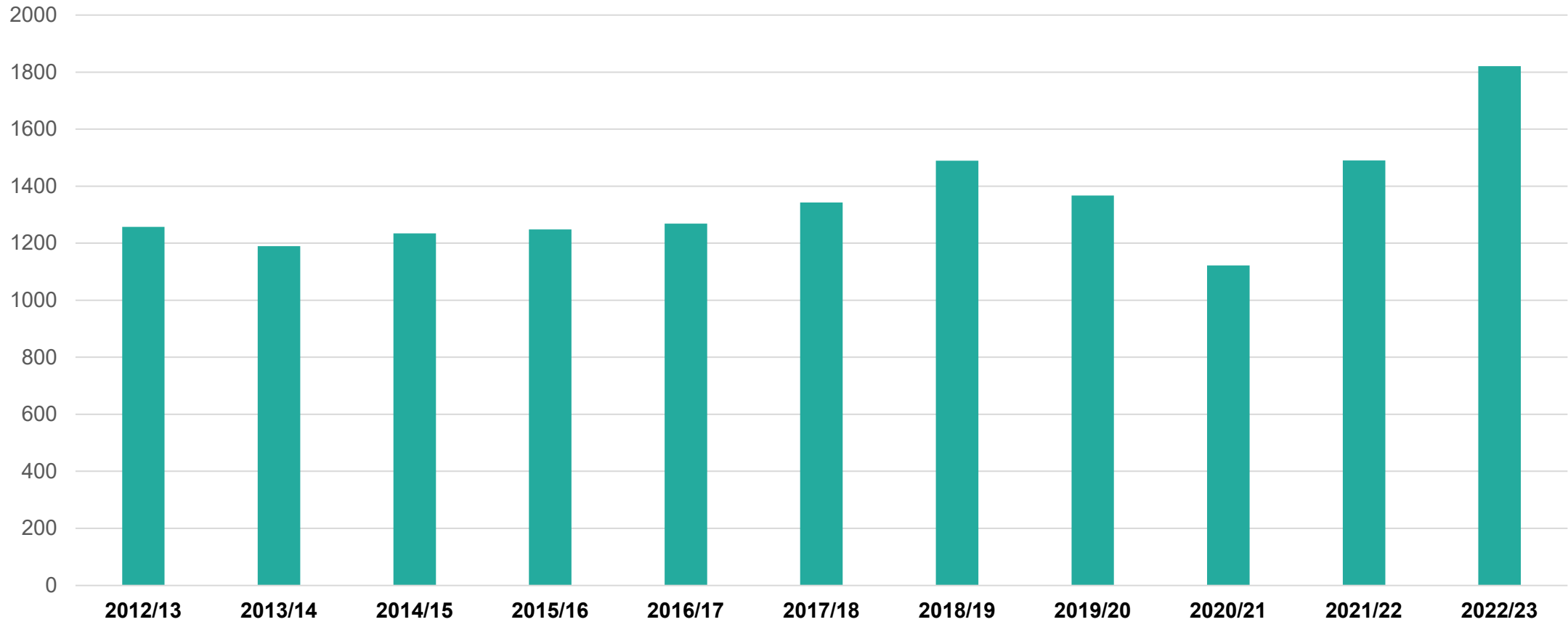


UK Processing Key Facts

- The second largest volume import market after the US
- 7 major plants and half a dozen smaller ones. McCain uses 1.432 billion pounds of potatoes in its 5 plants.
- Lamb Weston is the other large processor
- UK potato production has dropped by almost 50% since 2017
- There is room for at least one more large plant

UK Fry Imports

(M lbs. / Years to June)



Imports worth US \$1.162 billion in 2022/23



Other European Countries

- Most production is aimed at home market sales
- Austria: 3 plants c.350,000 tonnes of potatoes used a year
- Ireland: 2 plants
- Italy: 5 plants
- Norway: 3 plants
- Russia: 3 plants
- Spain: 2 plants
- Sweden: 1 plant
- Switzerland: 1 plant



Middle East and Africa

- Turkey
- Egypt
- Saudi Arabia

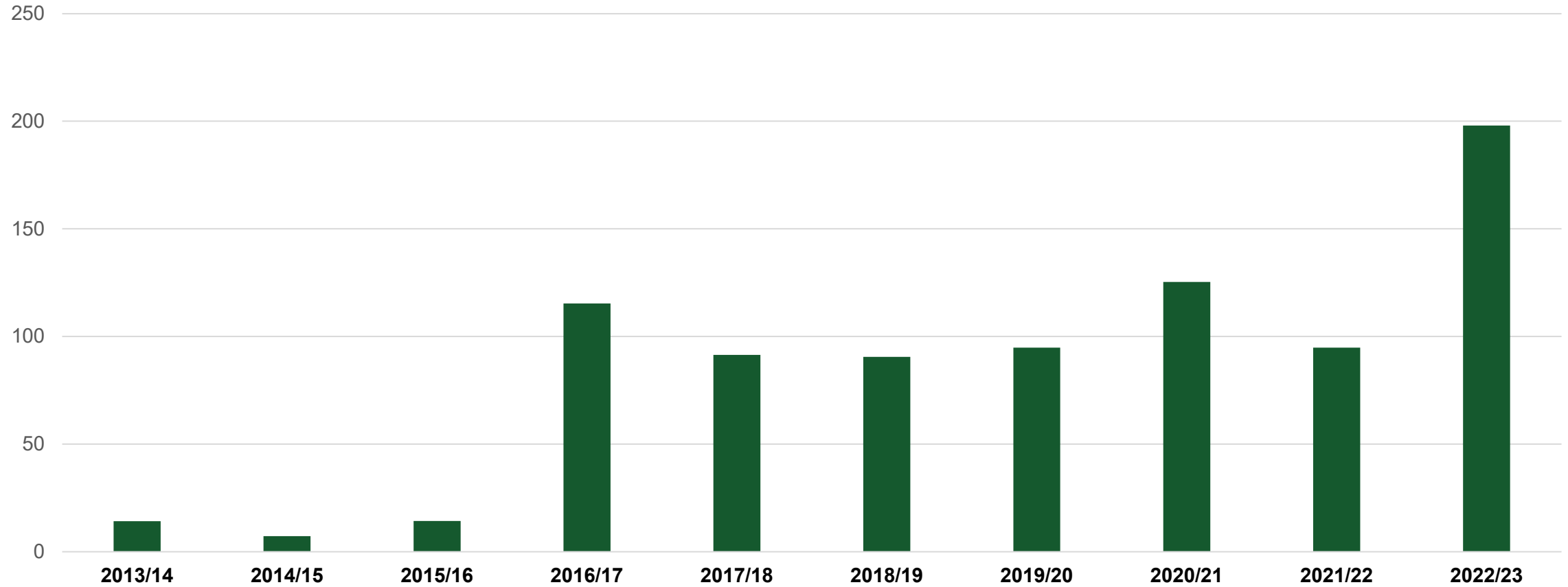


Turkey

- There are six significant fry processing plants in Turkey, largely owned by national not international companies
- Potato production has increased by 10% in the last decade to 11.2 billion pounds. Yields are up 25% in that time

Turkish Fry Imports

(M lbs. / Years to June)



Exports worth US \$140.5 million in 2022/23

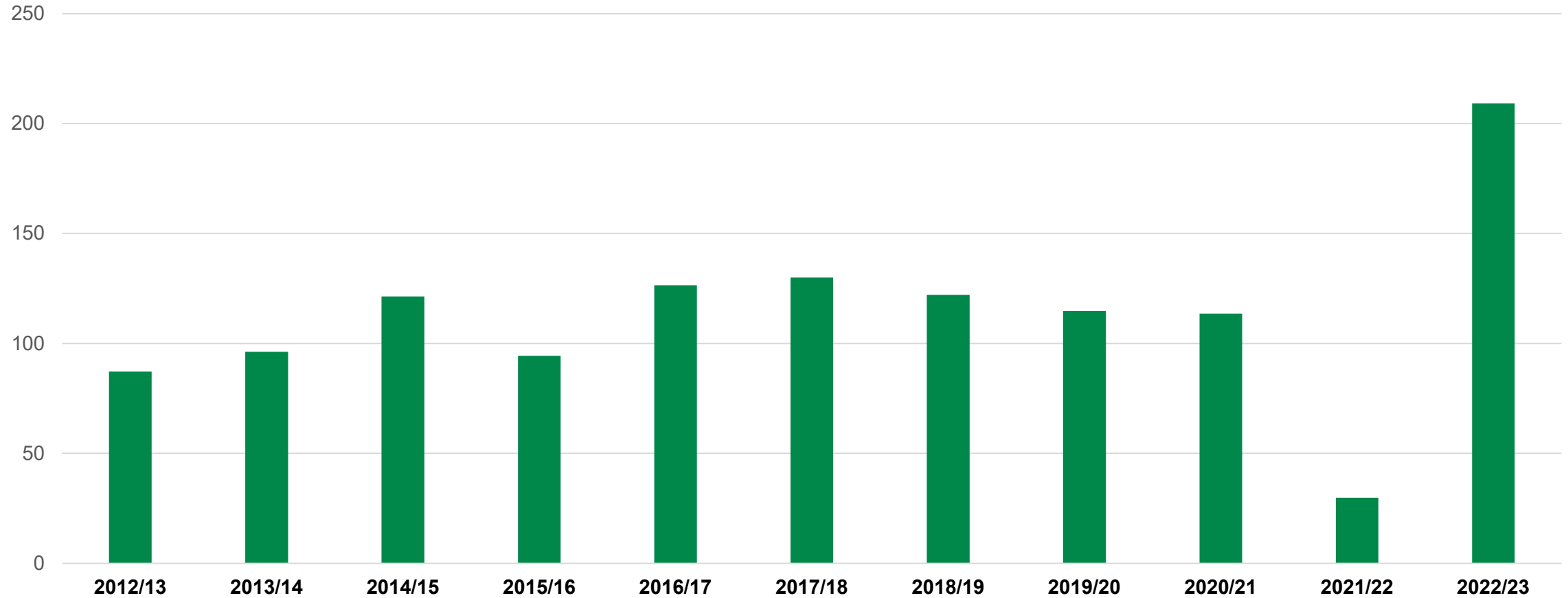


Egypt

- 3 main plants including a 330 million pound a year plant co-owned by Dutch processor Farm Frites
- Production has increased by 60% over the last decade to 1.522 billion pounds – yields up 92%
- Scope for expansion in processing

Egypt Fry Imports

(M lbs. / Years to June)



Exports worth US \$139 million in 2022/23
(Some unreliability in Egyptian customs data)

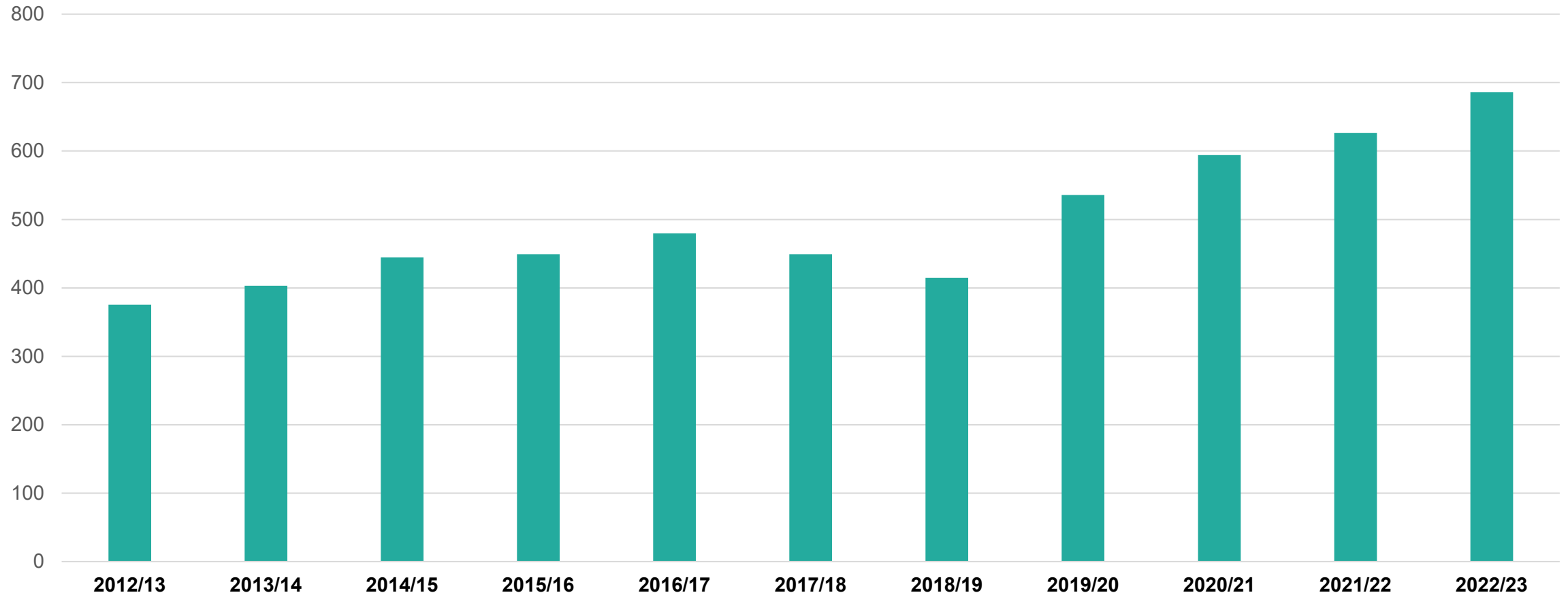


Saudi Arabia

- Imports have increased dramatically over the last decade. That has led to more investment in processing in the country
- A 79 million pound a year plant has been opened by the JADCO company – part funded by the Saudi government
- 2 other major plants
- Potato production has increased by 43% to 1.274 billion pounds in the last decade
- Yields have increased by 17% in that time

Saudi Arabia Fry Imports

(M lbs. / Years to June)



Source: WPM & Trade Data Monitor LLC

Imports worth US \$479 million in 2022/23



Other Middle Eastern Markets

- Iran: 1 plant
- Iraq: 1 plant
- Israel: 1 plant
- Kazakhstan: Dutch investment in a new plant



African Markets

- South Africa: 3 McCain plants + Nature's Garden plant and chip plants (including PepsiCo) The country imported 99 million pounds of fries in 2022/23 and exported two million pounds
- Desire to expand processing
- 2 plants in Kenya
- 2 plants in Zambia
- 1 plant in Nigeria

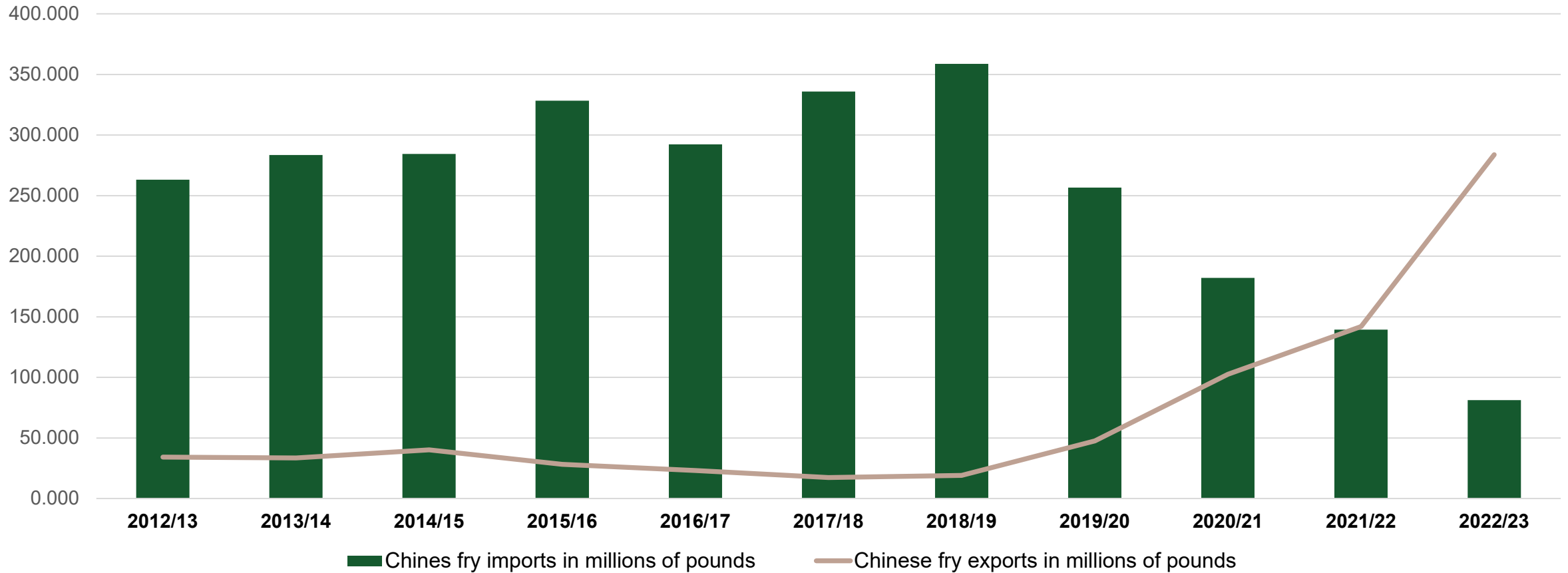


China

- There are at least 20 major processors in China – many producing dehydrated products
- N America and European players including Lamb Weston, Simplot, McCain, Aviko and PepsiCo have a presence in the country
- The USDA estimates that national frozen french fry production is about 993 million pounds a year

Chinese Trade in Fries

(M lbs. / Years to June)



Imports worth US \$54 million and exports US\$183 million in 2022/23

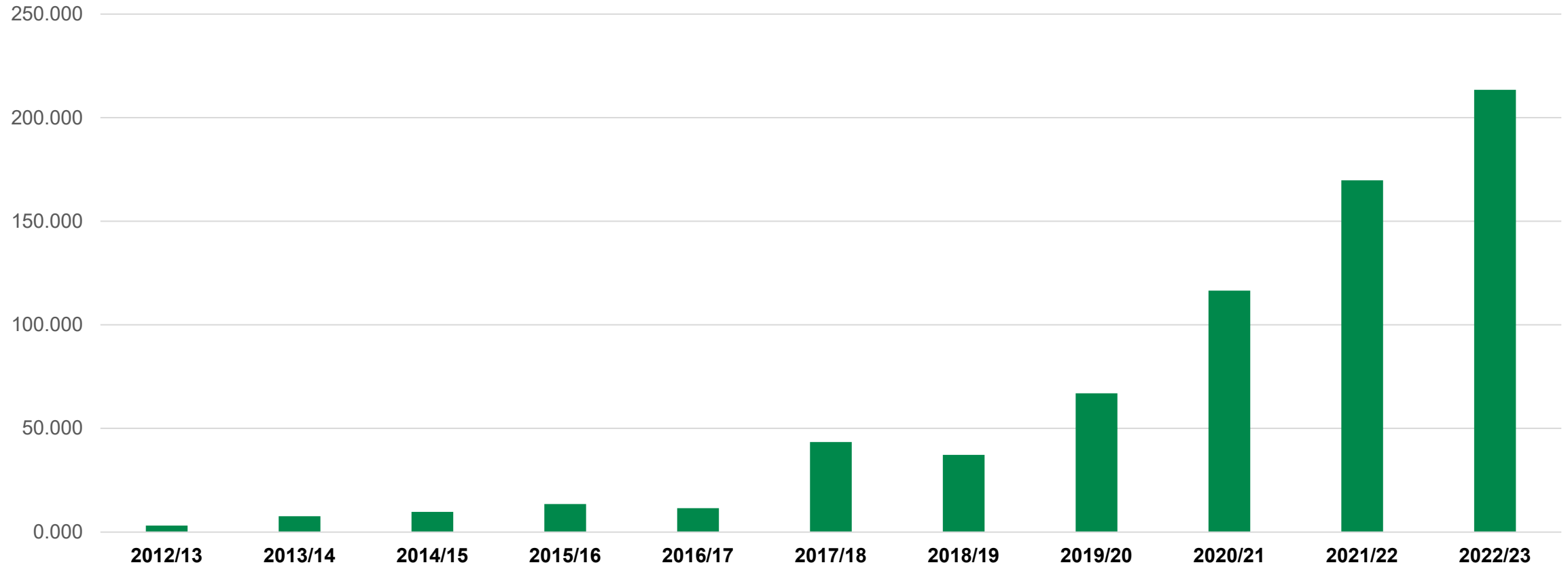


India

- There are about 20 major processors in India, many producing dehy and starch products.
- McCain and PepsiCo have a manufacturing presence
- N America and European players including Lamb Weston, Simplot, McCain, Aviko and PepsiCo have a presence in the country
- Further investment will be needed to keep up with the growing population and demand

India Fry Exports

(M lbs. / Years to June)



Exports worth US\$132 million in 2022/23



South America

- Argentina
- Brazil

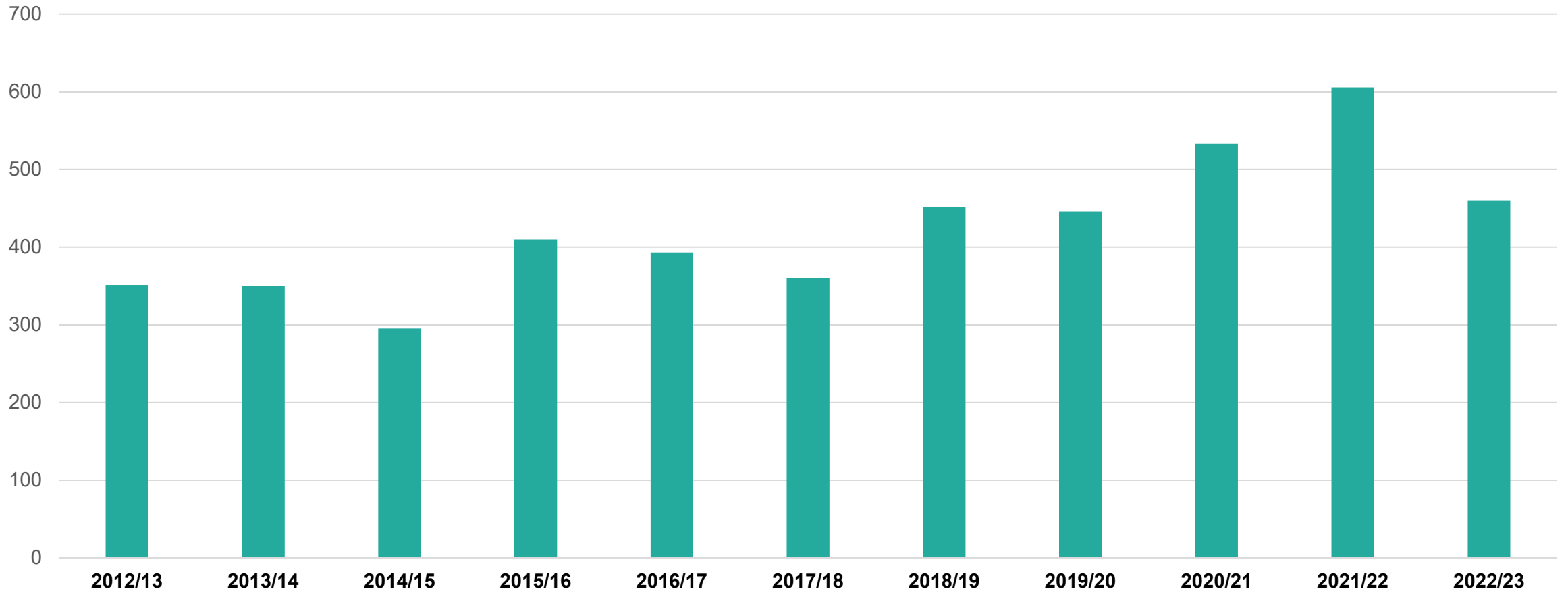


Argentina

- There are four major processing plants in Argentina
- McCain: 1 plant
- Lamb Weston Alimentos Modernos JV has one plant with another in the pipeline
- Farm Frites: 1 plant
- Simplot: 1 plant
- Production of all potatoes has increased by 59% over the last decade to 6.515 billion pounds

Argentina Fry Exports

(M lbs. / Years to June)



Exports worth US \$280 million in 2022/23

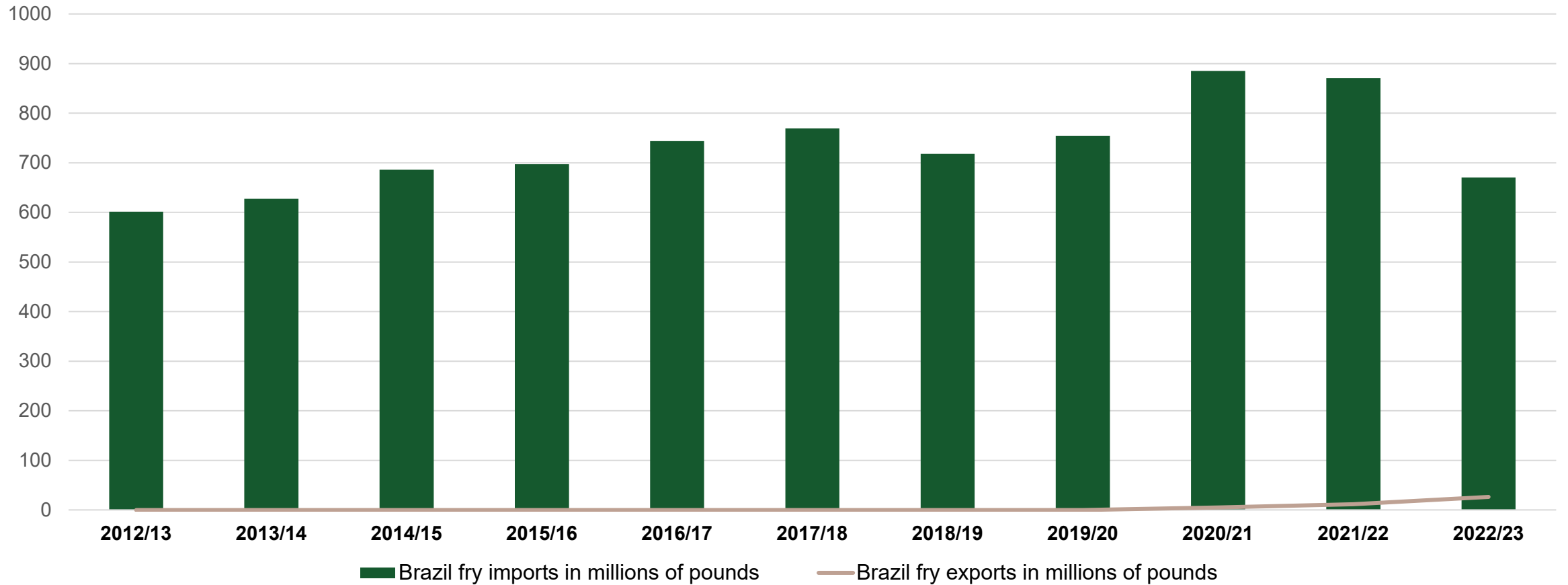


Brazil

- 3 main processing plants, including a McCain one and Bem Brazil processing 992 million pounds of potatoes a year
- There has been no increase in potato production in the last decade

Brazil Fry Exports

(M lbs. / Years to June)



Source: WPM & Trade Data Monitor LLC

Imports worth US \$386.6 million in 2022/23, exports were \$12.5 million

Exports of Frozen Potato Products

(M lbs. / By Region)

	2022/23	2021/22	2020/21	2019/20	2018/19	2017/18	2016/17	2015/16	2014/15	2013/14	2012/13	12/13:22/23 %
EU-5	13676	13054	11434	11416	11866	11422	10909	10003	9317	8641	8297	64.8
Other EU	625	584	530	529	583	579	539	455	443	485	456	37.0
Total EU	14302	13638	11964	11944	12450	12001	11448	10457	9760	9126	8754	63.4
North America	5023	5052	4632	4331	4553	4579	4437	4326	4003	4235	4020	25.0
South & Central America	494	620	541	447	452	361	394	411	296	351	354	39.7
Australasia	139	161	134	183	178	186	155	141	152	180	152	-9.0
Asia	518	327	234	134	78	94	64	62	71	61	51	919.7
Africa	24	24	23	19	20	18	12	12	14	11	6	300.1
Other Europe inc UK	70	64	73	80	125	162	86	76	77	75	82	-14.9
Middle East	409	127	243	215	218	231	263	119	134	117	92	344.6
Total	20978	20012	17843	17354	18074	17632	16859	15603	14507	14155	13510	55.3
EU+ N America	19325	18690	16595	16275	17003	16580	15885	14784	13763	13361	12774	51.3
EU & N Am as % total	92.1	93.4	93.0	93.8	94.1	94.0	94.2	94.7	94.9	94.4	94.5	-2.6

EU 5 = Belgium, Netherlands, France, Germany & Poland

Imports of Frozen Potato Products

(M lbs. / By Region)

	2022/23	2021/22	2020/21	2019/20	2018/19	2017/18	2016/17	2015/16	2014/15	2013/14	2012/13	12/13:22/23 %
EU-5	3925	3713	3450	3438	3644	3466	3361	3129	3000	2974	2802	40.1
Other EU	2981	2807	2278	2347	2474	2372	2345	2239	2104	1993	1824	63.4
Total EU	6906	6519	5727	5785	6118	5839	5706	5369	5104	4967	4626	49.3
North America	3883	3547	3149	2728	2721	2682	2460	2305	2164	2153	2090	85.8
South & Central America	1574	1883	1631	1446	1458	1464	1388	1224	1138	1031	959	64.2
Australasia	417	307	267	282	304	347	303	300	328	277	261	60.0
Asia	2687	2387	2266	2478	2486	2277	2186	2007	1886	1904	1801	49.2
Africa	196	192	155	122	141	109	101	43	55	38	88	121.9
Other Europe inc UK	2013	1675	1289	1515	1635	1463	1380	1344	1322	1273	1333	51.0
Middle East	941	891	825	751	625	639	652	592	587	514	453	107.5
Total	18615	17402	15310	15107	15488	14822	14175	13185	12586	12158	11611	60.3
EU+ N America	10789	10067	8876	8514	8839	8521	8166	7674	7268	7120	6716	60.6
EU & N Am as % total	58.0	57.8	58.0	56.4	57.1	57.5	57.6	58.2	57.7	58.6	57.8	0.2

Estimates of Frozen Potato Consumption and Population 2012 - 2032

	Pounds/person/year			Population in billions				
	2021	% change	2011	2022	% change	2012	2032	% 22:32
World	4.9	30.4	3.8	7.942	11.6	7.117	8.649	8.9
Asia	2.3	60.0	1.4	0.436	9.7	0.399	0.464	6.1
Africa	2.2	2.1	2.1	1.410	28.6	1.096	1.766	25.3
Europe	19.2	15.5	16.6	4.708	0.8	4.294	4.997	-1.3
S. America	10.7	43.6	7.4	0.744	9.1	0.738	0.735	6.6
Oceania	20.3	-1.9	20.7	0.045	17.7	0.038	0.050	11.6

Source: UN FAOSTAT and UN



Fry Takeouts

(as the world loves a fry takeout)

- There is already large N American expansion in the pipeline
- As this year shows, it is important that all parts of the supply chain can cope with expansion, including storage capacity
- Not such large European expansion is planned
- There is not the room to expand in Europe's and the world's largest exporting nations – Belgium and Netherlands
- Most European expansion is likely to take place in France, but there is potential in Germany, Poland and the UK where potato production has fallen
- The global market for processed product remains strong – 5% a year
- Demand growth is stronger in Africa, Middle East and Asia
- Increasing imports means development of a local processing industry – witness China, India, Russia and Saudi Arabia
- More extreme weather poses a threat to production
- The growth in processing product has come at the expense of table potato sales



**Many thanks to
Potatoes USA for
its support in
putting together
this presentation**