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Overview of global and Spanish reefer market

Mediterranean Ports and Shipping 2021

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OBJECTIVES OF THE PRESENTATION

- Overview of the refrigerated trade:
  - Commodity groups and traded volumes
  - Trade drivers
  - Trading partners
  - Role of maritime transport
- Future outlook of seaborne reefer trade
- Reefer market in Spain

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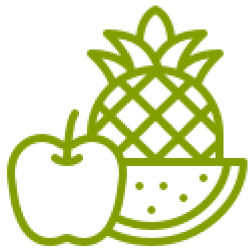
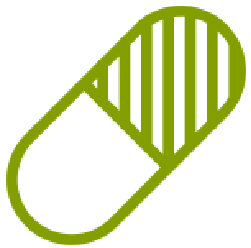
Global reefer market

Main refrigerated cargo commodity categories

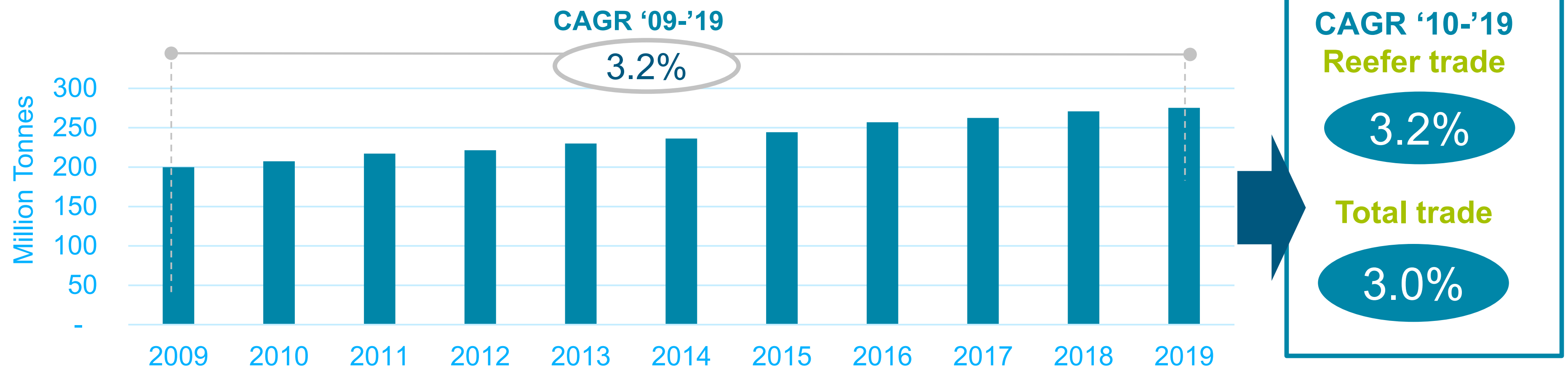
Meat	Fish	Fruit	Vegetables
			

Dairy products	Confectionery	Pharma	Flowers
			

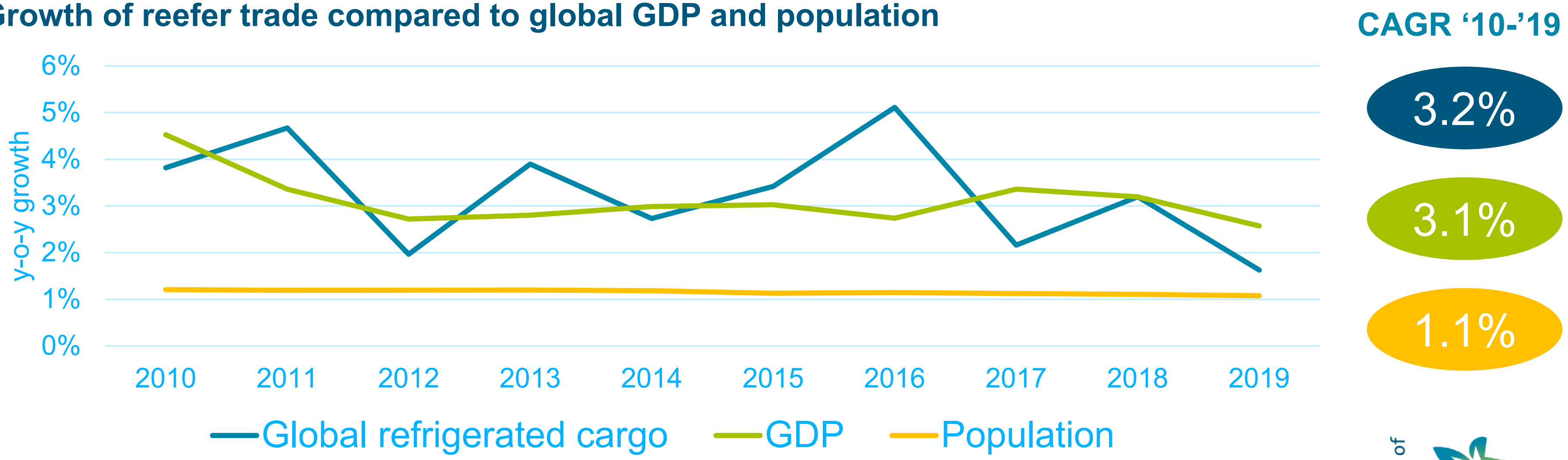
Overview of global reefer market

Global reefer trade has increased from 200 million tonnes in 2009 to 275 million tonnes in 2019, CAGR of 3.2%.

Global trade of refrigerated cargo, 2010-2019, in tonnes



Growth of reefer trade compared to global GDP and population



CAGR: Compound annual growth rate

Drivers of global refrigerated trade

Growth drivers

Socioeconomic

- Population and GDP growth
- Changes in diet (increased demand for plant-based and vitamin-rich diets)
- Increase demand of meat in Chinese market
- Increase consumption of exotic, non-local food, regardless of seasonality

Technological

- Improved supply chains (use of refrigerated containers vs. refrigerated vessels)
- Improved port infrastructure (increase in reefer plug capacity, new refrigerated warehouses)
- Increased efficiency (real-time access to data on container temperature)

Data of trade for 2020 is still not fully available, but some of the main exporting countries have already reported…

Preliminary results show that, although the reefer market has been les affected by COVID-19, restrictions in the supply chain have hindered the exports of some of the main exporting countries.

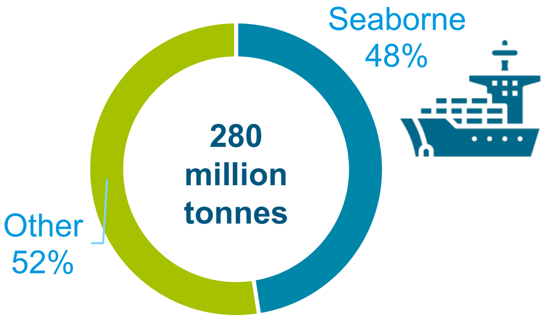
Exporter country	2020/2019 change	% share of total exports 2019
Netherlands	-3.0%	7.3%
Spain	0.1%	7.0%
USA	-1.6%	6.2%
China	1.3%	5.1%
Germany	-4.2%	5.1%
France	-1.3%	3.3%
Brazil	5.6%	2.9%
Belgium	-0.3%	2.8%
Poland	0.0%	2.5%
India	-12.0%	2.4%
Turkey	3.9%	2.1%
New Zealand	0.4%	2.0%
Egypt	-106.9%	1.9%
Italy	-4.8%	1.7%
Canada	6.5%	1.6%
Guatemala	0.5%	1.6%
United Kingdom	-6.7%	1.4%

These countries accounted for **~60%** of world exports of refrigerated cargo in 2019

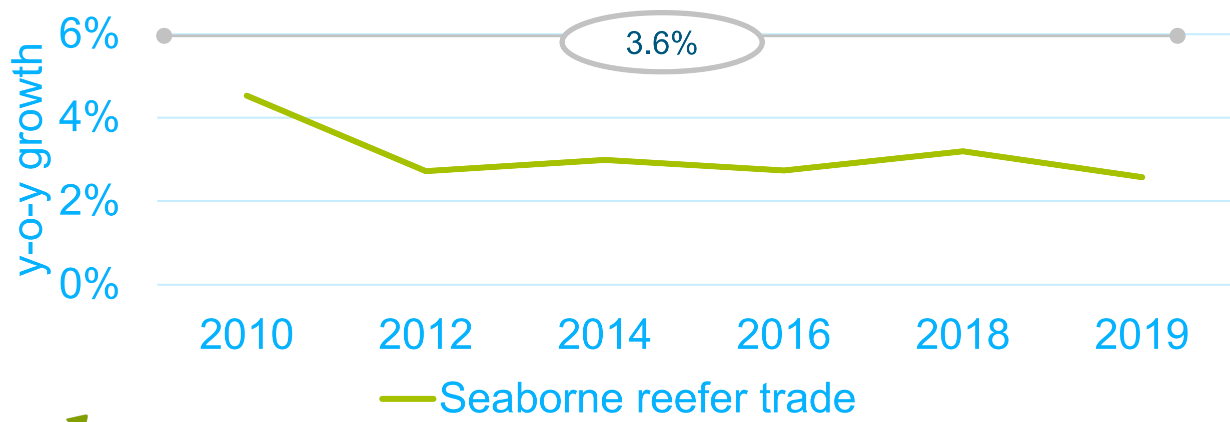
-5.3% global merchandise trade

Seaborne trade represents 48% of total trade in 2019 and has grown at a higher rate than total reefer trade (CAGR 3.6% vs. 3.3%). Of the seaborne trade, 13% is transported in refrigerated vessels and 87% in reefer containers.

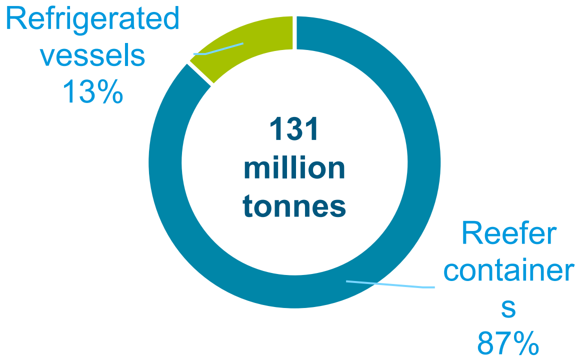
Seaborne trade vs. total trade, 2019



Y-o-y growth of seaborne reefer trade



Reefer containers vs. refrigerated vessels



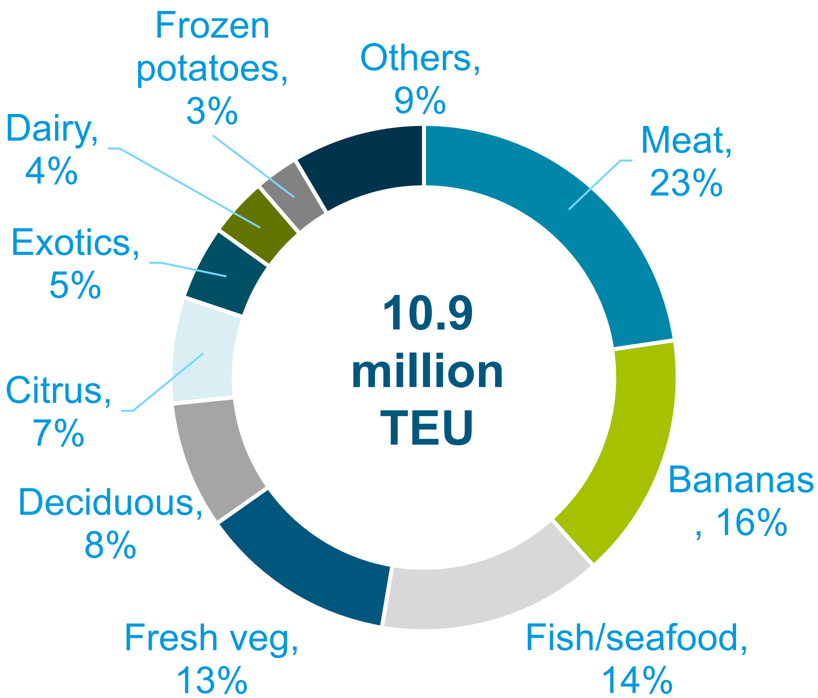
~10.6m TEU

Growth drivers

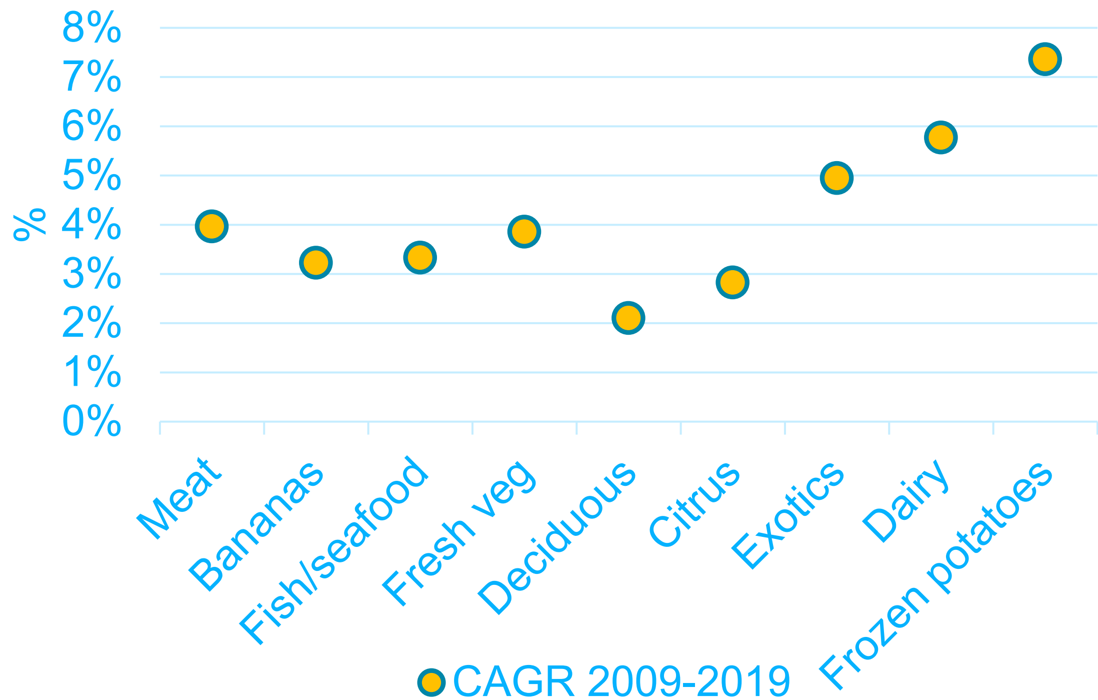
Maritime vs. other modes	Containers vs. reefer vessels
▪ **Competitive transport costs** compared to air and truck for long distances ▪ **Technological developments** have untapped the option of maritime transport (Controlled Atmosphere containers, GPS…)	▪ **Contracting reefer vessels fleet** ▪ **Increased preference of supply chain stakeholders in favour of containerships**

Meat, bananas and fish account for more than 50% of the trade in 2019. Frozen potatoes, dairy products and exotics have experienced the biggest growth in seaborne trade in the last decade.

Seaborne reefer commodities, 2019



Evolution of commodities 2009-2019



The global seaborne reefer trade is served by 15 different trade routes. The top 5 routes account for 56% of total seaborne reefer trade, being North America-Asia is the biggest route.

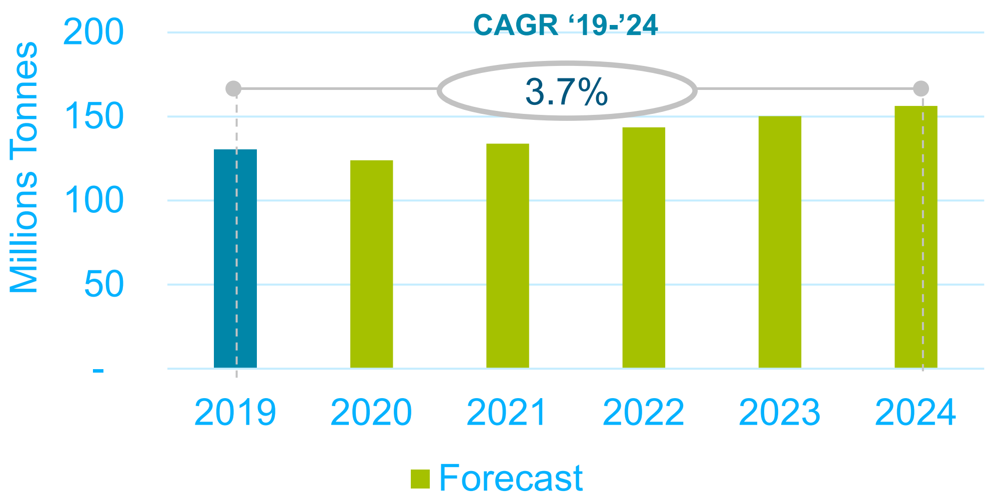
Top 10 seaborne reefer trade routes, 2019

Other routes:

- Mediterranean to Asia
- North Europe to North America
- Southern Africa to Europe
- Oceania to North Europe
- Southern Africa to Asia

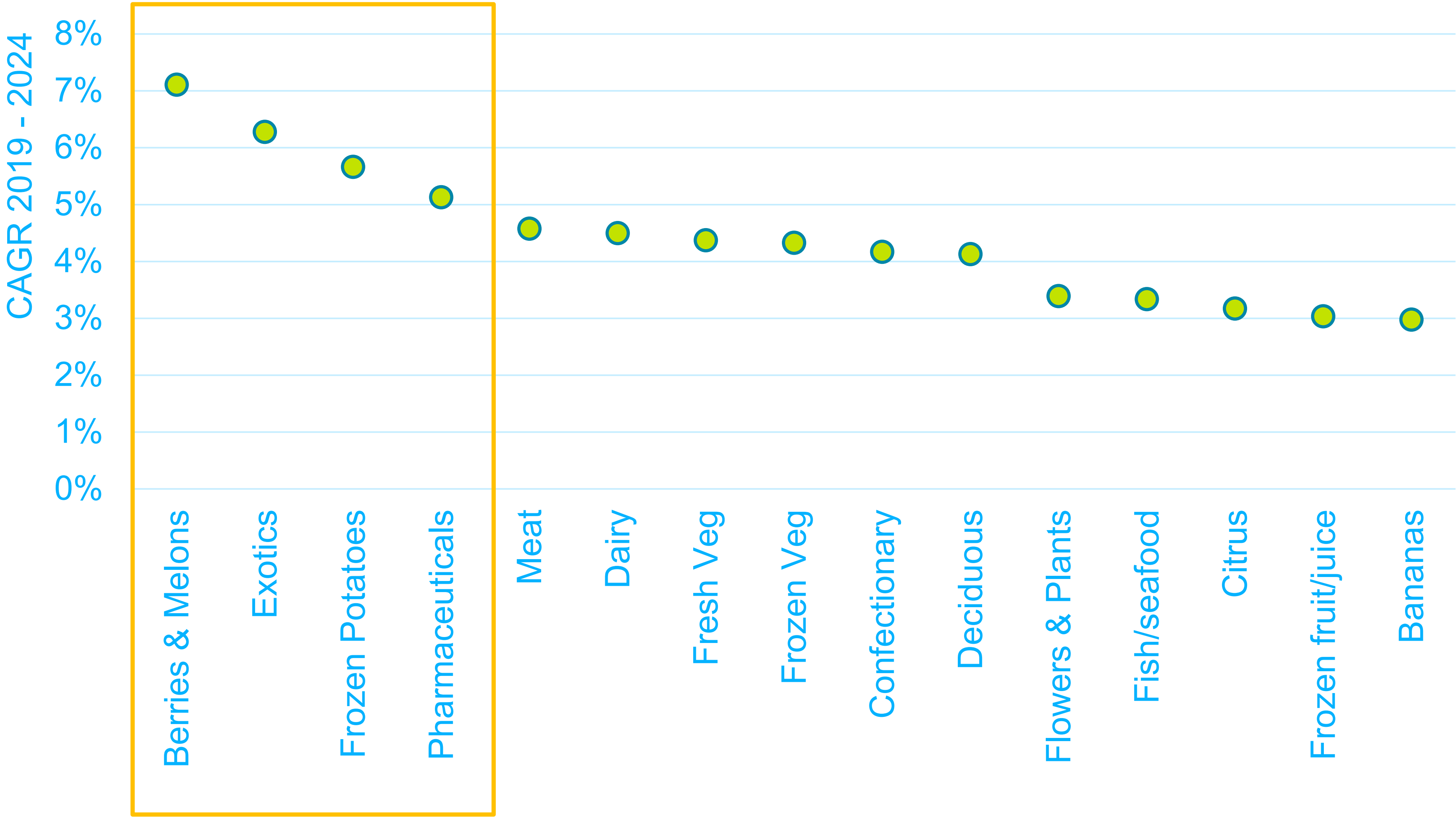
Seaborne trade of refrigerated cargo outlook to 2024: seaborne trade is forecasted to grow at a similar rate as in the past 10 years, reaching an estimated 156m tonnes (~ 13m TEU).

Forecast of seaborne reefer cargo



	CAGR 2009-2019	CAGR 2019-2024
Seaborne refrigerated cargo	3.6%	3.7%
GDP	3.1%	2.6%
Population	1.2%	1.0%

Growth potential, by commodity group



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Way forward – sector challenges and opportunities

Opportunities

- Growing market for ports:
  - Consumption of perishables is growing
  - Further modal shift expected towards maritime transport
  - Increased containerisation
- Bigger revenues for port authorities, terminal operators and shipping lines
- Increased visibility of the cargo compared to the dry containers
- Technological developments that untap the potential to other sectors
- Competitive transport costs compared to air

Challenges

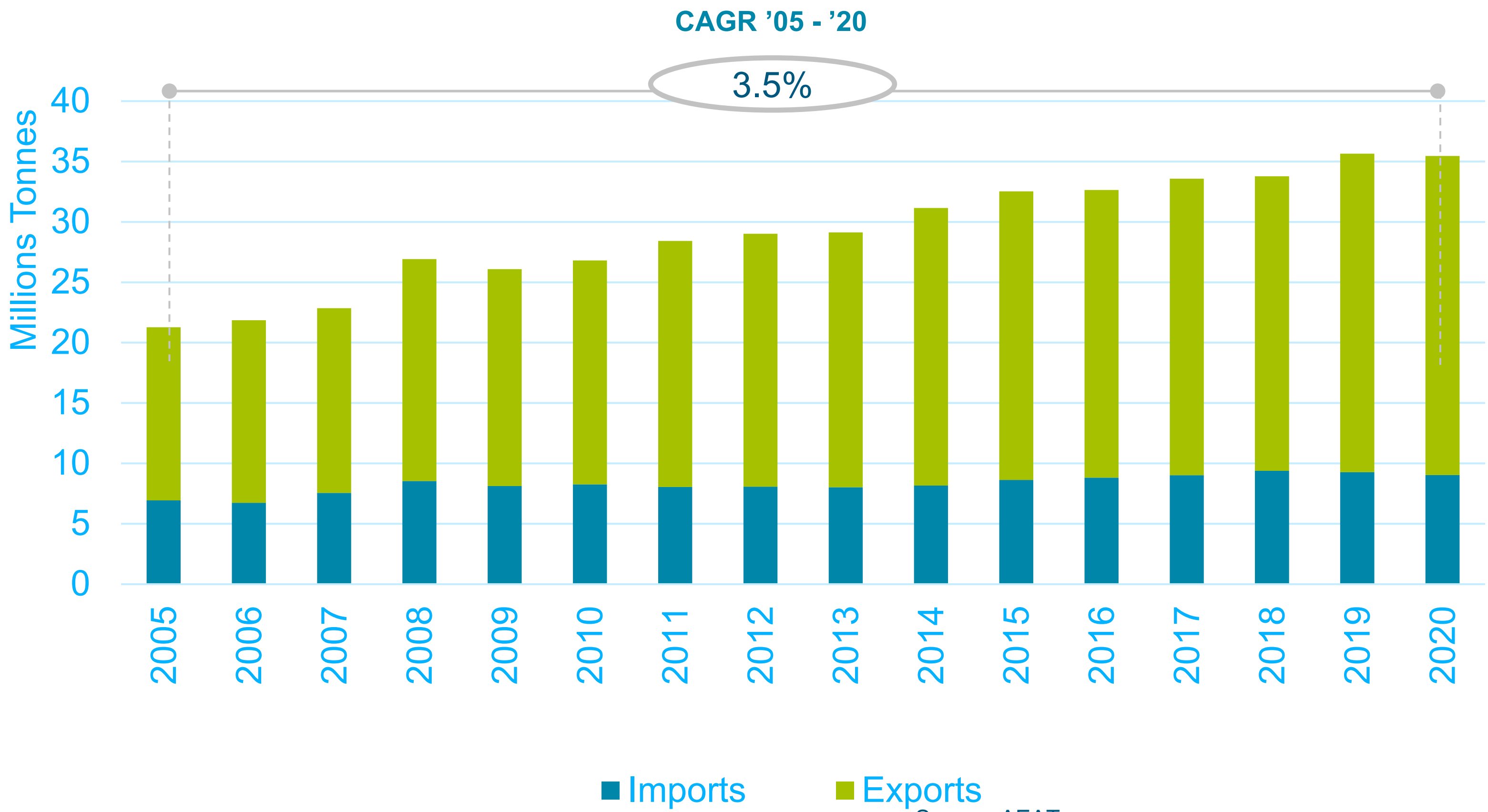
- Efficient port and terminal operations required
- Higher OPEX:
  - Higher maintenance of equipment
  - Higher cost of energy
- Sustainability concerns – cost of energy
- Increasing shortage of refrigerated shipping container equipment
- Trend for zero kilometre and near-shoring
- Shortage of workers to harvest local crops

OPEX: Operating Expenses

Overview of Spanish reefer market

The Spanish reefer market has grown from 21.3 million tonnes to 35.5 million tonnes in 2005-2020, a CAGR of 3.5%. This growth has been driven by the growth in exports, which account for 75% of the national reefer trade.

Reefer trade volumes of Spain, 2005 - 2020



Source: AEAT

CAGR 2005-2020

Exports

4.2%

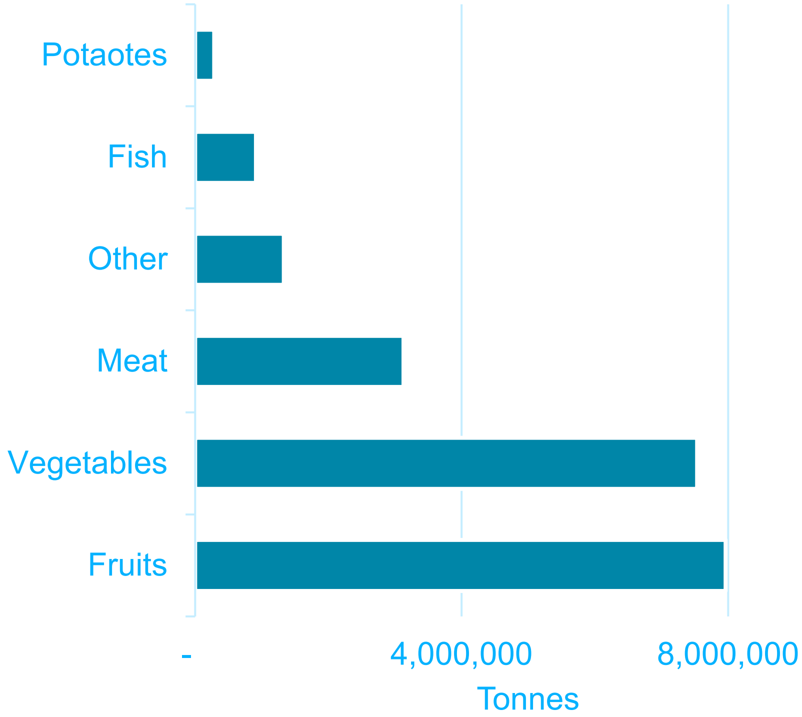
Imports

1.8%

Reefer market in Spain

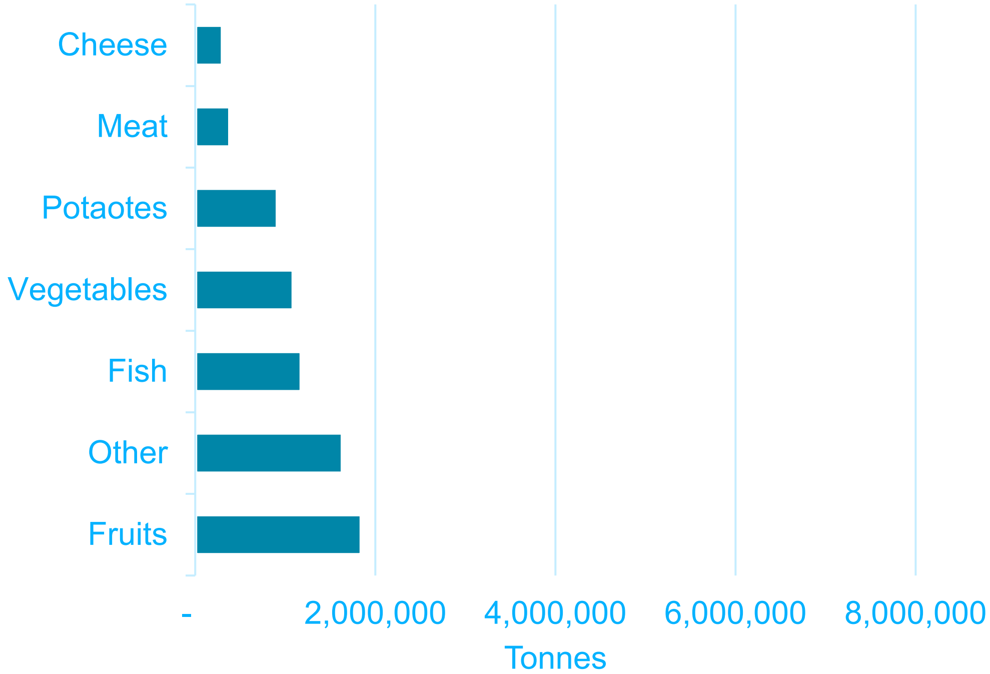
Fruits and vegetables account for 73% of total exports. The total import/export market is estimated at 2.4m TEU, 32% of total gateway traffic in 2020, which accounted for 7.4m TEU.

Spanish Reefer Exports, tonnes, 2020



~1,760,000 TEU

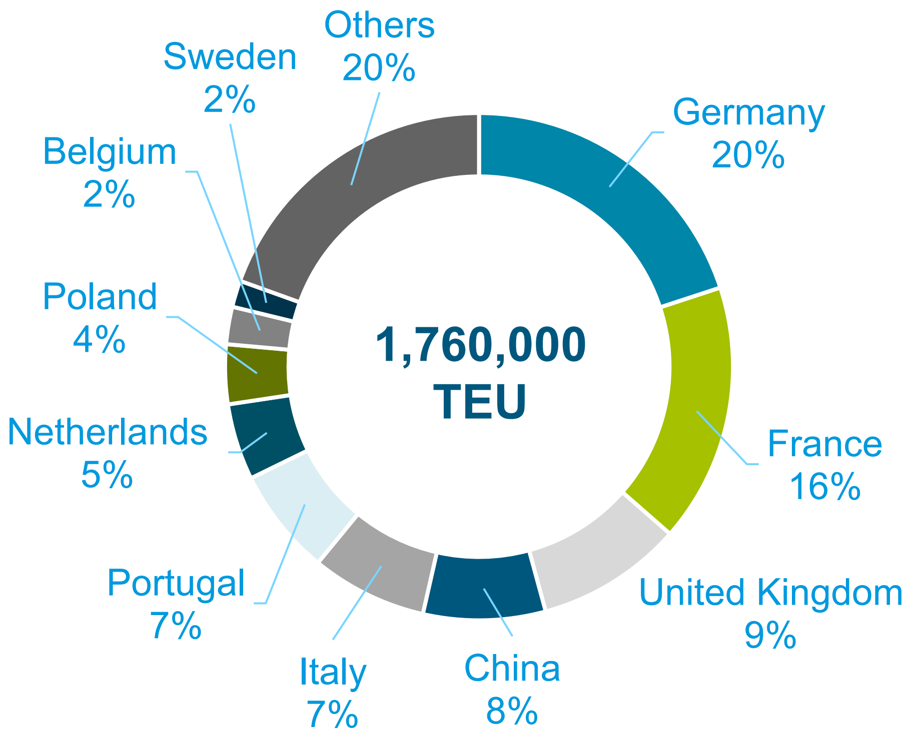
Spanish Reefer Imports, tonnes, 2020



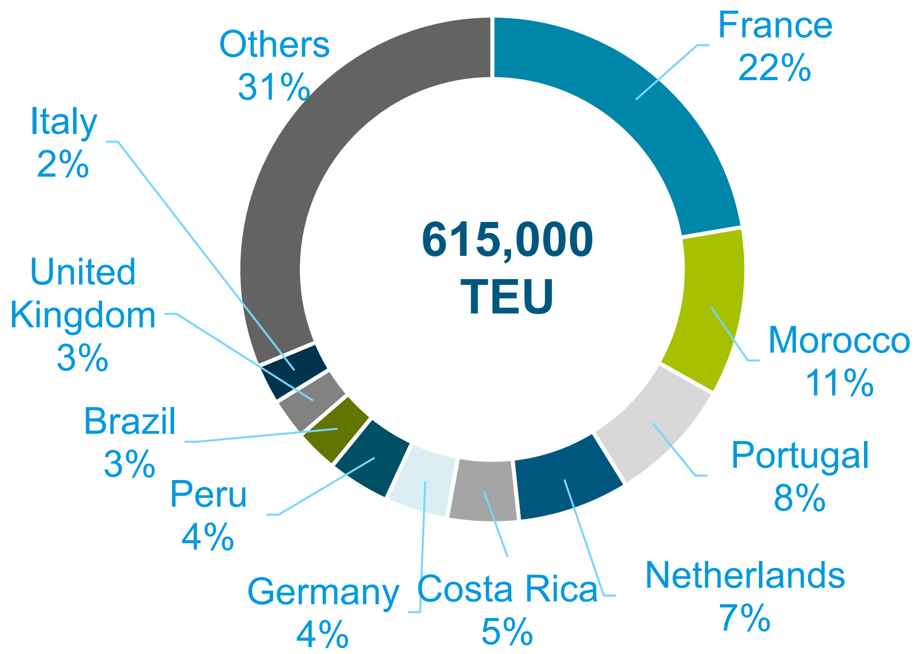
~615,000 TEU

Europe accounts for more than 83% of the exports, followed by China (8%).

Export partners for reefer cargo



Import partners for reefer cargo



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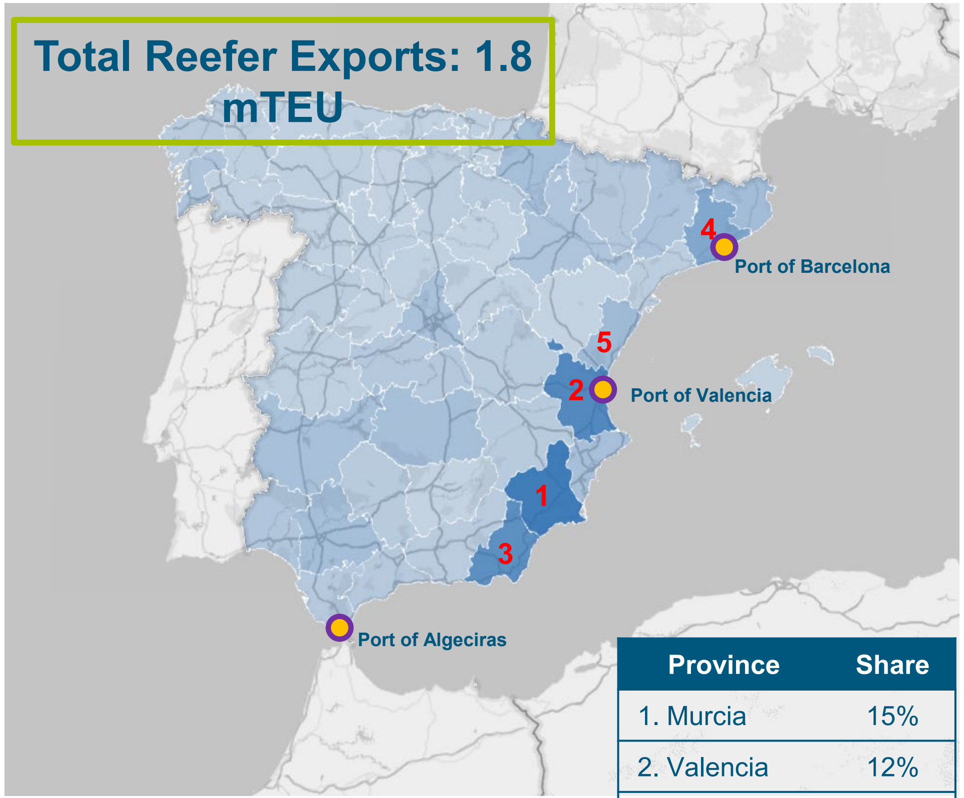
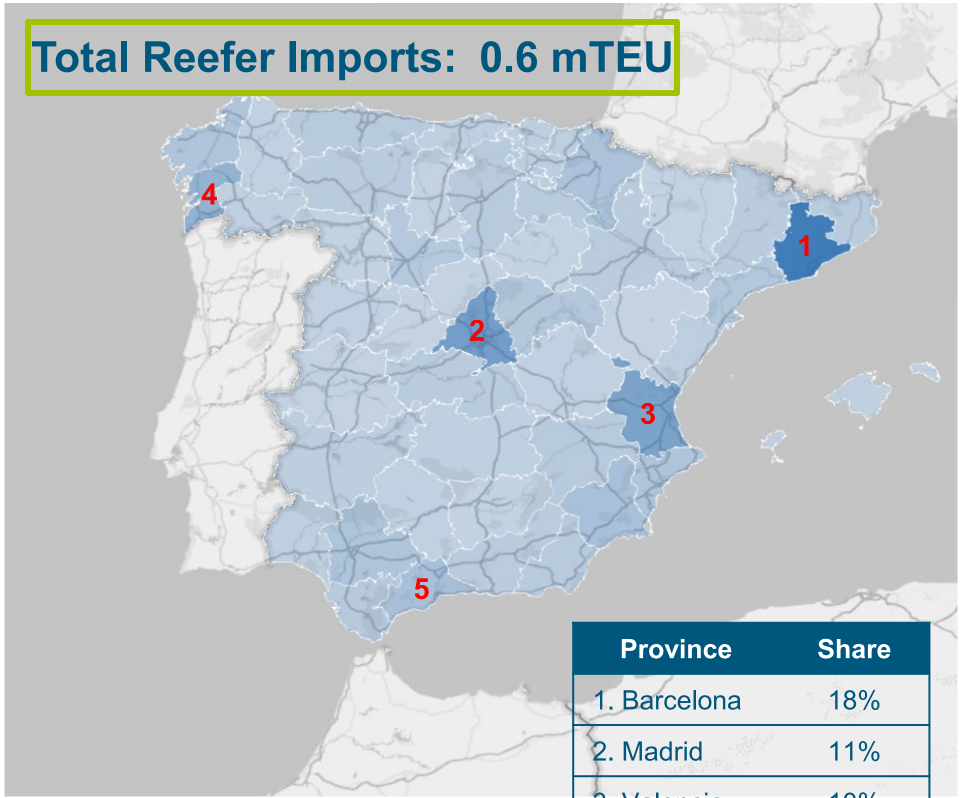
~50% of reefer exports are originated in East Coast provinces. The main gateways are Algeciras which gathers ~39% of exports, followed by Valencia (17%) and Barcelona (16%).

Exports of reefers per province, 2020, in mTEU



Province	Share
1. Murcia	15%
2. Valencia	12%
3. Almeria	11%
4. Barcelona	7%
5. Castellon	4%
Others	51%

Imports of reefers per province, 2020, in mTEU



Province	Share
1. Barcelona	18%
2. Madrid	11%
3. Valencia	10%
4. Pontevedra	7%
5. Malaga	4%
Others	50%

Source: Ocean Shipping Consultants, derived from Datacomex

Ports in Spain are taking a proactive role in attracting reefer cargo through infrastructure upgrades as well as economic incentives for refrigerated cargo.

Measures taken by main ports to foster reefer cargo

Port	Incentives to port dues	Infrastructure
Valencia	30% incentive for fruit, vegetables and frozen fish in containers 20% for meat and related products	Plans to improve railway transport Plans to expand its logistic services for refrigerated cargo in the terminals
Algeciras	30% incentive for import/export refrigerated cargo	Plans to improve its accessibility and plans to establish a railway corridor with Madrid and Zaragoza.
Barcelona	Reduction in the port dues Extra incentive to the cargoes that come by rail	Efficient rail connectivity with the inland terminals. It has even a dedicated refrigerate. service with the inland terminal “Terminal Marítima de Zaragoza”.

Measures taken by secondary ports to foster reefer cargo

Port	
Almeria	New reefer service with Sète in France

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Thank You!