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2017

43,776

33.658

12.804

316.547

FRUIT AND VEGETABLE SECTOR | INTERNATIONAL TRADE

A JOURNEY AROUND THE WORLD

TRADE IN FRUIT AND VEGETABLES ACCOUNTS FOR 23% OF GLOBAL PRODUCTION

For the second consecutive year, international trade in fruit and vegetables has continued to grow. And that's despite lockdowns and restrictions on movement aimed at slowing down COVID-19. According to the latest statistics provided by UN Food and Agriculture Organisation (FAO), trade increased by 1% in 2020 to 495 million tonnes, when international trade reached 23% of global production.

Spain flexes its muscles

The report prepared by Transporte XXI, based on FAO data, reflects Spain's importance on the international market, where it remains in fourth place in the world ranking, behind only the United States, China, and the Netherlands.

That said, China has recovered its pole position in exports, jumping ahead of Spain, where a 2% decline in exports resulted in total trade falling to 22 million tonnes in 2020.

Despite this setback, Spain remains Europe's leading exporter, moving 17 million tonnes. This figure represents 76% of foreign trade in fruit and vegetable products. However, it should be noted that the figures vary from the statistics provided by other organisations, mainly due to the different selection of products. Hence the slight differences with other charts and tables accompanying this publication.

The world ranking is headed by the United States, with a trade flow of 43.7 million tonnes in 2020, representing a 3% fall compared to pre-pandemic levels, but almost five million more than Spanish production in that year. The majority of US trade corresponds to import flows, which account for a movement of nearly 30.8 million tonnes (-3%), almost 70.5% of its foreign trade. This is followed by China, with a flow of 34.8 million tonnes of fruit and vegetables and an increase of 7% compared to 2019. The Netherlands completes the podium with 29.5 million tonnes, thanks to the role played by its ports, which act as distribution centres for fruit and vegetable produce to and from Europe.

China 34,793 Netherlands 29,464 3 4 Spain 22.310

COUNTRY

U.S.A

India

TOTAL 20

SPAIN, CLOSE TO A PODIUM FINISH

trade, behind only the United States, China, and the Netherlands.

2020

43,659

9.125

322.844

30,087 29,194 -2% +6% 27.845 21.892 -2% +6% 22.703 21.045 5 Germany 21,459 +2% +3% 20.956 20.799 20.869 Belgium 19.570 +2% 19.103 18.716 18.360 Canada 17.554 +8% +15% 16,306 15,213 15.214 16,461 8 France 15.968 -2% -3% 16 364 16 447 9 Thailand 14,877 +14% -8% 13.050 14.588 16.192 10 14,605 14,457 Mexico -2% 14.857 13.901 11 Italy 12,864 -0% 0% 12911 12,707 12,928 United Kingdom 11 962 +4% +7% 11542 11 121 12 11 225 10 794 11 132 11 580 13 Russia -3% -3% 11 114 +25% 14 Türkiye 9,252 +4% 8,884 7,814 7,383

Despite the 2% drop in fruit and vegetable trade, Spain remains in fourth position in terms of international

2019

44,839

32.617

9.396

318.967

311.821

2018

44,466

32.287

%20/19

-3%

+7%

0%

+3%

-29%

+2%

16 Ecuador 8.004 +6% +11% 7.544 7.429 7.222 17 7,656 -5% 8.072 7.297 7.455 Poland +3% 18 Vietnam 6,982 0% -10% 6.947 5.731 7,754 5,445 19 United Arab Emirates 6.074 +4% +12% 5.852 5.421 5,805 6,034 5,919 20 Costa Rica 5.873 +1% -1%

-3%

+1% **WORLD TOTAL** 494,945 +1% +2% 490,980 480,084 484,983

SPAIN MAINTAINS ITS DOMINANCE IN SALES ABROAD

It ranks as the second largest exporter of fruit and vegetables in the world, after China reclaimed the number one position, while the United States leads the world in terms of imports.

TOP IMPORTERS

Thousands of tonnes. Source: FAO.

RK	COUNTRY	2020	%20/19	%20/17	2019	2018	2017
1	U.S.A.	30,791	-3%	+2%	31,763	31,532	30,064
2	China	17,373	+10%	+1%	15,766	15,645	17,139
3	Germany	15,529	+2%	+3%	15,191	15,049	15,056
4	Netherlands	12,658	-1%	+8%	12,799	12,498	11,668
5	United Kingdom	10,773	+4%	+7%	10,326	9,990	10,057
WOR	LD TOTAL	245.163	+1%	+3%	243.719	239.004	239.174

TOP EXPORTERS

RK	COUNTRY	2020	%20/19	%20/17	2019	2018	2017
1	China	17,420	+3%	+5%	16,851	16,642	16,518
2	Spain	17,052	-3%	+5%	17,490	16,207	16,298
3	Netherlands	16,807	-3%	+4%	17,289	16,696	16,177
4	Mexico	12,957	+1%	+8%	12,889	12,368	11,983
5	U.S.A.	12,868	-2%	-6%	13,076	12,933	13,712
WOR	LD TOTAL	249,782	+1%	+2%	247,261	241,080	245,809

Thousands of tonnes, Source: FAO.

UNITED STATES **LEADS FRUIT** AND VEGETABLE TRADE

FRUIT AND VEGETABLE SECTOR | GLOBAL PRODUCTION

FRUIT AND VEG RESIST THE PANDEMIC

GLOBAL FRUIT AND VEGETABLE PRODUCTION ROSE BY 1% IN 2020 TO NEARLY 2.2 BILLION T

The health crisis had little impact on the agri-food industry in 2020, when global fruit and vegetable production increased by 1% to almost 2.2 billion tonnes. Yet recovery is slow; that figure is almost half of pre-pandemic production volumes.

Indeed, the pace of growth has slowed in recent years,

most notoriously in 2020. That said, CHINA, even during that THE challenging year, "WORLD'S 830 million more MARKET tonnes of fruit and GARDEN", vegetables were produced than at **LEADS** the start of the 21st THE century - that's a RANKING 61% increase on figures for 2000.

The situation is reflected in the statistical data published by the Food and Agriculture Organisation of the United Nations (FAO), pro-

cessed by Transporte XXI.

Producing 40% of the world's fruit and vegetables, China remains at the top of the rankings, light years ahead of its closest challengers. In 2020, China increased production by 1% to 881 million tonnes. India, second in the rankings, increased production by 2% to

over 261 million tonnes. Brazil remains third with 67.5 million tonnes, having recorded a 1% fall in volumes when compared to pre-pandemic figures.

The top three countries account for more than half of world production (55%). This percentage rises to almost 79% when you

consider the Top 20 of the world rankings.

The FAO statistics also reflect Spain's prominence in the

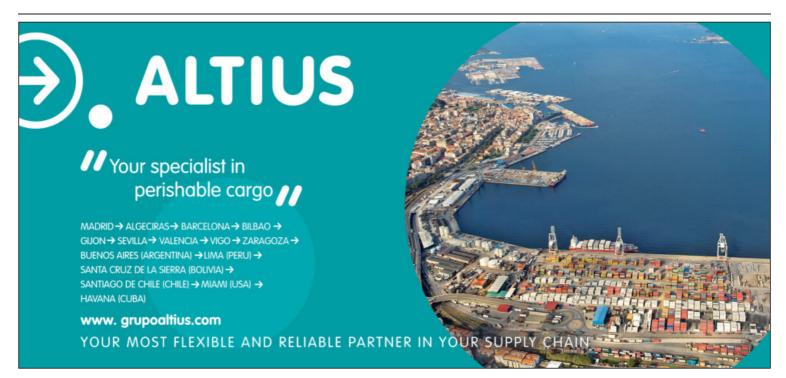
SPAIN, THE BIGGEST PRODUCER IN THE EU, IS IN THE GLOBAL TOP 10

The Spanish fruit and vegetable industry finished a challenging 2020 with production of 38.8 million tonnes and 3% growth, three times the global average.

RK	COUNTRY	2020	%20/19	%20/17	2019	2018	2017
1	China	880,968	+1%	+4%	874,894	854,623	846,542
2	India	261,145	+2%	+8%	254,850	250,527	241,276
3	Brazil	67,534	-1%	-2%	68,425	68,130	68,648
4	U.S.A.	64,021	-2%	-2%	65,659	61,674	65,552
5	Türkiye	54,463	+3%	+3%	53,004	52,679	52,846
6	Mexico	47,818	0%	+4%	47,642	47,532	45,983
7	Spain	38,836	+3%	+2%	37,587	39,233	37,962
8	Indonesia	38,049	+7%	+16%	35,428	34,309	32,731
9	Iran	35,592	+7%	+17%	33,313	31,137	30,540
10	Egypt	35,321	+2%	+2%	34,695	34,715	34,779
_11	Italy	31,617	+3%	-1%	30,586	30,553	31,859
12	Nigeria	31,218	0%	+4%	31,344	30,979	30,050
_13	Vietnam	29,602	+3%	+14%	28,812	27,312	25,943
14	Philippines	23,255	-1%	0%	23,434	23,502	23,358
15	Russia	19,858	-1%	+6%	20,096	19,631	18,689
16	Pakistan	17,698	+1%	+6%	17,589	17,229	16,719
_17	Algeria	16,606	+4%	+17%	15,948	15,001	14,248
18	Uzbekistan	15,749	0%	-4%	15,774	15,351	16,466
19	Colombia	14,376	-4%	+22%	14,956	13,482	11,765
20	Argentina	14,056	-4%	+5%	14,578	14,812	13,336
TOTA	L 20	1,737,783	+1%	+5%	1,718,616	1,682,411	1,659,292
WOR	LD TOTAL	2,193,965	+1%	+5%	2,169,581	2,127,509	2,098,636

Data in thousands of tonnes. Source: FAO

international arena, where it continues to show its strength. In fact, it has the highest production in the EU, ranking in seventh place in the global Top 10, with 38.8 million tonnes. It has retained this position since 2012, when it overtook Italy.



THE FRUIT AND VEGETABLE SECTOR IN SPAIN | FOREIGN TRADE

BOUND FOR THE OLD CONTINENT

EUROPE ACCOUNTS FOR 85% OF SPANISH EXPORTS OF FRUIT AND VEGETABLES

War in Ukraine, the increased cost of energy, raw materials and supplies, together with high inflation, have all dealt a hard blow to Spain's foreign trade in fruit and vegetable products with Europe, its main market.

Amidst this challenging economic backdrop, exports of fruit and vegetables recorded a 2% drop in volumes during the first five months of this year, totalling just over 6 million tonnes, according to data from the Secretary of State for Trade, processed by Transporte XXI.

A SETBACK IN POST-PANDEMIC EXPORT RECOVERY

The decline is due to the poor performance of sales abroad, which account for 85% of Spain's foreign trade in fruit and vegetable products with Europe. Fruit exports and vegetable exports both recorded similar declines (-3%) in the year to May, falling 3% less than in the first five months of 2021 to 5.1 million tonnes. Imports, meanwhile, rose by 2% to 935,000 tonnes in the period analysed, thanks to a 5% increase in vegetable imports, while fruit purchases fell by

The data signals a slowdown of the recovery that took place last year, after a difficult 2020, which was dominated by the global health crisis.

In 2021, Spanish fruit and vegetable exports to Europe experienced year-on-year growth of 2.6% in volumes, close to pre-pandemic levels. These are the findings of the report by the Spanish Federation of Fruit and Vegetable Producers' Associations (Fepex), differing slightly from those provided by the

THE SOUTH IS ALSO IMPORTANT

More than a third of Spanish fruit and vegetable exports to the European market come from Andalusia.

COMMUNITY	SHARE	2021	%21/20	%21/19	2020	2019	2018	2017	%21/17
Andalucía	33%	4,477	+1%	-1%	4,439	4,535	4,110	3,956	+13%
Com. Valenciana	29%	3,944	+1%	-3%	3,893	4,056	3,756	3,798	+4%
Murcia	20%	2,726	+5%	+6%	2,605	2,578	2,506	2,512	+9%
Cataluña	8%	1,019	+5%	+0%	968	1,014	912	1,047	-3%
Madrid	2%	231	-9%	-11%	254	259	268	309	-25%
Castilla-La Mancha	2%	221	+22%	+9%	182	202	189	187	+18%
Castilla y León	1%	168	+10%	+17%	153	144	150	149	+13%
Aragón	1%	166	-5%	-22%	175	214	166	202	-18%
Extremadura	1%	162	+24%	+3%	131	158	142	154	+5%
Galicia	1%	98	+2%	-5%	96	103	110	99	-1%
Navarra	1%	80	+17%	+26%	68	63	68	62	+29%
La Rioja	0%	43	+13%	+6%	38	40	36	41	+4%
País Vasco	0%	39	+402%	+288%	8	10	10	9	+321%
Canarias	0%	36	-34%	-45%	54	66	65	68	-47%
Baleares	0%	16	-8%	-20%	18	20	18	18	-11%
Other	0%	8	+1%	+1%	8	8	6	6	+38%
Asturias	0%	1	+189%	+311%	0	0	0	0	+527%
Cantabria	0%	0	+822%	+730%	0	0	1	0	>999%
TOTAL	100%	13,435	+3%	0%	13,091	13,471	12,511	12,617	+6%

Figures in thousands of tonnes. Source: Fepex.

United Nations Food and Agriculture Organisation (FAO), which uses different statistics, particularly in terms of the type of products analysed. Hence, the slight differences throughout this special issue by Transporte XXI, which can be identified by comparing the graphs accompanying this supplement.

Fruit exports were particularly noteworthy among foreign sales of fruit and vegetable products, increasing by 3% in volume last year, and totalling 7.6 million tonnes, thanks to increases in sales of strawberries and stone fruit. Vegetable exports increased by 1.6% in 2021, to 5.7 million tonnes.

Within Spain, the region of Andalusia remains the leading exporter, with 4.5 million tonnes last year, 1% more than in 2020. It is followed by the Valencian Community, with 3.9 million tonnes (+1%), Murcia, with 2.7 million tonnes (+5%) and Catalonia, with 1 million



SPAIN, EUROPE'S 'REFRIGERATOR'

TOP 25 TRADING PARTNERS

Germany and France account for almost 40% of Spanish foreign trade in fruit and vegetable products, with a flow of 7.5 million tonnes in 2021.

ANDALUSIA LEADS FRUIT AND VEGETABLE **EXPORTS**

tonnes (+5%). These four regions account for more than 90% of Spanish exports of fruit and vegetable products to the EU.

Europe: the main market

94% of Spanish exports were destined for the EU-27 and the United Kingdom. Specifically, exports to the EU amounted to 11.1 million tonnes (+4%) and exports to the UK fell slightly in volume, by 2%, totalling 1.5 million tonnes. Outside Europe, exports fell by 10% in terms of volume. Finally, in 2021, fruit and vegetable imports continued in line with the upward trend of previous years, with year-on-year growth of 5.5% in volume. Vegetable imports amounted to 1.5 million tonnes (+1%) and fruit imports rose to 2 million tonnes, 8% more in volume than in the previous year.

RK	COUNTRY	2021	%21/20	2020	2019	2018	2017
1	Germany	3,844	+3%	3,732	3,794	3,557	3,474
2	France	3,651	+1%	3,611	3,559	3,587	3,453
3	United Kingdom	1,680	-6%	1,786	1,831	1,712	1,718
4	Netherlands	1,276	-1%	1,294	1,356	1,253	1,238
5	Portugal	1,201	+5%	1,146	1,179	1,114	1,076
6	Italy	1,079	0%	1,077	1,136	947	1,056
7	Poland	722	+10%	658	734	594	640

Figures in thousands of tonnes. Source: Secretaría de Estado de Comercio

-13%

110

124

+2% 18,778 19,187 18,385 17,619

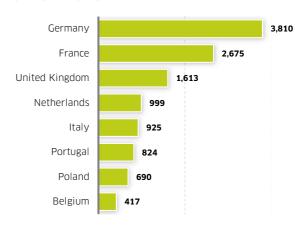
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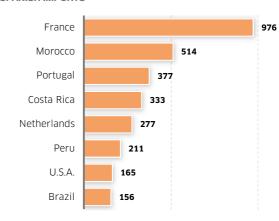
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SPANISH EXPORTS



SPANISH IMPORTS





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WORLD TOTAL

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PARIS VALENTON

THE FRUIT AND VEGETABLE SECTOR IN SPAIN | SPANISH FOREIGN TRADE FLOWS

SPANISH MARITIME TRADE BY REGION							
	* %22/21	2021	%21/20	2020	2019	SHARE 2022	2019
Europe **	-2%	16,173	+2%	15,859	16.214	84.5%	84.4%
Latin America and Caribbean	-6%	1,081	+7%	1,009	1.061	5.0%	5.2%
Africa	-1%	987	+9%	908	851	6.3%	6.1%
North America	-10%	416	-6%	445	469	2.0%	2.2%
Middle East	+36%	156	-9%	171	188	1.2%	0.8%
CIS - Commonwealth of Independent States	-62%	126	-28%	175	151	0.2%	0.5%
Asia **	+30%	120	-7%	130	184	0.7%	0.5%
Oceania	-20%	81	+4%	78	68	0.2%	0.3%
TOTAL	-2%	19,141	+2%	18,778	19,187		

EUROF	E **		
EXPORTS	* %22/21	2021	%21/20
Citrus fruits	+3%	3,591	-2%
Other fresh vegetables	-7%	1,882	+4%
Melons, watermelons and papayas	-38%	1,436	+12%
Apricots, cherries, plums	-28%	912	+9%
Lettuce, endives, chicory	-4%	868	+6%
Other	-1%	5,356	+1%
TOTAL	-3%	14,044	+2%
IMPORTS	* %22/21	2021	%21/20
Potatoes	+2%	844	-6%
Apples, pears and quinces	-7%	250	+6%
Cooked or frozen vegetables	+33%	175	+14%
	+1%	112	+23%
Other fresh fruits	. 170		
Other fresh fruits Citrus fruits	-3%	103	-26%
			2070

NORTH AI	MERIC	Α	
EXPORTS	* %22/21	2021	%21/20
Cooked or frozen vegetables	-4%	62	+3%
Citrus fruits	+24%	44	-6%
Onions, garlic, leeks	+94%	36	+17%
Other fresh fruits	+117%	4	-37%
Apricots, cherries, plums	-	4	-15%
Other	-53%	12	-50%
TOTAL	+12%	163	-6%
IMPORTS	* %22/21	2021	%21/20
Other nuts	-10%	127	+7%
Dry vine vegetables	-19%	79	-28%
Dates, figs, pinneaples, avocado	-98%	35	+10%
Onions, garlic, leeks	-58%	5	+92%
Other fresh vegetables	+35%	3	+100%
Other	-15%	5	-33%
TOTAL	-15%	5	-33%

LATIN AMERICA AND CARIBBEAN							
EXPORTS	* %22/21	2021	%21/20				
Apricots, cherries, plums	+52%	21	+163%				
Citrus fruits	-9%	21	-24%				
Cooked or frozen vegetables	+23%	20	+64%				
Apples, pears and quinces	+549%	16	-30%				
Onions, garlic, leeks	+46%	11	-51%				
Other	+45%	9	+4%				
TOTAL	+21%	98	-4%				
IMPORTS	* %22/21	2021	%21/20				
Dates, figs, pinneaples, avocado	-5%	336	+15%				
Bananas	-3%	301	+12%				
Melons, watermelons and papayas	-4%	81	+3%				
Onions, garlic, leeks	-34%	60	+19%				
Dry vine vegetables	+69%	42	-24%				
Other	-23%	163	-0%				
TOTAL	-8%	983	+8%				

AFRIC	CA		
EXPORTS	* %22/21	2021	%21/20
Apples, pears and quinces	+31%	56	-1%
Cooked or frozen vegetables	+8%	23	+7%
Dates, figs, pinneaples, avocado	-36%	19	+35%
Other fresh fruits	+12%	17	+14%
Dry vine vegetables	+3%	17	-32%
Other	-11%	34	-3%
TOTAL	+10%	166	-1%
IMPORTS	* %22/21	2021	%21/20
Citrus fruits	-91%	143	+51%
Melons, watermelons and papayas	+10%	128	+3%
Other fresh vegetables	+5%	96	+8%
Bananas	+40%	90	+26%
Vine vegetables	-9%	86	+6%
Other	+11%	277	-1%
TOTAL	-2%	820	+11%



	COMMONWEALTH	OF INC). STA	TES
	EXPORTS	* %22/21	2021	%21/20
	Citrus fruits	-46%	8	-10%
	Other fresh fruits	+24%	8	-8%
	Apricots, cherries, plums	-78%	2	+40%
	Other fresh vegetables	-44%	2	-17%
Ì	Dates, figs, pineapples, avocado	+26%	1	+65%
	Other	+90%	2	+46%
١	TOTAL	-22%	23	-2%
	IMPORTS	* %22/21	2021	%21/20
h	Dry vine vegetables		404	
۱	DI Y VIIIE VEGELADIES	-78%	101	-33%
1	Other nuts	-/8% +253%	101	-33% -37%
	, ,			
	Other nuts		1	
	Other nuts Dry vegetables	+253%	1 0	-37%
	Other nuts Dry vegetables Grapes, including raisins	+253%	1 0 0	-37% - +70%

	ASIA	**		
	EXPORTS	* %22/21	2021	%21/20
	Onions, garlic, leeks	-36%	10	+3%
À	Cooked or frozen vegetables	-15%	7	+42%
	Citrus fruits	+219%	4	-69%
	Other fresh fruits	+34%	3	-32%
(Other cooked or frozen fruits	-47%	2	-12%
A	Other	+60%	10	-23%
	TOTAL	+71%	36	-23%
	IMPORTS	* %22/21	2021	%21/20
	Coconut, nuts	+27%	20	+18%
	Temporarily preserved vegetables	+19%	18	-3%
	Cooked or frozen vegetables	+50%	9	+2%
	Grapes, including raisins	-4%	9	+4%
	Other nuts	+36%	7	+8%
	Other	+2%	21	-11%
	TOTAL	+17%	85	+1%

	MIDDLE	EAST		
4	EXPORTS	* %22/21	2021	%21/20
	Citrus fruits	+34%	34	-12%
	Apples, pears and quinces	+35%	21	-24%
	Onions, garlic, leeks	+10%	17	-26%
	Cooked or frozen vegetables	+63%	14	-16%
	Lettuce, endives, chicory	-40%	12	-6
	Other	+25%	30	-8%
	TOTAL	+31%	128	-15%
	IMPORTS	* %22/21	2021	%21/20
	Potatoes	+53%	22	+59%
	Dates, figs, pinneaples, avocado	+35%	3	+19%
	Temporarily preserved vegetables.	-22%	1	+23%
	Citrus fruits	-55%	1	-31%
	Other cooked or frozen fruits	+34%	0	+2%
	Other	+15%	0	+4%
	TOTAL	+48%	28	+44%

OCEA	NIA		
EXPORTS	* %22/21	2021	%21/20
Cooked or frozen vegetables	+6%	5	+7%
Onions, garlic, leeks	-13%	1	+7%
Other nuts	-81%	1	-20%
Other cooked or frozen fruits	+24%	0	+94%
Cassava roots and sweet potatoes	+3%	0	+155%
Other	-5%	0	-56%
TOTAL	-2%	8	+0%
IMPORTS	* %22/21	2021	%21/20
Other fresh fruits	+3%	56	+2%
Onions, garlic, leeks	-58%	10	+61%
Other nuts	+228%	4	+7%
Apples, pears and quinces	-82%	2	-36%
Dry vine vegetables	-69%	1	-53%
Other	-	0	-97%
TOTAL	-22%	73	+4%

SURVEY | THE COOL LOGISTICS CHAIN

"WE NEED DRIVERS"

OPERATORS BACK INTERMODALITY AND URGE PROGRESS ON ENERGY TRANSITION

Driver shortages have become the main Achilles heel of road transport, but Spanish hauliers and operators say a ban on loading and unloading by drivers "can make the profession more attractive." New government measures adopted to tackle shortages, including the ban, have been made in accordance with the CNTC, Spain's National Road Transport Committee.

> DO THE AGREEMENTS BETWEEN THE CNTC AND THE SPANISH GOVERNMENT (DECEMBER 2021) INCLUDE LONG-STANDING DEMANDS SUCH AS THE BAN ON LOADING AND UNLOADING BY DRIVERS AND THE COMPULSORY REVIEW OF THE DIESEL CLAUSE? ARE THESE TOOLS VALUABLE IN MAKING REFRIGERATED ROAD TRANSPORT COMPANIES MORE COMPETITIVE?

Carlos Prades

Grupo Torres

The agreements reached by the National Road Transport Committee (CNTC) mean there is a more favourable regulatory framework for road transport in all sub-sectors and specialities, including refrigerated transport. However, in order to make the laws legitimate, responsibility to ensure compliance lies with the companies themselves. Furthermore, we need to promote the professionalisation and training of all those involved in transport companies; with a legal framework that protects us, and knowledge of everything that is involved in operations, we can develop an increasingly efficient and profitable business.

José Ramón Mazo

Grupo Mazo

The ban on loading and unloading is a long-standing demand that we in the sector have sought in order to make working as a professional driver more attractive. It was unreasonable for the driver to have to carry out this work after so many hours of driving, when the role of transport companies should be limited to just that, to transport. Hopefully this will encourage more people to join as new drivers. The compulsory review of the diesel price clause was necessary to ensure the survival of the vast majority of companies. Fuel prices have shot up, and now account for 40% of the direct costs of transport.

Without such changes in the cost of travel, it is impossible for companies to continue to offer their services, other than at a loss. It is important to remember that the price of fuel has risen by almost 70% in one year.

Félix González Delgado

Delgo Operador de Transporte

The fact is that in the cooperatives where we load the products destined for the rest of Europe, we already worked in this way, so it has little impact on international transport. Spain is where we'll see an impact, and hopefully a positive one.

Demetrio Lanjarín

Grupo Caliche

The ban on loading and unloading by drivers improves their wellbeing in the workplace and places limits on what their duties entail, which never should have included carrying out these tasks. The diesel price clause is indispensable to keep costs in check. It is the largest part of our costs, and a revised fuel price would not boost profits, but rather prevent us from working at a loss, as is happening in part of the sector.

Antoni Tarragona

Transports Tarragona

The National Road Transport Committee (CNTC) did a fantastic job and succeeded in delivering measures that are fair and necessary for our sustainability. The measures will not make the sector more competitive, but they will provide it with breathing space, particularly in equalising the rules of the game between carrier and customer and bring dignity to a profession which is unfortunately only now, when it is in short supply, beginning to be appreciated for its value and its strategic importance.

Guillermo Martínez

ID Logistics

It is an agreement that makes our sector valued and from which businesses and consumers can benefit. Firstly, the ban on loading and unloading by drivers is a measure that corrects a historical anomaly of transferring non-specific jobs to professional drivers and it's a step towards improving working conditions and reducing the accident rate; many of them do not have additional training in certain processes such as

CARLOS PRADES

Manager of Grupo Torres and President of FVET



"THERE IS NO REAL ALTERNATIVE TO DIESEL ON THE MARKET"

JOSÉ RAMÓN MAZO

Managing Director of Grupo Mazo



"THE PRICES
BEING QUOTED
FOR ELECTRIC
VEHICLES ARE
UNAFFORDABLE"

handling specific machinery to carry out loading and unloading operations. Secondly, the revision of the diesel price clause is a measure that our sector has demanded in the past. It provides legal certainty by allowing transport companies to pass on the sharp increase in fuel costs to shippers, so that they can continue to provide the service in the best possible way, in an environment as turbulent as the current one. This is certainly a first step in the right direction, but more needs to be done.

Fernando Carreras

Carreras Grupo Logístico

These demands are really important in order to improve the quality of drivers' work. These measures are necessary to provide the value that the transport and logistics sector deserves. They are helpful measures, in terms of improving the competitiveness of Spanish road transport companies.

Francisco Javier Gea

Agetrans Demetrio e Hijos

Agreements that lead to improvements in the daily lives of drivers are always positive, both in terms of simplifying their work and minimising waiting times, as well as loading and unloading times, which undoubtedly means a reduction of transit times and, therefore, in an improvement in the competitive capacity of Spanish transport companies. Furthermore, making the job easier for drivers would go a long way towards making the driver's job more attractive again, which would reduce the driver shortages we are suffering from at the moment. As for the compulsory review of the diesel price clause, this is always important, as it prevents hauliers from bearing costs that they should not have to pay. We believe that the price of services should be linked only to the service; any costs beyond our control should be borne by the client.

> DOES THE SECTOR NEED TO BE BIGGER TO COMPETE IN EUROPE?

Carlos Prades

Grupo Torres

It would be preferable for it to be bigger, not least for Spain's international trade. In general, fleets operating in Europe are already larger than those operating domestically, but their potential would be improved if they were larger.

José Ramón Mazo

Grupo Mazo

Fragmentation results in a fierce price war that can only lead to the death of the sector. Having large fleets helps when competing with large corporations for contracts, because of the flexibility to accommodate their requirements. On the other hand, having a large fleet requires continuous investment in technology in order to manage the high costs that such a large organisation generates.

Félix González Delgado

Delgo Operador de Transporte I do not have a clear opinion.

Demetrio Lanjarín

Grupo Caliche

Price regulation is required in order to compete, not an increase in size. Demand for trucks is currently higher than supply, but the prices are too low to cover the costs, which has led to many companies working solely to cover costs or even at a loss.

Antoni Tarragona

Transports Tarragona

The market in Europe has been consolidating for years. We are beginning to see operations of some size in Spain that may prevent a necessary reversal of the trend. Similarly, the lack of capacity will persist in the market and, unless there are major changes, this will accelerate this process.

Guillermo Martínez

ID Logistics

The Spanish logistics sector has the capacity, technology and experience to lead the European market. We have a great deal of skilled talent in this industry in Spain, which contributes to its year-on-year growth and its adaptation to the evolving challenges faced by logistics. In the specific case of ID Logistics, Iberia is the second most important market for the company worldwide, behind only the company's home country, France. This is not by chance, but due to the great team of professionals we have in our country. Since our arrival on the market more than fifteen years ago, we have continuously grown and innovated by incorporating the latest technological advances.

Fernando Carreras

Carreras Grupo Logístico

The transport and logistics sector is very versatile and is constantly developing. The Spanish sector in particular is innovative and adapts to current and future needs. Through digitalisation and sustainable solutions, Spain's FÉLIX GONZÁLEZ DELGADO Managing Director of Delgo Operador de Transporte



"WE DO NOT SEE THE RAILWAY AS EITHER A BENEFIT OR A THREAT"

FRANCISCO JAVIER GEA

Manager of Agetrans Demetrio e Hijos



"THE LACK OF DRIVERS IS A KEY PROBLEM" transport and logistics sector is becoming a competitive player all across Europe.

Francisco Javier Gea

Agetrans Demetrio e Hijos

The Spanish fleet is one of the largest in Europe, at least as far as refrigerated transport is concerned, so I do not believe that size is a handicap in competing with Europe.

> IS A BAN ON COMBUSTION ENGINES, AS CALLED FOR BY BRUSSELS, ACCEPTABLE FOR LONG-DISTANCE HAULIERS, GIVEN THAT THERE IS CURRENTLY NO EFFICIENT TECHNOLOGICAL ALTERNATIVE?

Carlos Prades

Grupo Torres

No, it is not affordable. It is an impossible situation that does not consider the reality. FVET supports projects seeking the development and implementation of alternative fuels, such as H2Ports, a project linked to the Port of Valencia that aims to incorporate hydrogen into port operations. We are aware that transport companies themselves are concerned about environmental issues and are buying more modern vehicles with state-of-the-art technology that means fewer emissions. But, for the time being, there is no real alternative to diesel on the market.

José Ramón Mazo

Grupo Mazo

As long as there is no real and affordable alternative to combustion engines, a ban on them seems unreasonable to me. The prices of electric vehicles are unaffordable for any company. On the other hand, there is currently no network of recharging points to make this shift to electric vehicles, whether passenger cars or long-distance vehicles, feasible. There is also talk of a hydrogen option, but it remains a long-term option. I think it will be many years before combustion engines can be replaced over long distances.

Félix González Delgado

Delgo Operador de Transporte

If gas is not acceptable to Brussels (and I don't know if it is), I would say that it is certainly not possible. With gas it is already possible.

Demetrio Lanjarín

Grupo Caliche

There are currently no guaranteed alternatives to combustion engines. On the one hand, there are not enough electric and gas recharging points to allow lorries to recharge in order to continue their route. On the other hand, these vehicles have a limited ran-

ge, which is the greatest challenge for electric mobility. The electric lorry with the longest range currently on the market can travel 340 kilometres and takes an average of four hours to obtain a full fast charge of the battery. In contrast, the combustion engine can cover more than 2,500 kilometres on a single tank of fuel. At present, the key is gas engines, which considerably reduce emissions, but maintain a range of around 1,000 kilometres, with a recharge time of around 40 minutes. But, as I said at the beginning, there are not enough recharging points.

Antoni Tarragona

Transports Tarragona

Not at all. Without a technological alternative available to all companies, it is inconceivable that the combustion engine can be phased out in the short to medium term. Long haul transport companies have always been a leader in sustainability, either by moving to intermodal solutions or by investing in more efficient vehicles: Euro VI, etc. However, in the absence of economically sustainable technology, capacity problems for long-distance transport will only get worse.

Guillermo Martínez

ID Logistics

We are united in our efforts to reduce the use of fossil fuels. Our energy transition strategy includes the progressive elimination of greenhouse gases to make our business more sustainable at all stages of the supply chain. However, in order to undertake such a major change, we need guarantees on the effectiveness of this technological alternative to meet the demands of the European Union. At ID Logistics, we aim to reduce the energy intensity of our logistics activities by 20% by 2030, and to reduce the CO2 carbon footprint of our facilities by 40% by 2030. The commitment to alternative fuels and more efficient forms of transport, the electric vehicle or, in the near future, the use of fuels such as hydrogen, is essential to achieve the elimination of greenhouse gas emissions. This is not currently possible, as there is still a long way to go in terms of technological development, but we are working towards achieving an efficient technology that will allow us to operate in a way that minimises greenhouse gas emissions. The company has also implemented a proactive policy to significantly reduce energy consumption and waste, and since last year, all our platforms in Spain have been using 100% renewable energy

COOL LOGISTICS

(from page 11)

Fernando Carreras

Carreras Grupo Logístico

The European Parliament's objective of banning the sale of cars with combustion engines from 2035 is a clear step towards a CO2-free future. However, targeted efforts in innovation and sustainability are required to make technologies accessible to transport operators. For the time being, there are no viable alternatives.

Francisco Javier Gea

Agetrans Demetrio e Hijos

In the absence of an efficient and sufficient infrastructure, we believe that any alternative to combustion engines will be unaffordable for any company in the industry, and of course, if this is not resolved, either the ban will have to be delayed or we will be entering a new supply chain breakdown. If such infrastructure were to be implemented, we would not hesitate to make the necessary investments in order to reduce our carbon footprint.

> DO THE 'ECO-INCENTIVES' PROPO-SED BY THE MINISTRY OF TRANS-PORT TO ENCOURAGE THE USE OF FREIGHT RAIL IN SPAIN MAKE IT POSSIBLE FOR FREIGHT HAULIERS TO USE THE TRAIN?

Carlos Prades

Grupo Torres

In Spain, goods transportation still relies on lorries. In the Port of Valencia alone, it handles 93% of the freight traffic, while the remaining – minimal – percentage is handled by rail. The future lies in intermodality, and we should look at how we can develop this hybrid transportation mode. There is no logic in encouraging the train and penalising the lorry.

José Ramón Mazo

Grupo Mazo

For several decades, we have been putting some of our lorries on the railway. At the end of the day, it's about good service with good frequencies. This will make it possible for more freight hauliers to board the train, although the 'door-to-door' service provided by lorries cannot be replaced by the train.

Félix González Delgado

Delgo Operador de Transporte

We are not interested; we don't see the railway as either a benefit or a threat to us.

Demetrio Lanjarín

Grupo Caliche

Eco-incentives are not enough to use this part of freight intermodality. Staff

DEMETRIO LANJARÍN

Managing Director of Transporte de Grupo Caliche



"YOU DON'T NEED SIZE TO COMPETE, YOU NEED TO REGULARISE PRICES"

ANTONI TARRAGONA

Business Development Manager Transports Tarragona



"IT IS
IMPOSSIBLE TO
DISPENSE WITH
THE
COMBUSTION
ENGINE IN THE
SHORT TO
MEDIUM TERM"

costs and depreciation remain high. They increase because you need to have two drivers and two lorries, one at the origin and one at the destination.

Antoni Tarragona

Transports Tarragona

No. Road hauliers are the first to encourage and promote the use of rail and intermodal solutions. However, if there is no adequate infrastructure network to be a real alternative to road transport, any incentive is woefully inefficient.

Guillermo Martínez

ID Logistics

According to data from the Spanish Transport and Logistics Observatory, 94% of goods transported in Spain are moved by road. Thanks to its advantageous geographical location and extensive road network, Spain has the third highest number of kilometres of motorways and dual carriageways in the world, making it one of the European Union member states with the highest volume of freight traffic. All this means that the logistics and transport sector accounts for 7.9% of GDP and is extremely important in our economy. Given that land transportation is so vital in our country, it is essential that public administrations encourage the use of railways to relieve congestion on our roads, increase efficiency and diversify staff employability. We welcome any progress that is made in promoting rail transport. This measure may be a first step towards increasing the proportion of freight trains operating in the Spanish rail network, although there is still a long way to go to reach the levels of other European countries.

Fernando Carreras

Carreras Grupo Logístico

They help, but the train is still facing fundamental problems, which 'eco-incentives' have not managed to completely solve.

Francisco Javier Gea

Agetrans Demetrio e Hijos

They may be attractive and even make it possible to use the train but given the level of customer demand for delivery times - we are talking about fresh produce - we believe that in most cases the train is currently unviable if delivery dates demanded by customers are to be met.





> IS THE LACK OF DRIVERS THE **ACHILLES HEEL OF ROAD HAULAGE COMPANIES? WHAT IS THE SOLU-**TION?

Carlos Prades

Grupo Torres

Indeed, the shortage of drivers is another major transport problem. In Valencia, this shortfall has gone from affecting one in three transport companies in 2021, to half of the companies, according to the latest survey carried out by the Federation. It is a frightening scenario; driver shortages are already causing operational stoppages. There are no miracle solutions. We do think that the government could, for example, provide financial assistance to young and unemployed people to obtain accreditation to become a professional driver, and extend and promote vocational training in this field. On behalf of the Federation and the sector, we need to believe in what we are; as the driving force behind the rest of the economic sectors, we are essential, and we must stand up for our position and against the undignified situations that our drivers sometimes have to deal with.

José Ramón Mazo

Grupo Mazo

This issue goes beyond the transport sector. Hospitality, hotels, construction, etc., are some of the areas where skilled labour is hard to come by. It is difficult to make transport attractive to young people, it is a profession in which they would spend a lot of time away from home. Transport companies have to ensure that we offer good working conditions to attract this workforce. Offering quality, long-term jobs with cutting-edge work tools, so that drivers feel comfortable in their workplace. Another option would be to facilitate bringing in workers from third countries, so that fleets do not have to be shut down.

Félix González Delgado

Delgo Operador de Transporte

A ban on loading and unloading operations by drivers may be a valid measure to make the sector an easier place to find work. Actually, loading and unloading limited a lot of people other than the usual profiles that everyone has in mind when they think of a chauffeur.

Demetrio Lanjarín

Grupo Caliche

We are experiencing a generational changeover that is a challenge for the entire sector. We have to continue to make progress in professionalisation, in visibility and in adapting working conditions to show that this is an attractive profession with a future.

Antoni Tarragona

Transports Tarragona

Yes. In fact, this situation has also meant that companies with their own fleet are increasingly valued in the market. There are long-term solutions, such as the process of making the work of drivers and their conditions more respectable and establishing coordination mechanisms between means of transport and companies to ensure, for example, that a driver can enjoy decent working conditions like any other professional. However, the short-term solution that governments should already be considering is the opening of quotas for workers from countries outside the European Union.

Guillermo Martínez

ID Logistics

The lack of drivers is one of the major problems that all companies involved in the world of logistics and transport have to face. If we want to attract young people to work in the sector, which has been so badly treated over the last few decades, it is essential that they should be given more dignity. The steady ageing of the workforce and

GUILLERMO MARTÍNEZ Transport Director of



"IT IS VERY **IMPORTANT TO ENCOURAGE** THE USE OF THE TRAIN"

FERNANDO CARRERAS CEO of Carreras

Grupo Logístico



"IN SPAIN THE SECTOR IS INNOVATIVE AND **ADAPTABLE**"

lack of replacement staff is a reality that will challenge us to make every effort. In addition, the strong growth of e-commerce has been detrimental to long-haul transport and benefitted last mile transport. The situation is clear, and there are no plans to increase the number of drivers in the short term to alleviate this problem. However, there are two solutions that could help to reverse this trend. The first of these is a response to a long-standing demand for multimodal development. The conversion of the rail network to a freight network would address the lack of long-distance drivers, as the number of goods that a train can carry is much greater than that which can be carried by road transport. However, this conversion is in the hands of the State and is, in principle, more difficult to carry out. On the other hand, this profession needs to be provided with both economic and social incentives to encourage new generations and the unemployed to take up these jobs. Not only wage factors, but also living conditions, infrastructure and route changes to make it much more possible to reconcile work and family life. In short, to make working conditions much more attractive.

Fernando Carreras

Carreras Grupo Logístico

It is a difficult sector, and we need to make it more respectable. The lack of drivers is a problem currently seriously affecting the transport sector. The solution is not easy, but it involves training people interested in joining the sector and attracting trained drivers from other countries to Spain.

Francisco Javier Gea

Agetrans Demetrio e Hijos

If not the Achilles heel, it is one of the key problems facing most companies in the sector. In our humble opinion, the solution would be for the government to subsidise the acquisition of the necessary licences, so that unemployed people can efficiently retrain, which would not only help to alleviate the shortage of drivers but would also significantly reduce the number of unemployed people, especially the long-term unemployed. All of this, as mentioned above, would be facilitated if we could get drivers to confine themselves to doing their jobs and not have to waste their rest hours on tasks that are not theirs to do, such as loading and unloading.



The hydrogen lorry is in the sights of fleet operators in the refrigerated sector.

Business leaders in the refrigerated transport sector have raised the key question of which energy the Spanish fleet of long-haul vehicles will use in the future. Despite differences of opinion in the transport sector, business

THE SECTOR

RENOVATION

DEMANDS

REAL AID

FOR

leaders are at loggerheads with the EU over moves to decarbonise the transport sector.

"European policy to tackle the decarbonisation of the transport sector clashes with the industrial reality of lorry manufacturers," businessmen have told Transporte XXI.

"Sustainability advocated by politicians is wishful thinking as currently there is no way to buy a cost-effective hydrogen lorry," they say, adding: "Realistically, what we need are subsidies to renew fleets with less polluting vehicles - those powered by fossil fuels which is what we can use."

The arrival of Next Generation funds from the European Union should provide an incentive to undertake the decarbonisation of the sector, a business that has yet to find clear alternatives to diesel for long-distance cargo flows. Beyond the use of liquefied natural gas, businessmen are starting to see the deployment of electric vehicles or last mile distribution. And yet, hydrogen seems the only possible long-term alternative.

The main problems facing the fleet renewal are the shortage of product supply, as well as the price of units; they do not currently allow for adequate market implementation. Hydrogen lorries are up to 180% more expensive than diesel vehicles and 30% more expensive than electric vehicles; these prohibi-

tively expensive costs are preventing companies from investing in them.

Manufacturers, who have spent years preparing for the sector's energy transition, all have prototypes and units ready to go to market in the next few years. Volvo already offers electric engine lorries and lorries that run on renewable fuels such as biogas.

Both Volvo and Mercedes-Benz plan to add a third CO2-neutral option, hydrogen-powered fuel cell electric lorries, in the second half of this decade. Hydrogen is generated from renewable energy, compressed, transported, and supplied to the engine. This fuel generates the electricity that is used as propulsion energy.

Companies in the sector say that fuel cell electric lorries will have an operating range comparable to many diesel lorries, a distance of up to 1,000 kilometres, with a refuelling time of less than 15 minutes. Built with two fuel cells capable of generating 300 kW of electricity, such lorries can handle a maximum total weight of up to 65 tonnes, with a useful load of 25 tonnes.

With the aim of achieving the same results as the diesel-powered vehicles currently used in the sector, all signs indicate that the first deliveries of this type of tractor unit, dedicated to long-distance traffic, could begin in 2025 or 2027, depending on the manufacturers.

Supply infrastructure

Mercedes-Benz aims to start the first customer trials on a hydrogen lorry model in 2023. Designed from scratch, it will have to

have the same durability standards as an Actros, being able to cover a distance of 1.2 million kilometres over a tenyear period, with 25,000 operating hours

"Fuel cell technology is still at an early stage of development and there are many advantages, but also some challenges ahead," manufacturers say. Volvo, for instance, points out that there is a problem with "the large-scale supply of green hydrogen, as fuelling infrastructure for heavy-duty vehicles has not yet been developed".

Lorry manufacturers aim to significantly increase the supply of green hydrogen over the next two years, which means the use of biogas could be a transitional energy until the advent of fuel cell lorries in long-haul heavy haulage.

THE HYDROGEN LORRY, COMING IN 2025





SUPPLY CHAIN | ROAD TRANSPORT

SPAIN LEADS THE EUROPEAN FLEET

THE REFRIGERATED TRANSPORT BUSINESS REMAINS COMMITTED TO MODERNISATION AND INNOVATION IN AN UNCERTAIN ENVIRONMENT, WHERE THE SUPPLY OF MATERIAL HAS SLOWED DOWN

The Spanish fleet leads the way in Europe, thanks to a steady commitment to investment and innovation, but market uncertainty, caused by the widespread increase in costs, is jeopardising the country's fleet renewal.

A standstill in deliveries has prompted an increase in the number of kilometres travelled by existing vehicles and reduction in capacity, resulting from the expiry of certain leasing contracts that cannot be extended and a shortage of new vehicles due to the delay in the supply of orders from tractor and articulated refrigerated unit manufacturers.

Despite these circumstances, Spanish refrigerated transport is currently

enjoying a privileged position on major routes in the European supply chain. Together with Eastern European fleets, over the years Spanish companies have emerged as the industry leaders, driven by the modernisation of resources, digitalisation and a commitment to innovation made to reduce Spain's 'peripheral country' effect compared with other European regions.

More than 20,000 Spanish refrigerated lorries cross European borders every day, with volumes dependent on the timing of the agri-food export season. The highly fragmented sector is made up of 506 companies with combined sales of €4.5 billion, according to the annual Road

FLEET OPERATORS TARGET PROFITABILITY BY ADAPTING TO THE MARKET Transport White Paper published by Transporte XXI. The typical company has a turnover of €4.13 million euros.

The dynamic and diverse nature of the sector is evident considering its commitment to playing the rules of the game in terms of investment, its own fleet, and the provision of quality service. As part of a decarbonisation objective, the sector has started to show a commitment to intermodality and the establishment of carbon-free corridors, through the creation of flexible rail motorways to relieve congestion on European roads.

"Adapting the fleet to the market" is key to ensuring profitability, says José Esteban Conesa, president of Primafrio, Southern Europe's leading refrigerated fleet operator, based in Murcia, moving more than 2,000 lorries of volumes during the peak season.

Meanwhile, Carlos Moreno de Viana-Cárdenas, CEO of Ontime, the company that acquired the Malaga-based fleet operator Acotral this year, is committed to growing the business: "Single-service operators will have to seek alliances and integrations with integrated operators if they want to survive," he explains.

In this way, operators remain hopeful that they will be able to maintain a healthy business momentum this year following a 2021 that "was positive overall, because most companies



More than 20,000 Spanish lorries cross the border every day.

grew", says José María Arnedo, CEO of Armesa Logística and President of the employers' association Atfrie. This organisation is made up of a select group of 60 companies, which handle the majority of national and international road traffic volumes, with a volume of more than 15,000 lorries on the road every day.

The commercial outlook for the 2022-23 fruit and vegetable season is positive, according to industry sources. However, there is "a fear that there will be a lack of lorries from the last quarter of the year onwards, which is bound to lead to a consequent increase in prices during the

season," says one industry source. It is a worrying situation for shippers, especially for distribution chains and fruit and vegetable product intermediaries, who are noticing a reduction in supply that could affect peaks in demand at the height of the season in regular export traffic to Northern Europe and the British market.

Meanwhile, in terms of import flows, companies are experiencing a problem with returns that will not allow exports and import to balance themselves out, due to "the anticipated consumer crisis caused by the general increase in prices as a result of the energy crisis"

MORE SPECIFICATIONS AND EMISSION ALLOWANCES

Beyond the current energy situation and the spectre of a possible recession in the last quarter of 2022, during the start of the fruit and vegetable season, refrigerated transport businessmen consulted by Transporte XXI say the European Union's tightening of standardisation conditions for all types of vehicles stands out among their medium-term concerns. From 2024, all new lorries will have to be fitted with Intelligent Speed Assist (ISA) and a low tyre pressure warning and sensor system, including trailers and semi-trailers over 3.5 tonnes.

Vehicles must also have a warning system for objects in the blind spot and an Alcolock breathalyser.

Meanwhile, fleet operators have expressed growing concern and uncertainty over the European Parliament's approval of the new Emissions Trading Scheme (ETS II), which is based on the "polluter pays" principle, as it is understood that the transport sector is not prepared to take on an emissions allowance trading system in the current economic situation.

FLEET OPERATORS
IDENTIFY A
SHORTAGE OF
LORRIES FOR THE
SEASON



SUPPLY CHAIN | ROAD TRANSPORT

SEMI-TRAILERS ROLL INTO DOUBLE FIGURES

REGISTRATIONS OF REFRIGERATED LORRIES GATHERED MOMENTUM IN THE FIRST HALF OF THE YEAR. WITH A 27.8% INCREASE, ACCORDING TO DATA FROM THE EMPLOYERS' ASSOCIATION ASFARES

The refrigerated transport fleet recovered its momentum last year, bringing an end to three years of stagnation. New units on the road increased by 20% to 4,331 new units in 2021, and by 19% compared to 2019, the last pre-pandemic year, according to data provided by the Spanish Association of Manufacturers of Trailers and Semitrailers, Tankers, and Similar Vehicles (Asfares).

This upward trend in the refrigerated road transport segment has continued in the current financial year. The registration of refrigerated trailers and semi-trailers increased by 27.8% to 2,397 in the first half of 2022, compared to the previous year. This brings the year-on-year figure to 4,853 units per year, and Asfares is forecasting a similar figure by the end of

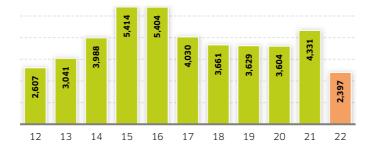
Asfares, which is run by Juan Viartola, revealed that the share of refrigerated trailers and semi-trailers manufactured in Spain jumped to record heights, from 68% in 2020 to 85.8% in 2021, with more than 3,700 units registered. Schmitz, Sor Ibérica, Lecitrailer and Indetruck emerged as the companies with the largest market share in the first half of this year.

Schmitz has an order for 50 refrigerated semi-trailers in progress for FM Logistic Ibérica, the first ten

MANUFACTURERS EXPAND THEIR SERVICES

THE REFRIGERATION FLEET IS GROWING STRONGLY

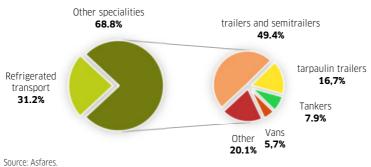
The employers' association Asfares estimates that this year will close with more than 4.800 refrigerated trailers and semi-trailers, almost 500 more than in 2021.



REGISTRATION OF REFRIGERATED TRAILERS AND SEMI-TRAILERS

Data in units. Data for 2022 are for the first half of the year.

DISTRIBUTION BY TYPE



of which have already been delivered. These units, manufactured at the German multinational's production plant in Zaragoza, are temperature-controlled doubledeck system units which can load 66 Euro pallets. They also feature the 'TrailerConnect' telematics system with door contact, coupling and tank sensors.

with more than 50 years of

experience in the refrigerated vehicle manufacturing sector, remains committed to continuous improvement. As part of the process of redesigning semitrailers, where the company has already implemented new cappings, an electrical system and other structural innovations, this year it has introduced a revamped image for rear mudflaps.

In addition, this year Lecitrailer has set up its first THE SHARE

REFRIGERATED **TRAILERS**

GROWTH IN THE COLD **FLEET** BETWEEN JANUARY AND JUNE

THIS YEAR'S

FORECAST IS FOR

AROUND 4,800

REFRIGERATORS

after-sales service base in Portugal, where all types of chassis and bodywork of any make can be repaired. With this site, the company now has seven bases of its own with a combined surface area of more than 500,000 square metres. Five are in Spain, in Zaragoza, Barcelona, Madrid, Valencia and Seville. The other two are in Lyon (France), and in the Portuguese municipality of Mangualde, where the facilities of a 36,000-square-metre centre include a bench redressing tool, shot blasting, a painting cabin, a brake tester, a tyre alignment laser system, and repair pits.

Asfares notes that the registration of trailers and semi-trailers over 12 tonnes in 2021 totalled 13,886 units, up 27.7% from 10,877 in 2020 and 11% more than in 2019. Tarpaulin trailers, which accounted for 4,721 vehicles, rose by 54%. Behind refrigerated trucks came dump trucks, with 1,604 registrations, an increase of 38%. It also highlighted the 45% increase in container ships, with 609 units.

Following an increase of over 25% in refrigerated vehicles in the first half of the year, vans and container ships grew by more than 5%. Tanker and dump trucks dropped somewhat less, with tarpaulin trailers falling slightly, and flatbeds and other specialist units in decline. In the overall market, the figures remain stable at around 14,000 units. At the end of the first half of 2022, 14,272 units were registered, with a similar amount forecast for the full year.

Continuous improvement Meanwhile, Sor Ibérica,



A port and its sales outlets have never been so united



SUPPLY CHAIN | RANKING OF REFRIGERATED ROAD TRANSPORT COMPANIES

COVID CURBS GROWTH

THE HEALTHCARE CRISIS TAKES ITS TOLL ON COMPANIES IN THE SECTOR, AS TURNOVER FALLS BY 2.2% TO €4.52 BILLION DURING A DIFFICULT 2020

Refrigerated road transport weathered the COVID-19 storm better than other specialities. During the difficult year of 2020, turnover in the sector fell by 2.2% to €4.52 billion, a modest drop when compared to the 6% fall registered by the Spanish road freight transport sector. In fact, despite the downturn in 2020, refrigerated road transport has reported strong growth of 11.2% compared to 2006, second only to the speciality of cranes and special transport, with an increase of 24.7% over the last five years.

These figures are stated in the 2022 Edition of the White Paper on Road Transport, which is produced every year by this publication, based on a sam-

ple of 4,000 companies, of which 529 are refrigerated transport specialists.

"Despite the pandemic, it has not been a bad year, although it hasn't been a good one," says José María Arnedo,

president of the employers' association Atfrie. "We have had consistency in our work, because consumption has been higher," he adds.

The fall in sales of refrigerated road transport, the Spanish market garden's key logistical partner for European trade, is consistent with the decline in Spanish fruit and vegetable exports to the EU, which fell by 2.8% to 13 million tonnes in 2020. This figure is the equivalent of more than 540,000 lorries, which. despite the lockdowns and restrictions on mobility, continued to operate even during the worst phases of the pandemic.

Furthermore, a 23% sales share of the transport sector shows how refrigerated road transport has consolidated its position as the second largest speciality in the sector, behind only breakbulk and full lorry loads and agencies, under the heading of 'other specialities' (due to the fine line that separates these businesses), which have a 58% share.

Good health

IN REFRIGERATED

TRANSPORT

IN THE LAST

FIVE YEARS

The statistics reflect the Spanish agri-food industry's excellent performance. Despite the difficult situation resulting from the pandemic, Spain continues

to be the EU's 'refrigerator', with the EU receiving 74% of the flows of fruit and vegetable products moved between Spain and the rest of the world.

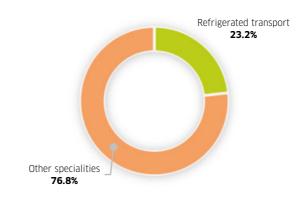
In terms of turnover, only 2.3% (12 com-

panies) have a revenue of over €50 million. Together, in 2020, they generated a turnover of €1.47 billion, a third of the business. SMEs, which make up 88% of the survey respondents, recorded sales of €3.04 billion, 67% of total refrigerated road transport sales in 2020.

Primafrio, which this year reached an agreement with Apollo Infrastructure, once again heads the company ranking. In a bid to accelerate its growth plans, the US investment fund bought a 49% stake in the Murcia-based refrigerated

REFRIGERATION, IN SECOND PLACE

Sales confirm refrigerated road transport as the second most important speciality in the sector, with a 23% share.



Source: Transporte XXI

REFRIGERATION WEATHERS THE STORM

Sales of refrigerated hauliers fell by 2.2% in 2020, compared with a 6% drop for road transport as a whole.



Figures in millions of euros. Source: Transporte XXI.

transport group. With no official figures for the 2020 financial year at the time of going to press, the operator made a statement that it recorded revenues of €506 million in 2021, up 10.5% on the previous year.

Next is Transportes J. Carrion, which is still grappling with a downward trend. In 2020, company sales fell by 25% compared to 2019, to almost 189 million. Over the last five years, its turnover has shrunk by 18%, having lost 40 million in sales since 2016.

PRIMAFRIO, J. CARRION & FUENTES, AT THE TOP OF THE RANKING IN TERMS OF TURNOVER

Transportes Agustín Fuentes e Hijos, acquired by the American giant Lineage Logistics, completes the podium with sales of 158 million in 2020, up 3% on the previous year. This percentage rises to 19% over the last five years.

The top three refrigerated transport companies are in the exclusive club of the Top 10 road haulage companies in Spain, according to the latest edition of the White Paper published every year by this publication.

Analysis by region

In terms of location, refrigerated transport is distributed throughout Spain, although dependence on the agri-food industry means that the sector is mainly concentrated in the Mediterranean Arc.

Having overtaken Andalusia in 2017, the leading autonomous community by sales is Murcia, with a 28% share. The 92 companies located in this region closed 2020 with a turnover of 1.27 billion, a figure almost identical to the previous year. Next is Andalusia, where turnover for the region's 109 companies fell in 2020 to €1.22 billion, down 4% compared to the previous financial year. The Valencian Community retains third place, after the region's 76 refrigerated transport specialist companies recorded a fall in revenues to €611 million in 2020, down 3% compared to the previous year.

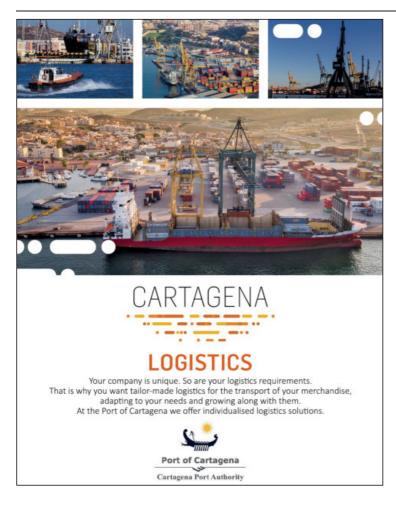
These three Spanish autonomous communities, which also lead the ranking in terms of volume of fruit and vegetable exports to Europe, although not in the same order, account for 69% of the refrigerated road transport business.

SPANISH EXPORTS OF FRUIT AND VEGETABLE PRODUCTS

Murcia, Andalusia and Valencia account for 69% of the refrigerated road transport business in Spain, with aggregate sales exceeding €3.1 billion in 2020, according to the White Paper on Road Transport prepared by Transporte XXI.

									MPLOYMENT	SH	HARE
COMMUNITY	COMPANIES	2020	%20/19	2019	2018	2017	2016	%20/16	2020	SALES	EXPORTS
Murcia	92	1,276.79	0%	1,282.62	1,201.06	1,152.93	1,077.83	+18%	5,244	28%	19%
Andalucía	109	1,224.24	-4%	1,269.70	1,197.50	1,240.90	1,161.22	+5%	6,548	27%	33%
Com. Valenciana	76	611.37	-3%	632.72	615.69	582.67	570.28	+7%	3,107	14%	28%
Cataluña	42	446.31	-3%	458.41	446.39	433.83	419.28	+6%	2,452	10%	7%
Galicia	34	202.44	-1%	204.70	187.42	183.28	190.45	+6%	1.145	4%	1%
País Vasco	15	150.00	+1%	148.38	136.15	104.84	97.10	+54%	968	3%	0%
Castilla-La Mancha	18	125.35	0%	125.21	111.97	108.49	99.31	+26%	965	3%	2%
Madrid	15	112.98	+1%	111.52	103.16	104.48	103.93	+9%	697	2%	2%
Aragón	15	93.94	-3%	97.05	94.49	107.90	102.63	-8%	654	2%	1%
Navarra	12	68.68	-3%	70.50	67.87	62.87	58.58	+17%	432	2%	3%
Asturias	16	51.27	+4%	49.13	43.68	39.35	36.53	+40%	416	1%	0%
Baleares	11	51.20	-11%	57.45	55.64	54.53	50.43	+2%	407	1%	0%
Castilla y León	14	30.92	-13%	35.44	30.90	30.08	27.73	+11%	265	1%	1%
La Rioja	9	29.09	-2%	29.67	28.02	26.84	23.70	+23%	220	1%	0%
Cantabria	4	18.59	0%	18.68	21.68	20.44	17.72	+5%	42	0%	0%
Canarias	15	14.98	-7%	16.05	15.43	19.10	18.12	-17%	216	0%	0%
Extremadura	9	14.85	-7%	16.04	14.22	15.93	14.23	+4%	151	0%	1%
TOTAL	506	4,523.00	-2%	4,623.28	4,371.28	4,288.47	4,069.08	+11%	23,929	100%	100%

Data in millions of euros. Sales share: Market share of the national total in 2020. Export share: Share of exports of fruit and vegetable products in 2020 (by weight). Source: Transporte XXI.





COOL LOGISTICS

REFRIGERATED TRANSPORT COMPANIES IN SPAIN | RANKING BY SALES IN 2020

			YEAR				SALES						
RK	COMPANY	PROVINCE	OF BUILD	2020	%20/19	%20/16	2019	2018	2017	2016	Results	Assests	Workforce
1	Primafrio SL	Murcia	1999	n.a.	-	404.91	375.75	342.65	311.81	-	24.65	108.48	340
2	Transportes J. Carrión SA	Almería	1980	188.93	-25%	250.44	258.54	269.40	229.30	-18%	2.21	10.94	406
3	Transportes Agustín Fuentes e Hijos SL	Murcia	1992	158.37	+3%	154.25	147.58	138.60	132.98	+19%	3.66	41.45	772
4	Transportes Mazo Hermanos SA	Valencia	1972	103.72	-1%	105.08	103.69	98.47	93.05	+11%	1.36	45.70	475
5	Grupo Transonuba SL	Huelva	1985	103.47	+5%	98.27	83.29	81.31	76.07	+36%	1.51	6.27	180
6	Sabetrans SL	Huelva	1987	88.61	+75%	50.51	45.75	43.73	40.13	+121%	6.87	24.86	497
7	Transportes Grupo Caliche SL	Murcia	1987	87.32	+12%	78.01	74.86	65.53	61.18	+43%	2.08	15.11	174
8	Isabel Alonso Alonso SL	Almería	1999	83.90	+13%	74.15	56.23	46.43	36.18	+132%	2.40	19.28	506
9	Agencia Transportes Trota SA Transintercano SL	Lleida	1984	79.43 68.33	+3%	77.09	74.22 59.54	72.20	74.38 59.27	+7%	2.63	11.69	357 551
	Disfrimur SL	Almería Murcia	1991 1997	56.29	-5%	63.05 59.36	58.45	59.16 56.89	57.66	+15%	7.07 0.55	35.54 6.08	763
12	Hermes Logística SA	Barcelona	1982	n.a.	-	54.75	54.60	56.01	55.04	-	-0.53	-2.53	131
13	Galadtrans 2009 SL	Castellón	2009	45.42	-4%	47.11	49.78	46.71	39.86	+14%	0.47	1.58	63
14	Castillo Trans SA	Alicante	1983	43.85	-7%	47.16	43.17	37.02	38.61	+14%	1.14	7.90	416
15	Olano Seafood Ibérica SA	Gipuzkoa	1989	43.24	-2%	44.01	47.16	32.48	27.62	+57%	0.97	4.99	77
16	Explotación Internacional de Transportes SL	Alicante	1965	43.16	+2%	42.46	40.55	30.86	27.54	+57%	0.02	0.90	249
17	Tudefrigo SL	Gipuzkoa	1993	42.35	+13%	37.46	31.64	29.00	26.98	+57%	0.64	4.01	245
18	Transportes Eurocruz SL	Murcia	1996	41.75	-2%	42.60	39.96	35.62	33.10	+26%	0.61	7.23	225
19	Campillo Palmera SL	Murcia	2012	39.58	-10%	44.17	53.15	54.21	55.50	-29%	0.54	12.80	208
20	Transportes Penades e Hijos SL	Albacete	1987	38.51	+4%	37.17	27.34	23.40	18.73	+106%	1.63	6.23	321
21	Transportes García Villalobos SA	Madrid	1990	37.80	+10%	34.47	32.62	34.74	38.02	-1%	0.62	5.95	218
22	Transportes J. Carbó SL	Barcelona	1989	32.47	-14%	37.71	32.33	27.85	22.48	+44%	0.40	4.73	194
23	Capitrans SL	Murcia	1992	31.63	-4%	32.90	31.20	28.19	25.76	+23%	2.24	8.72	153
24	Francisco Pérez Rodríguez SA	Almería	1986	31.55	+13%	27.85	24.04	24.01	21.92	+44%	0.25	2.20	271
25	Transportes Tresserras SA	Girona	1947	n.a.	- 404	30.86	32.66	31.71	29.38	- 200/	0.03	3.12	102
26	Aralogic SL	Zaragoza	2006	29.77	-1%	30.14	29.56	26.46	23.25	+28%	0.41	1.87	175
27	Fresh & Carry SA Inter Trans Pérez Casquet SL	Murcia Almería	1998 1999	24.69 n.a.	+2%	24.10	20.44	17.41 19.36	6.89 17.38	+258%	0.32 1.04	1.00 7.67	23 284
29	Transfrired SL	Cuenca	2003	24.21	+12%	21.53	19.53	16.47	15.43	+57%	0.58	2.33	135
30	Transportes Hermanos Corredor SA	Murcia	1982	24.13	+3%	23.36	22.47	21.19	21.74	+11%	0.20	5.78	45
31	Indapak Logistic SL	Almería	2002	24.07	-9%	26.34	24.56	23.91	22.26	+8%	0.87	4.78	5
32	Transportes Cruz SL	Navarra	1975	23.62	+5%	22.58	22.52	22.03	19.87	+19%	1.06	8.38	164
33	Agetrans Demetrio e Hijos SL	Murcia	2000	23.22	+7%	21.77	19.78	19.72	16.13	+44%	0.26	2.71	163
34	Trans-Manolet SL	Alicante	1983	23.07	+3%	22.45	21.97	17.95	14.09	+64%	0.94	5.04	154
35	Transportes Frigoríficos Narval SL	Madrid	1998	22.92	-13%	26.36	24.18	21.56	19.43	+18%	0.03	2.03	159
36	TAE Transports i Serveis Integrals SL	Barcelona	1995	22.82	+5%	21.83	20.11	18.33	20.00	+14%	0.04	5.29	127
37	Cosoltrans Logística y Expedición SL	Murcia	2006	22.73	-14%	26.39	24.15	22.09	18.14	+25%	0.15	1.51	26
38	Agencia Transportes Robles SA	Lleida	1985	22.68	+2%	22.20	21.34	19.92	15.52	+46%	0.35	1.47	287
39	Juan Francisco Aranda SL	Granada	1994	22.60	-4%	23.66	20.25	18.99	17.48	+29%	0.74	8.15	197
40	Transfrío Rias Baixas SL	Pontevedra	2016	22.53	+5%	21.40	17.93	16.70	3.01	+649%	0.27	2.27	104
41	Serfri Trucks SA	Murcia	2007	22.45	+20%	18.63	17.01	19.03	17.45	+29%	0.41	1.01	23
42	Trans Jaylo SA	Navarra	1995	22.27	-1%	22.52	19.94	17.03	13.50	+65%	2.94	11.78	159
43	Transportes J Prats SA Armesa Logística Internacional SA	Girona Valencia	1980 2013	19.93 19.80	-15% +7%	23.50 18.45	22.11 19.95	21.25 18.46	20.56 8.92	-3%	0.55 2.61	3.49 9.68	
44	Hervián SL	Murcia	1991	19.80	+1%	19.66	17.62	16.61	15.35	+122%	0.58	5.99	226
46	Transportes Vigar SL	Sevilla	1990	19.68	+6%	18.52	16.34	14.78	11.40	+73%	2.11	14.45	172
47	Rau Load Cargo SL	Valencia	1993	19.61	+3%	18.97	15.53	21.20	19.19	+2%	0.14	2.35	31
48	Transportes Yagüe & Lago SL	Málaga	1978	18.82	+19%	15.84	15.75	17.33	13.79	+36%	0.30	1.95	70
49	Euroloma SL	Murcia	1993	18.75	-1%	18.86	16.99	16.78	15.35	+22%	1.03	6.82	76
50	Andalucía Cargo SA	Almería	1999	18.34	+27%	14.46	13.03	10.50	10.86	+69%	0.05	0.16	16
51	Mascaró Morera SL	Baleares	1995	18.04	-8%	19.59	18.67	18.38	16.35	+10%	0.26	2.95	134
52	Sociedad Anónima Transvasa SA	Cantabria	1978	18.01	+7%	16.83	13.50	13.27	11.65	+55%	2.46	14.64	35
53	Frío Nature Almería SL	Almería	2012	17.91	+17%	15.27	11.93	11.09	8.71	+106%	0.40	1.53	6
54	Rau Load Cargo Barcelona SL	Valencia	1998	17.90	-5%	18.91	17.08	15.60	13.97	+28%	0.51	0.58	17
55	Trans Frío Higueral SL	Almería	1997	17.66	+7%	16.47	13.55	12.66	10.70	+65%	1.81	5.14	187
56	Transportes y Excavaciones Valiente SL	Sevilla	1993	17.61	-2%	18.00	17.02	16.84	17.58	+0%	0.57	4.38	52
57	Transportes Piadela SL	Coruña	1990	17.38	+8%	16.16	15.43	14.66	13.80	+26%	0.94	6.74	54
58	Interfrive SA	Almería	1994	17.37	-14%	20.23	18.61	16.65	16.14	+8%	1.84	13.93	171
59	Inter-Cañabate SL	Almería	1995	17.34	-10%	19.36	19.44	20.33	20.94	-17%	0.27	5.96	15
60	Logidis Sistems SL	Almería	1997	17.22	-24%	22.59	23.37	21.31	20.60	-16%	0.19	2.03	18

COOL LOGISTICS

			YEAR				SALES						
RK	COMPANY	PROVINCE	OF BUILD	2020	%20/19	%20/16	2019	2018	2017	2016	Results	Assests	Workforce
61	Tudefrigo Sur SL	Almería	1991	17.10	-10%	19.03	16.36	14.13	13.75	+24%	-0.38	0.53	154
62	Rafa Grau Transports SL	Valencia	2014	16.99	+20%	14.15	11.58	9.29	6.91	+146%	0.17	0.82	90
63	Transportes Caudete SA	Albacete	1967	16.82	+0%	16.74	9.35	9.34	9.88	+70%	-0.84	4.55	143
64	Transportes Tarragona SA	Lleida	1985	16.51	-4%	17.12	19.22	19.37	19.80	-17%	-0.86	-1.23	41
65	Transportes Valín e Hijos SA	Lugo	1988	15.84	-14%	18.38	12.14	11.56	11.99	+32%	0.09	3.79	133
66	Transportes Internacionales Eurotransfret SL Frío Aragón SL	Alicante	2009 1988	n.a.		15.60 15.44	14.52 14.86	14.87 13.51	13.72 11.70	-	-0.19	1.53 2.10	141 130
68	Transportes Sindo SL	Zaragoza Sevilla	1976	15.38	-10%	17.15	17.27	16.66	16.81	-9%	0.00	6.49	93
69	Transmoro SL	Huelva	1992	15.25	+18%	12.97	9.75	8.55	6.80	+124%	1.15	3.48	141
70	Rau Load Cargo Marítima SL	Valencia	2004	15.11	+14%	13.28	11.78	11.09	9.48	+59%	0.76	0.84	18
71	Transportes el Mirador-Miratrans SL	Murcia	1995	14.90	+8%	13.81	13.14	13.28	12.27	+21%	0.11	1.32	119
72	S. Cabrera SL	Almería	1991	14.88	-1%	15.09	14.47	13.89	12.74	+17%	1.58	14.31	119
73	Antonio Marco SL	Alicante	1985	14.62	+2%	14.29	13.01	n.a.	8.54	+71%	0.17	2.05	99
74	Tradomi SL	Murcia	1996	14.55	+9%	13.36	10.68	9.50	7.26	+100%	0.52	4.22	117
75	Distribuciones y Representaciones Usieto SA	Zaragoza	1988	14.26 13.98	-12% +0%	16.24	15.05	13.02	9.89	+44%	1.55	15.53 9.94	92
	Trans Rocamar SL Olano Norte SL	Valencia Gipuzkoa	1977 2017	13.98	+0%	13.92 10.96	13.61 4.97	12.33	11.98	+17%	0.69	2.19	84 114
78	Antonio Gijón Operador del Transporte SL	Granada	2006	13.96	+4%	13.48	13.54	11.75	9.66	+45%	0.03	1.68	80
79	Eurosol Cargo SA	Murcia	2005	13.93	-11%	15.46	16.16	16.58	16.71	-17%	0.84	3.83	102
80	Frigo-Líneas Nórdicas SL	Almería	2005	13.86	+3%	13.46	10.97	9.25	8.76	+58%	1.55	9.53	107
81	Grupo Salas Águila SL	Almería	1994	13.52	+5%	12.86	11.06	10.23	8.45	+60%	0.69	6.51	93
82	Delta Stocks Logistics Global SL	Tarragona	2017	12.84	-13%	14.78	13.59	0	0	-	0.51	1.72	17
83	Innova Logic Transportes SL	Valencia	2006	12.65	+2%	12.44	10.56	9.09	6.91	+83%	0.38	0.87	49
84	Cronofrío SA	Girona	2001	12.50	-14%	14.54	14.52	14.77	14.31	-13%	0.10	1.89	55
85	Bonfrig FDC Ultracongelados SA	Pontevedra	2002	12.31	+103%	6.07	2.70	2.14	1.91	+546%	-0.21	0.07	46
86	Transportes Bolipesk SL	Cádiz	2004	12.28	+2%	12.05	10.22	7.68	5.00	+146%	0.45	1.43	28
87 88	Serincar 92 SL Eumatrans SL	Asturias Cádiz	2013	12.26 n.a.	+44%	8.53 12.14	5.26 12.35	1.69 13.27	1.40	+777%	0.61	1.46 1.92	65 56
89	Alianza Galadtrans SL	Castellón	2001	11.72	-12%	13.36	14.15	16.23	13.48	-13%	0.10	0.34	15
90	Transportes Valle del Oja SL	La Rioja	1996	11.71	-4%	12.18	10.55	10.05	9.29	+26%	1.81	6.00	66
91	Devesa-Express SL	Pontevedra	1997	11.53	-14%	13.35	12.97	13.35	15.10	-24%	0.38	2.73	80
92	Transportes Frigoríficos Solocanarias SL	Sevilla	2001	11.38	+2%	11.20	9.78	9.61	10.01	+14%	0.41	1.75	21
93	SC Andaluza de Transportes Cotravelma	Málaga	2008	n.a.	-	11.26	12.32	12.45	s.d.	-	-0.17	0.96	9
94	José María Navajas SL	La Rioja	1998	n.a.	-	11.05	11.41	10.94	9.08	-	0.17	5.33	96
95	Genaro Rodríguez e Hijo SL	Huelva	1997	10.85	+24%	8.72	8.21	8.40	6.86	+58%	0.12	1.61	54
96	Transports J Prada SL	Girona	1980	n.a.	- 20/	10.81	9.68	9.28	9.23	- 20/	0.24	4.40	62
97 98	Satfer España SL Transportes Pibejo SL	Valencia Madrid	1983 1995	10.81 n.a.	+3%	10.44 10.76	10.34 8.66	10.38 7.49	11.02 7.09	-2%	0.17	1.20 0.86	59 62
99	Cofrivigo SCL	Pontevedra	1982	n.a.	_	10.76	10.18	9.89	9.58	_	0.03	0.43	8
100		Murcia	2018	10.47	+14%	9.18	0.18	0	0	_	-0.42	-0.07	88
101		Baleares	2005	n.a.	-	n.a.	10.40	9.97	8.48	-	0.15	0.53	14
102	Tojeiro Transportes SA	Coruña	1977	10.34	+4%	9.97	10.19	10.30	9.18	+13%	0.90	15.52	42
103	Merlatrans SA	Murcia	1990	10.21	-9%	11.29	11.24	10.31	9.65	+6%	-0.38	2.08	54
104	Transgesol SL	Almería	2003	10.00	-23%	12.98	11.85	11.42	10.44	-4%	0.96	5.27	90
105	Frío Guerrero SL	Almería	2006	9.98	+7%	9.35	8.07	5.67	5.33	+87%	0.03	0.08	9
	Kartin SL Transports Interpasionals B Fuster SI	Pontevedra	1997	9.97	-6%	10.56	10.01	9.73	9.48	+5%	0.47	0.96	65
107 108	· · · · · · · · · · · · · · · · · · ·	Alicante Jaén	2005 1997	9.94	-0% -4%	9.95 10.30	9.34 11.36	8.88	8.65 9.11	+15%	0.11	1.06 0.47	88 72
	Interbalsa SL	Murcia	1997	9.83	-3%	10.30	9.90	9.16	7.29	+9%	0.03	2.49	81
110		Barcelona	2001	9.81	+3%	9.53	10.07	9.42	8.85	+11%	0.33	0.76	97
111	Estela Trans SL	Almería	1994	9.66	-4%	10.05	8.88	7.38	6.84	+41%	0.47	2.09	33
	Transgallego Logistic SL	Murcia	1991	9.63	-17%	11.54	12.53	12.16	11.78	-18%	0.14	2.04	16
	Olano Logística del Mar SL	Gipuzkoa	2018	9.52	+1%	9.40	5.40	0	0	-	0.17	0.40	194
	Transdonat SA	Valencia	1970	9.43	-	n.a.	8.75	9.45	9.84	-4%	-0.21	3.46	55
	Martínez Cobo e Hijos SL	Girona	2000	9.40	+4%	9.05	8.55	8.55	8.27	+14%	0.37	2.04	29
116		Almería	1997	n.a.	- 4 F0/	n.a.	9.25	8.62	8.14	240/	0.01	0.41	19
117	Almacenajes Pogar SL Transportes Oteiza SA	Cuenca	1987	9.11	-15%	10.72	10.32	7.36	6.95	+31%	0.09	0.66	107
	Transportes Otelza SA Transportes Las Maravillas SA	Navarra Murcia	1975 1987	9.08 n.a.	-10%	10.06 n.a.	10.19 9.05	9.70 9.72	8.66 8.54	+5%	0.04	2.63	35 46
	Transportes Carlos SL	Tarragona	1986	9.04	+5%	8.59	7.67	6.77	6.92	+31%	0.13	5.12	72
120	porces carros se	ιαιταξυπα	1700	3.04	- 370	0.55	7.07	0.77	0.32	.71/0	0.00	J.12	1 4

REFRIGERATED TRANSPORT COMPANIES IN SPAIN | RANKING BY SALES IN 2020

			YEAR				SALES						
RK	COMPANY	PROVINCE	OF BUILD	2020	%20/19	%20/16	2019	2018	2017	2016	Results	Assests	Workforce
121	Transportes Badosa SA	Girona	1967	8.99	-10%	10.02	10.75	12.78	12.35	-27%	-0.20	2.60	81
122	Vicente E Escudero SL	Alicante	2002	8.97	-0%	9.02	7.89	7.11	6.45	+39%	0.10	1.25	68
123	Transportes Farmaceúticos SA	Madrid	1986	8.97	-1%	9.03	9.11	8.89	8.56	+5%	0.09	1.80	16
124	Austrian Fruits SL	Lleida	2009	8.96	+558%	1.36	1.30	1.72	1.74	+416%	0.37	0.86	63
125	Yonatan Pérez Suárez SL	Lugo	2013	8.94	-26%	12.11	13.11	15.40	18.17	-51%	-0.63	-0.98	80
126	Logística Eurocruz SL	Murcia	2005	8.81	+2%	8.60	5.99	3.35	2.54	+247%	0.50	1.07	82
127	Omega Delivery SL	Madrid	1998	8.70	-4%	9.04	9.96	9.26	10.00	-13%	2.40	8.88	10
128	Trans Valemar SL	Valencia	1993	n.a.	-	8.63	8.83	10.16	n.a.	-	0.07	0.72	21
129	Sauratrans SL	Murcia	1995	8.57	-6%	9.08	10.35	11.58	9.61	-11%	0.13	1.49	62
130	Refrilog SL	Baleares	2005	n.a.	-	8.57	8.17	8.29	8.62	-	0.09	1.65	62
131	Logística de Cox SL	Alicante	2006	8.53	-19%	10.56	11.48	8.65	12.07	-29%	0.12	0.35	54
132	Orcelitrans SL	Alicante	1996	8.49	+3%	8.24	7.78	7.69	7.22	+18%	0.05	0.89	72
133	Rau Load Cargo Sevilla SL	Valencia	1996	8.38	+11%	7.52	5.98	6.76	8.14	+3%	0.23	0.30	13
134	Servicios Logísticos del Pla SL	Lleida	1996	8.32	-4%	8.71	8.37	7.47	6.84	+22%	0.41	6.07	99
135	Potel Torres Transportes SL Vicente Loureda García SL	Pontevedra	2006	7.94 7.81	+6%	7.50 9.57	7.16 8.92	7.22	6.88	+15%	0.48	2.89	29 23
136 137	Somartrans L´ Eliana SL	Coruña Valencia	1991 1998	7.01	-21%	9.88	10.37	7.76	5.66	+15%	-0.35	-0.07	68
138	Trans Wences SL	Barcelona	1993	7.73	-26%	10.48	10.78	10.56	9.72	-21%	0.12	5.35	66
139	Grupo Hnos Terres Montiel SL	Murcia	2006	7.65	+35%	5.66	5.16	4.61	4.45	+72%	0.32	0.68	33
140	Transportes Barceló 2010 SL	Baleares	2001	7.64	-13%	8.78	8.24	7.55	6.55	+17%	-0.25	0.47	125
141	Logísticas Goyanes SL	Lugo	2006	7.64	-11%	8.57	8.67	9.34	9.05	-16%	-0.03	2.10	42
142	Rau Load Cargo Denia SL	Valencia	2005	7.63	-2%	7.82	7.59	0.52	0	-	0.28	0.35	10
143	Transleo Sur SL	Sevilla	2012	7.59	-8%	8.21	7.28	7.15	7.13	+6%	0.37	0.89	87
144	Transportes Euro-Almería 2000 SL	Almería	2000	7.51	+1%	7.44	10.16	11.67	10.64	-29%	0.22	0.97	10
145	Transmado Express 2002 SL	Jaén	2002	7.39	-7%	7.98	7.77	7.95	8.14	-9%	0.86	2.64	90
146	Transportes y Logística TLX SL	Murcia	2011	7.37	+10%	6.69	5.53	5.02	2.58	+185%	0.17	1.08	100
147	Dimafrío SL	Murcia	2017	n.a.	-	7.27	3.22	0.44	0	-	0.03	0.11	67
148	Transportes Arrastio SL	Gipuzkoa	1999	7.12	+5%	6.80	7.07	6.59	5.66	+26%	0.57	2.12	43
149	Transportes Frigoríficos del Segre SL Transaguimu SI	Lleida	2000	7.09 7.06	-15% -7%	8.36	8.76	7.49	6.95	+2%	0.03	1.08	53
150 151	Transaguimu SL Tircarhe SL	Almería Córdoba	2014	7.06	+2%	7.60 6.92	6.55	5.29 6.07	5.31 5.87	+33%	0.55	3.87 4.33	59
152	Betese Gestión de Sv. de Almacenajes y Portes SL	Barcelona	2003	6.94	-14%	8.06	7.91	7.41	6.77	+3%	0.00	1.39	21
153	Dalias Transport SL	Alicante	1987	6.92	+18%	5.87	6.00	5.89	4.61	+50%	0.06	1.45	47
154	Pitarch Logística SA	Castellón	1984	6.82	-14%	7.90	8.64	8.86	7.94	-14%	0.00	5.52	67
155	Transportes Cameselle SL	Pontevedra	1988	6.69	-4%	6.98	6.78	6.37	5.86	+14%	0.25	0.93	65
156	Betiko-Trans SL	Bizkaia	1996	6.69	+17%	5.70	6.81	5.66	6.36	+5%	0.49	3.93	33
157	Transportes José Valero Ridao SL	Almería	2010	6.67	+5%	6.37	5.98	6.00	4.92	+36%	0.39	2.08	77
158	Transportes Juan Gómez SA	Murcia	1986	6.62	-11%	7.44	6.16	6.77	7.79	-15%	0.10	1.21	32
159	Transportes Papa Alí SL	Murcia	1996	6.49	+1%	6.46	4.62	4.52	4.37	+49%	0.04	0.25	55
160	Transportes Miguel Parrilla SL	Sevilla	1991	6.49	-19%	8.02	9.00	7.99	7.71	-16%	0.05	1.18	60
161	Lópezmar SL	Madrid	1999	n.a.	-	6.48	4.01	3.16	3.82	-	0.06	0.61	104
162	Frigo Vanfer SL	Lleida	2010	6.43	-2%	6.57	6.20	6.09	5.46	+18%	0.16	1.80	48
163	Disalfrío Centros Logísticos SL Lofriastur SL	Jaén	2002 2013	n.a. 6.27	-2%	6.32	6.11 5.89	n.a. 5.64	6.39 5.20	+21%	0.05	1.33 1.95	61 76
164 165	Transportes Frigoríficos García Ramiro SL	Asturias Girona	2013	6.26	+6%	5.91	5.14	n.a.	2.58	+142%	0.23	0.65	46
166	Frío-Cantoria SL	Almería	1996	n.a.	-	6.25	5.56	5.54	s.d.	- 14270	0.03	2.46	113
167	Transportes Indo SA	Gipuzkoa	1983	6.24	-8%	6.75	6.74	6.51	6.34	-2%	0.01	2.62	57
168	Biologistic SL	Valencia	2002	6.16	-2%	6.31	7.25	6.73	6.09	+1%	-1.00	-0.93	21
169	Transportes New Frío SL	Sevilla	2006	6.01	-24%	7.86	7.83	6.95	6.43	-7%	-3.42	-3.01	58
170	Betrex España SA	Valencia	1990	5.92	-1%	5.99	5.77	5.42	4.59	+29%	0.04	0.43	11
171	Transportes Santín y Jové SL	Barcelona	1983	n.a.	-	5.92	4.82	4.17	4.62	-	0.31	1.31	37
172	Amodo Mio Logist Cargo SL	Murcia	2018	5.90	+10%	5.35	0.97	0	0	-	0.01	-0.07	16
173	Perea SL	Alicante	1972	n.a.	-	5.90	6.13	6.37	5.69	-	0.06	0.60	53
174	Carnes Erdella SL	Bizkaia	1984	5.87	-0%	5.89	5.88	5.98	5.60	+5%	0.27	2.32	71
175	José Hernández Quijada e Hijos SL	Murcia	1994	5.76	+7%	5.39	4.87	4.50	4.33	+33%	0.23	2.07	44
176	Transportes Francisco Cordero e Hijos SL Transportes Manuel Ares SL	Huelva	1999	5.76 5.75	-9% +4%	6.30	5.55	6.29	6.01	-4%	-0.39	0.11	69
177 178	Panero Logística SL	Coruña Asturias	1999 2003	5.75	+4%	5.50 5.49	5.54 5.31	5.35 5.23	4.99 5.08	+15%	0.37	4.20 2.58	46 64
179	Ondatrans Tractores SL	Lleida	2003	5.74	+25%	4.60	4.39	4.24	3.30	+74%	0.14	0.40	54
	Frigo Express Europe SL	Lleida	1987	n.a.	-	5.74	4.08	3.87	4.80	-	-0.51	2.86	56
	·												-

SUPPLY CHAIN | DISTRIBUTION BY MODE OF TRANSPORT

HAULIERS DOMINATE TRADE

THE ROAD TRANSPORT SECTOR MOVES MORE THAN 80%
OF SPANISH FOREIGN TRADE OF FRUIT AND VEGETABLE PRODUCTS

Hauliers remain the driving force behind Spain's foreign trade in fruit and vegetable products, moving 83% of imports and exports in 2021. This statistic rises to 99% in the EU, the main market, which accounts for 74% of trade between Spain and the rest of the world, according to the Spanish Secretary of State for Trade's provisional statistics for 2021, released at the time of going to press.

Recording 3.1% growth during a year characterised by the global health crisis, hauliers moved a total of 14 million tonnes in the EU alone, the equivalent of almost 600,000 lorries. A strong performance by exports, which account for 99% of the total trade, fuelled most of the growth; foreign sales of fruit and vegetables increased by 3.5% to 12 million tonnes in 2021. In contrast, imports recorded a similar volume to that recorded in 2020.

A more detailed analysis also reveals the main destination countries for Spanish fruit and vegetables. Germany leads the ranking with 3.8 million tonnes, representing 31.5% of total exTHE TRAIN AND THE PLANE, 'SILENT PARTNERS'

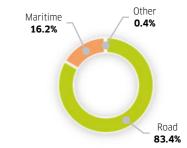
GERMANY AND FRANCE, THE MAIN DESTINATIONS ports to Europe. Next is France with 2.7 million tonnes, a flow which rises to 3.7 million if we add French imports, the main source of Spanish fruit and vegetable purchases. The Netherlands completes the podium, receiving nearly one million tonnes of fruit and vegetable products from Spain. These three countries account for more than 62% of Spanish exports of fruit and vegetable products to the EU. The statistics also reflect the importance of the United Kingdom, which accounts for 13% of sales, and continues to be the third biggest export country for Spanish fruit and vegetables, despite the difficulties arising from Brexit.

The next mode of transport in use is maritime transport, with a 16% share in Spanish foreign trade statistics for fruit and vegetable products, moving 3 million tonnes last year, but this percentage is reduced to 0.7% in the EU, Spain's main market. Finally, rail and air modes continue to be of little importance, despite a strong rise in 2021, with an increase of 19% in the case of rail and 28% in the case of air freight.

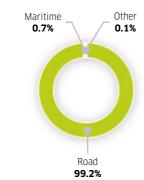
AT THE PACE OF ROAD TRANSPORT

Maritime transport is reduced to a minimum in traffic with the European Union.

WORLD







Data in thousands of tonnes. Source: Secretaría de Estado de Comercio.





FRUIT AND VEGETABLE SECTOR | SPANISH TRADE FLOWS OF FRUIT AND VEGETABLES TO EUROPEAN UNION BY ROAD



DENMARK										
EXPORTS	* %22/21	2021	%21/20							
Citrus fruits	+16%	49	+4%							
Other	-8%	142	+1%							
TOTAL	-2%	191	+2%							
IMPORTS	-43%	3	-8%							

% 1.0 % 5	21 % : 092	21/20 +0% +9% +0%
% 5	02	+9%
8 4	38	. 00/
		TU/6
% 2	76	+4%
% 2	74	-3%
% 1.2	21	+5%
6 3.8	03	+3%
6	34	-2%
		% 3.803

NETHERI	ANDS	3	
EXPORTS	* %22/21	2021	%21/20
Citrus fruits	+16%	200	-7%
Other fresh vegetables	-3%	170	-7%
Melons, watermelons and papayas	-39%	111	+1%
Cabbages, cauliflowers, swedes	-0%	68	+2%
Lettuce, endives, chicory	-4%	67	+1%
Other	+7%	354	-3%
TOTAL	+2%	970	-4%
IMPORTS	* %22/21	2021	%21/20
Potatoes	-7%	68	+17%
Other	+18%	201	+3%
TOTAL	+9%	269	+6%

	IRELAND		
	* %22/21	2021	%21/20
EXPORTS	+3%	105	+8%
IMPORTS	-34%	1	-71%

BELO	MUIE		
EXPORTACIONES	* %22/21	2021	%21/20
Citrus fruits	+9%	108	-4%
Cooked or frozen vegetables	-22%	71	+9%
Other fresh vegetables	-9%	45	+1%
Potatoes	-26%	30	+4%
Other	+1%	161	+3%
TOTAL	-4%	415	+2%
IMPORTACIONES	* %22/21	2021	%21/20
Cooked or frozen vegetables	+14%	35	+21%
Other	-18%	101	+18%
TOTAL	-10%	135	+19%

FRANCE								
EXPORTS	* %22/21	2021	%21/20					
Citrus fruits	+2%	794	+1%					
Other fresh vegetables	-12%	367	-0%					
Melons, watermelons and papayas	-33%	284	+11%					
Cooked or frozen vegetables	-4%	170	+9%					
Apricots, cherries, plums	-32%	168	+19%					
Other	-0%	873	+4%					
TOTAL	-6%	2,656	+4%					
IMPORTS	* %22/21	2021	%21/20					
Potatoes	+5%	670	-6%					
Cooked or frozen vegetables	+4%	86	+12%					
Other	+2%	211	-17%					
TOTAL	+4%	968	-7%					

AUSTRIA

* %22/21 2021 %21/20

67

116

184

-21%

-8%

-13%

-43%

EXPORTS

Citrus fruits

IMPORTS

Other

TOTAL

	EXPORTS
1997	Citrus fruits
	Apricots, cherries, plums
	Other fresh vegetables
	Other fresh fruits
	Lettuce, endives, chicory
	Other
	TOTAL
	IMPORTS
	Manzanas, peras y membrillos
	Resto
	TOTAL

MALTA

EXPORTS IMPORTS

* %22/21 20

+8% -30%

ITAL

PORTUGAL				
EXPORTS	* %22/21	2021	%21/20	
Potatoes	+37%	130	+8%	
Bananas	-19%	98	+15%	
Citrus fruits	-2%	71	+28%	
Other fresh vegetables	-27%	68	+11%	
Melons, watermelons and papayas	+5%	60	-11%	
Other	-6%	387	+1%i	
TOTAL	-4%	814	+6%	
IMPORTS	* %22/21	2021	%21/20	
Tomatoes	+21%	57	+66%	
Citrus fruits	+51%	50	-41%	
Other	+33%	268	+6%	
TOTAL	+34%	375	+1%	

4				
LUXEMBOURG				
	* %22/21	2021	%21/20	
EXPORTS	+42%	10	+44%	
IMPORTS	-26%	7	-29%	

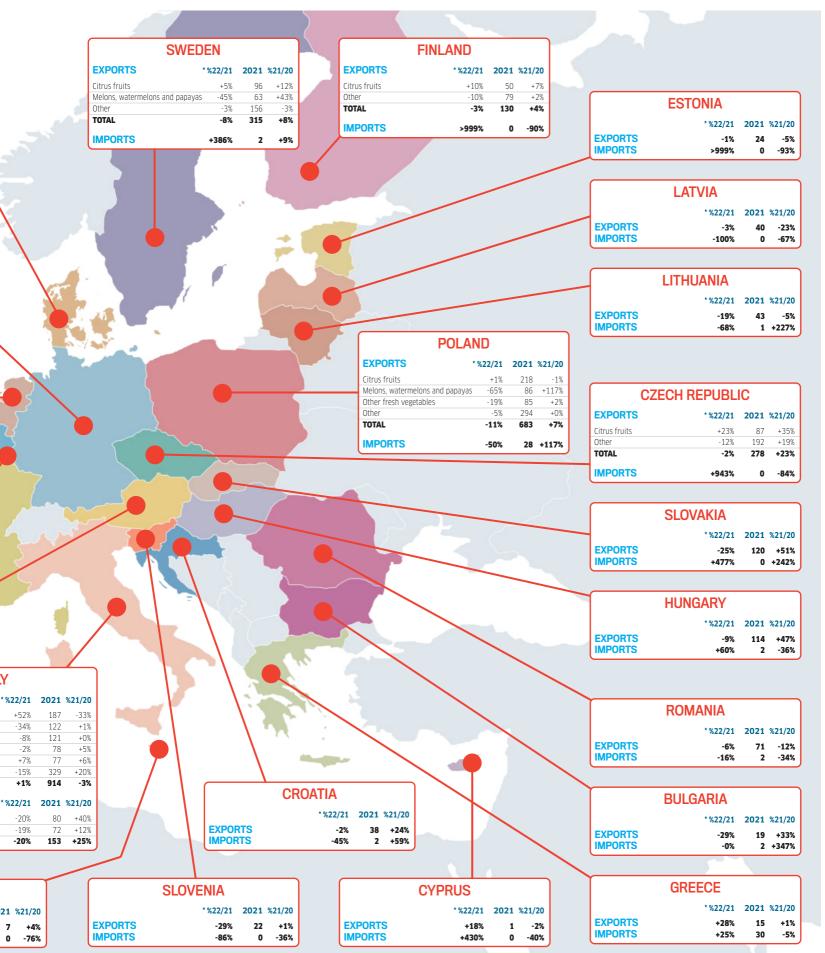
-3%

+1%

-0%

7 +99%







In the midst of turbulent times, freight forwarders are banking on the reefer trade to guarantee returns. As one freight forwarder points out, refrigerated cargo is a type of traffic "that was not affected by Covid-19 and, for the moment, is not being affected by the war in Ukraine." He adds: "Reefer traffic is mostly food, which means it is holding up well. The last thing consumers can do without is food."

Reefers continue to flourish,

with shipowners still focused on the freight forwarding business. "The shipping lines want to retain our customers because the prices are still very high." Although, he says, "prices are likely to start falling next year, they won't fall as low as 2019 prices." The upshot could be that "shipping lines will be less inclined to work directly with the shipper", he points out. Shipowners, with tremendous margins, give credit to large shippers, but when freight ra-

tes fall, they may "no longer be so interested, and will turn to the freight forwarder to take on the customer's financing".

To talk reefers is to talk about the road or the ship. "Cargo is still a by-product" for airlines. Use of air freight is generally limited to high addedvalue products or sample products. This is despite the fact that "the price difference between air and sea transport has narrowed", he says. Air freight has also risen, but not at the saCargo is a "by-product" for airlings

me rate as sea freight.

However, another professional consulted played down the extent of current market ebullience for reefers. Although they are still a safe bet, "we have noticed that the maritime reefer container is somewhat stagnant. We don't know whether this is temporary or the start of a recession". In this particular case, he notes the slowdown in traffic such as gourmet exports to the USA market.



www.asthoncargo.es

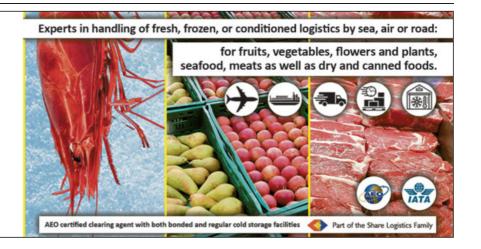
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COOL LOGISTICS

Freight forwarders do agree that a degree of uncertainty has emerged since the end of the summer. "We are under the cloud of inflation, which is going to cause a complicated second half of the year," says one of those consulted. "The current situation is one of uncertainty. Parity of the euro with the dollar doesn't help. Freight rates were already high, but now they are even higher as the euro is losing value," adds another professional.

FREIGHT FORWARDERS CONTINUE TO SET UP REEFER OR PHARMA DEPARTMENTS

Last year "will go down in history as the record turnover year" for the freight forwarding sector. This is unlikely to be repeated this year because "in the second half of the year, part of what was gained in the first half is going to be lost", he says, although reefers will continue to perform well. "The last recession prompted Spanish companies who had operated domestically, to export. That is why we are not experiencing the crisis. Now we'll see what happens," adds another professional.

The reefer container is not suffering from the same equipment shortages that dry containers continue to suffer from. But "yes, we are suffering from the removal of calls, which is being done on purpose". Shipowners, he explains "leave containers in Asian ports so we have to pay a premium to reposition equipment in Europe". The lack of equipment and space "is hurting small freight forwarders in particular". Since the pandemic began, "the big freight forwarders have become bigger and the small ones smaller". Apart from the dark clouds on the horizon, a growing number of freight forwarders are opting for specialisation: "they are creating reefer or pharma departments because they have a higher profit margin, where there is not so much competition".

Specialist companies such as Airpharm, which started in 1988 as a freight forwarder dedicated to the pharmaceutical sector, later expanded its niche to cosmetics, veterinary and light chemicals. It is currently committed to growing as an integrated logistics operator for the sectors in which it specialises.

Another example is the start-

up Fleetever, a platform for international transport and logistics services focused on the food industry. One of the logistical problems of agri-food importers and exporters is the management of information and traceability of operations. This tool makes it possible to centralise all stages of transport, from departure to arrival, according to its promoters.







Transporte

SUPPLY CHAIN | LOGISTICS OPERATORS

ECOSYSTEM FOR SPECIALISTS

THE COSTS

OF COOL

SOAR

LOGISTICS

LOGISTICS OPERATIONS FOR TEMPERATURE-CONTROLLED PRODUCTS REQUIRE A LEVEL OF SOPHISTICATION ONLY AVAILABLE TO TRUE EXPERTS

Transport, storage, and distribution operations for fresh, chilled, and frozen requires a significant degree of specialisation and sophistication. Logistics operators must use technologies intensively to ensure the traceability of food and medicines and temperature control throughout the entire process. With demand growing for these product types, this is all the more important, as cold logistics is playing a greater role in transport.

"The existence of certain dietary pat-

terns that have been emerging in society for some time now, such as a healthy diet based on fruit and vegetables, and the increased consumption of organic products, as well as the expectation of greater consumption of fresh produce

via the internet in the not too distant future, will inevitably translate into a greater need to increase the number of temperature-controlled warehouses in Spain", property consultancy CBRE said in a report prior to the pandemic.

Acquisitions

This ebullient state of the cold logistics operations market is reflected in the growing number of international operators entering the Spanish market through acquisitions. This summer, the Portuguese company Zolve completed a merger with Spanish logistics operator Logifrío, whose commercial brand will be maintained in Zolve's operations in both Spain and Portugal.

At the beginning of August, the American company Lineage Logistics

announced the acquisition of Grupo Fuentes, a Spanish cool logistics company specialist based in Murcia. During the summer, Grupo Logista bought El Mosca, another leading Spanish specialist in fruit and vegetable transport based in

Molina de Segura (Murcia). Furthermore, some months ago, investment fund Apollo, acquired 49% of Primafrio.

Meanwhile, this year STEF Iberia finalised the purchase of the TTC group,



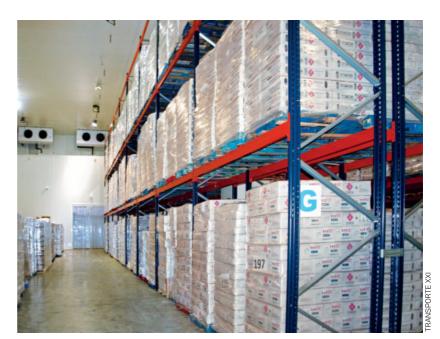
Fripecan's refrigeration facilities in Cabanillas del Campo





WAREHOUSES **ON DEMAND**

In the logistics real estate market of refrigerated warehouses, long-term contracts are signed in order to cope with higher construction costs than other logistics warehouses, higher rents for tenants (logistics operators. large retailers and manufacturers), and to ensure that owners obtain similar returns to those of roomtemperature logistics warehouses.



Cool logistics operations are technology intensive.

a specialist in the management of logistics and transportation of frozen and refrigerated food products in Galicia, and owner of Enaboy Castilla, thereby consolidating its refrigerated and frozen food product transportation network in Castilla y León with three new centres in Valladolid, Salamanca and Benavente (Zamora).

Costs

Importantly, the distribution of temperature-controlled products involves much higher costs than room temperature products. The distribution of frozen products, for instance, costs four times as much as that of dry products,

while refrigerated products are twice as expensive as dry products, according to

The main problem facing cool logistics operators today is the cost of energy. This problem may have seemed temporary a few months ago, but it is increasingly becoming a permanent

According to data from the Spanish Association of Cold Storage, Logistics and Distribution (Aldefe), energy costs currently account for around 50% of running costs for companies that carry out temperature-controlled storage, following significant increases in the price of electricity over the past two years.



MORE MERGERS AND ACQUISITIONS

The cold storage giants have continued to grow in the last two years by buying up operators.

RK	COMPANY	CAPACITY IN M3
1	Lineage Logistics	73,498,895
2	Americold Logistics	39,962,999
3	United States Cold Storage	11,987,322
4	NewCold Advanced Cold Logistics	6,091,628
5	Nichirei Logistics Group	5,639,159
6	Interstate Warehousing	3,277,258
_ 7	Frialsa Frigorificos	3,075,584
8	VersaCold Logistics Services	2,988,302
9	VX Cold Chain Logistics	2,766,862
10	Constellation Cold Logistics	2,487,377
11	Superfrio Logistica Frigorificada	2,145,395
12	Serbom Armazen Gerais Frigorificos	1,923,356
13	Conestoga Cold Storage	1,821,163
14	Congebec Logistics	1,723,556
15	RLS Logistics	1,671,502
16	Burris Logistics	1,667,505
17	Emergent Cold LatAm	1,332,702
18	Friozem Armazens Frigorificos	1,055,999
19	Magnavale	1,034,809
20	Confederation Freezers - Brampton	976,789
21	Trenton Cold Storage	970,626
22	Nor-Am Cold Storage	964,805
23	Agri-Norcold	865,019
24	Frigoscandia	817,623
25	Metcold Supply Network Managemen	745,795

Data as of March 2022. Source: IARW.

SUPPLY CHAIN | COLD STORAGE

CONSOLIDATION CONTINUES

LINEAGE LOGISTICS AND AMERICOLD LOGISTICS LEAD THE TOP 25, BOOSTED BY CORPORATE OPERATIONS

The total capacity of the world's 25 largest refrigerated warehouse operators amounts to 170 million cubic metres, according to the latest data presented last March by the Global Cold Chain Alliance (GCCA). Since the previous report in June 2020, capacity has increased by around 25 million cubic metres, largely due to frequent merger and acquisition activity.

The North American Top 25 manages 120 million cubic metres of refrigerated warehouses, while the European Top 10 manages 29 million cubic metres and the Latin American Top 10 manages 10 million cubic metres. All regions reflected increased capacity as well as the incorporation of new operators in this sector. According to GCCA's analysis, "consolidation"

continues to play an important role in the growth of the major players in the cold storage industry".

In recent years, Lineage Logistics has strengthened its position as a world leader in refrigerated warehousing, operating more than 400 warehouses with 73.5 million cubic metres of capacity. Among its acqui-

sitions in 2021 were the US companies Crystal Creek Logistics and Perishable Shipping Solutions (PSS), with which it is expanding e-commerce and last-mile distribution solutions.

Also on the podium are Americold Logistics, the second largest global cold storage operator, with 249 facilities and close

to 40 million cubic metres of capacity, followed by United States Cold Logistics, with close to 12 million cubic metres.

Dutch operator Newcold Advanced Cold Logistics moves up to fourth position, with 6 million cubic metres, taking the place held by AGRO Merchants Group in 2020, prior to its integration into Americold Logistics. The Japanese group Nichirei Logistics is in sixth position

in the ranking, with 5.6 million cubic metres of refrigerated capacity, and the Mexican company Frialsa Frigoríficos, with more than 3 million cubic metres, has climbed to seventh position in the last two years, which in 2020 was occupied by Kloosterboer, a supplier from the Netherlands that was acquired by Lineage Logistics last year.

NORTH AMERICA CAPTURES 120 OUT OF 170 MILLION CUBIC METRES



Positive and negative cold storage

DELEGATIONS:

Grupo Fuentes Castejón (NAVARRE) Tel.: 948 77 07 27 Mob: 630 17 07 17

Grupo Fuentes Santiago de Compostela Tel.: 981 81 94 36 Mob: 620 85 00 10

Grupo Fuentes Picassent (VALENCIA) Tel.: 678 65 27 37

Grupo Fuentes Mercamadrid (MADRID) Tel.: 696 47 56 11

Grupo Fuentes Logistics 4389 Vlissingen-Oost NETHERLANDS

COOL LOGISTICS

Meanwhile, Canadian company Versa-Cold Logistic Services, which was ranked eighth in the GCCA ranking in March, reached a sale agreement with Lineage Logistics, its new owner, the following month. Founded in 1941, with its headquarters in

The Top 25 has grown by almost 25 million cubic metres since 2020

Toronto, Calgary, Vancouver, Edmonton, and Montreal.

In ninth position is the Chinese operator VX Cold Chain Logistics, with a capacity of 2.7 million refrigerated cubic metres, followed by the European operator Conste-

llation Cold Logistics (CCL). Controlled by investment fund Arcus Infrastructure Partners, CCL has jumped five places from fifteenth place in 2020. In this period, CCL added one million cubic metres to reach nearly 2.5 million cubic metres, following the acquisitions of companies including Vrieshuis Lagemaat, Frigologix, Göteborgs Fryshus and HSH Coldstores.

Superfrio Logistica Frigorificada, with a storage capacity of more than 2.1 million cubic metres, has also moved up 5 places, now in 11th place in the GCCA ranking, from 16th place in 2020. This Brazilian operator, controlled by Pátria Investimentos, has acquired the company Logfrio and the refrigeration units of Austral and Cascavel/PR, as well as undertaking various investments in facilities in its market.

The Brazilian operator Serbom Armazéns Gerais Frigoríficos has also made a strong entry into the global refrigerated storage Top 25, occupying 12th place, with a capacity of 1.9 million cubic metres. The Canadian company Conestoga Cold Storage is up one position from 2020, displacing its compatriot Congebec.

The US company RLS Logistics also joins the GCCA rankings, in 15th place. Founded 50 years ago, and headquartered in New Jersey, the company has expanded strongly in recent years with acquisitions of operators such as Hutt Trucking and Logistics in Holland, Michigan, and Performance Cold Storage in Salt Lake City, as well as opening new warehouses.

DUTCH NEWCOLD RISES TO FOURTH PLACE



Vaughan, Ontario, VersaCold operates 24

temperature-controlled facilities with near-

ly 3 million cubic metres. The company controlled by Canadian private equity fund

manager TorQuest Partners is expanding

its network of properties in Canada's most populous metropolitan markets, including

A COOLER APPROACH TO PERISHABLES

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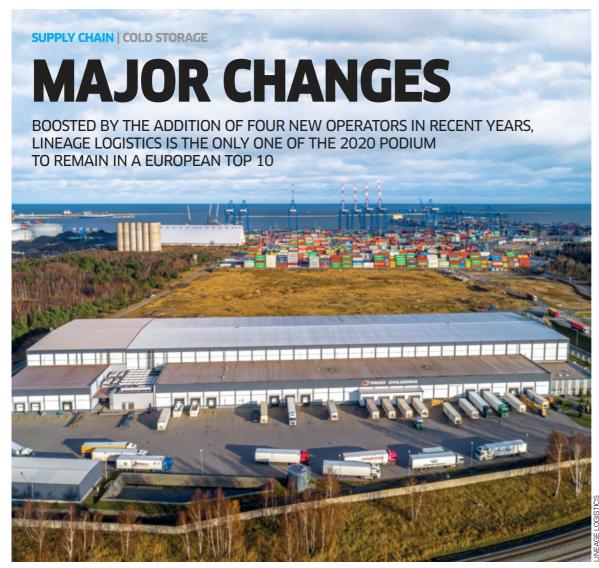


Image of the Lineage Logistics facility in Poland

The Top 10 largest European refrigerated warehouse operators have increased capacity by nearly six million cubic metres to 29 million cubic metres, according to the latest data presented last March by the Global Cold Chain Alliance (GCCA). Compared to the last report from June 2020, the increase in capacity reflects numerous sectorial changes.

THE EUROPEAN TOP 10 GAINS 6 MILLION **CUBIC METRES IN** TWO YEARS

Lineage Logistics leads the way in European cold storage supply, with more than 16.1 million cubic metres, a volume that is almost three times the previous comparison of two years ago. Since its 2017 arrival in Europe with the acquisition of Dutch Partner Logistics, the US giant has maintained an intense pace of acquisitions and investments. Among the most notable of these transactions is the takeover of Kloosterboer, also from the Netherlands, which in 2020 ranked second in Europe with 4.6 million cubic metres. In the last three years, Lineage Logistics has positioned itself in Spain, with Frinavarra, Frioastur and the recent acquisition of the



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COOL LOGISTICS

THE CAPACITY

OF EUROPE'S

TOP 10

OPERATORS

Murcian transport company Grupo Fuentes. It has also established itself in Italy with Kantaro SRL, as well as consolidating its position in other markets such as Denmark, with the operations of Coldstar, Kolding, Ludsoe and Scanpo-Superfrost, and in Norway with the acquisitions of Teglverksveien, Larvik and Moss Cold. Its continental network exceeds 70 facilities in eleven European countries.

The ranking also highlights the growth of operator Newcold Advanced Cold Logistics, which climbs to second place in the European Top 10, with almost 3.5 million cubic metres, nearly 600,000 more than in 2020.

Constellation Cold Logistics climbs two places in the ranking to third place. In the last two years, it has increased its cold storage capacity by almost 900,000 cubic metres. The company has recently appointed Carlos Rodriguez as its new CEO; he also held the same position at AGRO Merchants

REFRESHING THE EUROPEAN TOP 10

Americold Logistics, Frigoscandia, Frigrolanda Logistics Group and Groupe Conhexa enter the ranking.

RK	COMPANY	CAPACITY IN M3
1	Lineage Logistics	16,116,827
2	NewCold Advanced Cold Logistics	3,476,156
3	Constellation Cold Logistics	2,487,377
4	Americold Logistics	2,280,270
5	Nichirei Logistics Europe	1,572,499
6	Magnavale	1,034,809
7	Agri-Norcold A/S	865,019
8	Frigoscandia	817,623
9	Frigolanda Logistics Group	368,119
10	Groupe Conhexa	330,000

Data as of March 2022. Source: IARW.

Group, and later at Americold after acquiring that company.

In addition, Americold enters the European Top 10 for cold storage, straight into fourth place, with a volume of about 2.3 million cubic metres. Nichirei Logistics Europe moves up one place to fifth. The European subsidiary of the Japane-

se multinational exceeds 1.5 million cubic metres, an increase of more than 100,000 cubic metres since two years earlier.

Magnavale and Agri-Norcold also moved up one position compared to 2020, to sixth and seventh place respectively, despite having both redu-

ced their refrigeration capacities. The British company handles over one million cubic metres of cold storage, while the Danish company has 865,000 cubic metres. Meanwhile, Sweden's Frigo-

scandia enters eighth place in the European cold storage ranking with its network of 25 facilities and terminals in Sweden and Norway, totalling 817,000 cubic metres. Frigoscandia, which was acquired last year by the German fund Mutares, took control of the Norwegian operator Polar Frakt

this year.

Frigolanda Logistics Group, based in the Netherlands, also enters the European Top 10 with a volume of 368,000 cubic metres. Finally, France's Groupe Conhexa has also made it into the **IARW** ranking thanks to the management of facili-

ties totalling 330,000 cubic metres. In 2020, this operator, founded in 1975, undertook the expansion of its facilities in the port of Dunkerque, with the addition of 5,000 square metres of surface area.





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SUPPLY CHAIN | COLD STORAGE

GROWTH AND TRANSFORMATION

THE REFRIGERATION SECTOR CONTINUES TO GROW, ACCORDING TO ALDEFE

Formed of 432 active companies with 7 million cubic metres of refrigeration facilities (at frozen and refrigerated temperatures), Spain's refrigeration sector generated a whopping turnover of more than €6 billion in 2021. And it's now set to grow even further.

"The growth of the warehouse subsector and the provision of cold logistics services to third parties will continue for the foreseeable future, in view of the increasing demand for frozen products in the domestic and international markets", says the Cold Storage Observatory, created by the Association of Cold Storage, Logistics and Distribution of Spain (Aldefe) together with the University of Zaragoza. According to the observatory's analysis, the growing need for temperature-controlled warehouses represents a clear business opportunity for companies already operating in the cold storage leasing sec-

However, the situation opens the door to new operators and investors with deep pockets to undertake more modern, tailor-made projects associated with the major international companies in the sector, such as those carried out in the last two years by global leaders Lineage Logistics and Americold.

The interest shown by large investment funds in the Spanish refrigeration sector confirms the growing trend in the consumption of frozen foodstuffs. Expectations of high growth rates attract new players, willing to take on €

6,000

TURNOVER IN 2021 FOR THE 432 COMPANIES IN THE COLD SECTOR the investments that technology trends demand

Giant companies entering the market with considerable financial clout, and the subsequent concentration of facilities and the integration of the logistics chain (collection, storage, handling and transport) together with a high capacity for technological innovation, means these companies can reduce costs and dictate rules, a situation that will, in the medium-term, lead to profound changes in the business structure of this sector in Europe and Spain.

According to analysis by the observatory, the appeal of the refrigeration sector therefore has a "detrimental effect", as it can jeopardise the viability of traditional operators with fewer resources in Spain who will, in order to

be competitive, have to modernise their facilities, improve their processes, be more efficient in the use of energy, and comply with environmental regulations. It says that Spanish refrigeration companies face the great challenge of maintaining a significant presence in the market in a climate

demanding investment, whilst at same time dealing with rising energy costs, electricity being the main resource necessary for the creation of refrigeration.

Technological advances, coupled with demands for environmental sustainability and changes in purchasing



Virto refrigerated warehouse under construction in Funes (Navarra).

and consumption patterns by the end customer, are affecting warehousing and refrigerated services, reveals the Cold Storage Observatory.

The report also states that future warehousing will be characterised by

higher capacity and greater flexibility. The vertical construction of automated high-rise refrigerated warehouses with greater cold storage capacity will be necessary in order to reduce the operating costs relating to land values, especially near urban areas, and to facilitate the handling of

cargoes

THE

SECTOR'S

TREND OF

FURTHER

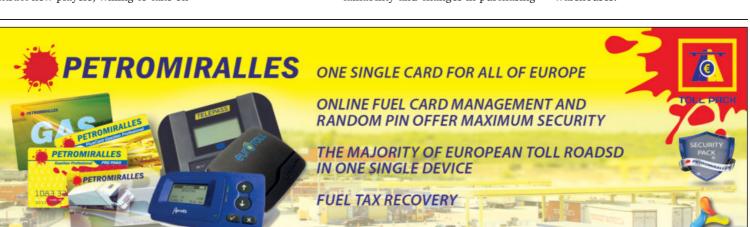
GROWTH

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CONTINUES

Based on these forecasts, logistics warehouses with horizontal freezing and refrigeration cold rooms with warehouses no higher than 10 metres will gradually lose ground to vertical warehouses.

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OCCUPANCY

RATE OF

REFRIGERATED

WAREHOUSES



Furthermore, robotisation will continue to gain pace in frozen refrigerated businesses and in the first storage of large batches, such as picking. In this phase of processing, automated guided vehicles (AGVs) and automated storage and retrieval systems (AS/RS) for the movement of cargo will become ubiquitous.

Likewise, the implementation of automated mobile shelving (racking) is also increasing, as it allows for advan-

ce day-to-day planning and eliminates slower traditional picking methods, according to the Cold Storage Observatory. Robotic exoskeletons will also be able to facilitate the ability of workers to operate independently in the preparation of orders, in loading, unloading and the reloading of heavy objects, by actively increasing their lifting move-

AUTOMATED HIGH-TURNOVER WAREHOUSES

ments, thus relieving back muscles and stabilising the spine. A further technological challenge that of making machines capable of operating

in extreme temperatures, powered by energy-efficient motors with the lowest possible heat emission, supplied by low-cost energy systems.

However, full automation is not seen as an option by most logistics specialists, whether for economic or practical reasons. For the time being, it will be restricted to warehouses with a high turnover rate and where efficiency and speed are paramount.

On the other hand, the growth of retail e-commerce requires fast delivery, so its growth will force the construction of cold stores in urban areas or in nearby locations. In addition, the increased demand for frozen and chilled convenience products in online and physical supermarkets will require distribution warehouses to have more cold storage

DOUBLE-FIGURE RISES

The cold storage sector's turnover in Spain was €57.6 million, an increase of 23.4 per cent compared to the previous year, according to Aldefe's calculations.

Likewise, average activity and turnover figures achieved double-figure growth at the end of 2021. The average number of employees per 10,000 cubic metres is 3.49, 11.9% more than in 2020.

Meanwhile, 0.28 tonnes were handled per cubic metre, 27.3% more than in the previous year. Furthermore, the average billing per cubic metre was €8.23.

The average occupancy of frozen product warehouses in Spain at the end of 2021 was 82.25%, according to the analysis of the association run by Beatriz Valencia.

By regions, the Valencian Community leads the ranking with 87.53%, while the

southern region has the lowest occupancy rate with 79.05%. Below the average are Asturias and Galicia with 81.49%, the Central zone with 81.24%, the Canary Islands with 80%, Catalonia with 79.53% and the Southern zone with 79.05%; as well as the aforementioned Valencian Community, the Northern zone is also above the average with

82.97%.

Regarding the distribution by categories of the requested products, Aldefe's analysis places fish in the lead with 19.59%, followed by meat and processed products, each with the same figure of 18.56%. Three points behind the leader is vegetables with 16.49%, while bread and miscella-

neous produce is five points behind with 14.43%. Finally, dairy products came in at 9.28%, followed by pharmacenticals.

Safety Innovation Port of Málaga Sustainability Connectivity **SUPPLY CHAIN | E-COMMERCE**

ONLINE GROCERY SHOPPING IS GAINING POPULARITY

E-COMMERCE SALES OF FRESH PRODUCE GREW BY 7.8% IN SPAIN LAST YEAR, ACCORDING TO DATA FROM THE SUPERMARKET EMPLOYERS' ASSOCIATION, ASEDAS, WITH FRUIT AND VEGETABLES BEING THE MOST POPULAR PRODUCTS



E-commerce of fresh products in the Spanish market has continued to grow, with a 7.71% rise in sales recorded in 2021, according to data from the 'VI Observatorio del comercio electrónico de alimentación' (VI Observatory of e-commerce of food) carried out by the Spanish Association of Distributors, self-service stores and supermarkets (Asedas), in collaboration with the Complutense University of Madrid and the Autonomous University of Madrid.

In total, 52.49% of consumers buy fresh produce online,

representing yearon-year growth of 2.6%. However, according to the report, occasional shopping (31.68%) is still more popular than frequent shopping (12.89%) and regular shopping (7.92%).

52% OF SPANISH PEOPLE BUY FRESH PRODUCE ONLINE

The most popular products are fruit and vegetables (72.24%), followed by charcuterie and cheese (71.85%), meat and poultry (61.81%), baked goods and pastries (52.56%), fish and seafood (37.60%) and supermarket ready meals (25.79%).

The report notes that buying fresh produce online "appears to be more dependent on variables such as income (middle income levels are less likely) or household size (large families are less likely), than on others such as age".

According to the study, growth factors for this increase in fresh produce e-commerce volumes have to do with "brand loyalty and environmental awareness in recognising transportation issues and waste generated".

This largely explains the growth of "click & collect" or online shopping with in-store collection, which has grown by 300%, although it still only accounts for 11% of total deliveries, Asedas points out.

Frozen food

Meanwhile, 56.85% of consumers buy frozen products online, 29.34% of whom do so occasionally, 15.84% frequently and 11.68% regularly. 77.16% of consumers buy packaged food online, at least occasionally in 36.55% of cases, frequently in 24.67% of cases and regularly in 15.94% of cases.

In any event, the increase in e-commerce volumes of food products has not hampered the supply of in-person sales. The number of modern food distribution outlets in Spain topped 25,100 in 2021, a net growth of nearly a thousand since 2019, according to Asedas.

Fruit and vegetables dominate online shopping for fresh produce.

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Conventional reefer container shipping lines had an exceptionally good year according to Seafield Shipbrokers, a leading independent shipping agent working in the global ree-

fer markets. Reflecting the dramatic upturn in trade, in 2021 its ISB Seafield Reefer freight rate index jumped by 104.9% year-on-year to a six-year high of 1,841 points. "The con-

Freight rates hit a sixyear high, according to the ISB Seafield Reefer index

tinued surge in demand for conventional reefer capacity was driven by global container shortage issues which, in turn, have been exacerbated by the significant disruptions to supply chains caused by the global pandemic, "Seafield Shipbrokers analysis explains.

Noting that the disruption of the global supply chain caused container shipping rates to soar by an average of 200% during 2021, the shipping agent emphasised this cost increase and the lack of equipment, which caused "many carriers involved in cold logistics to turn to conventional reefer vessels".

TEUS SHIPPING RATES SOAR BY 200% IN 2021

In the smaller fleet (reefer vessels with capacity of between 2,831 cubic metres and 9,910 cubic metres), time charter equivalent returns for owners "averaged a year-on-year increase of 62.8%", the ISB Seafield Reefer freight rate index company noted.

In the mid-size reefer sector, the market has also been affected by a capacity shortage in South and Central America, South Africa and New Zealand. "Squid fishing catches in the Southwest Atlantic, often



the indicator of the first quarter direction of this sector, increased by 90%, a substantial improvement," Seafield Shipbrokers disclosed.

Meanwhile, larger reefer vessels, which are mainly used in the fruit and banana trade "recorded a yearincrease on-vear 109.7%", the shipping agent said.

These significant increases in dry container cargo levels and equipment shortages prompted some of these volumes to switch to using general cargo vessels, leading to an increase in

their freight rates in these sectors. Furtherreefer more. vessels, due to their multipurpose and multideck configuration, were the perfect substitutes for this dry cargo.

Fleet capacity for vessels over 2,831 cubic metres ex-

ceeded 5.2 million cubic metres at year-end, with an average age of 28.5 years, Seafield Shipbrokers revealed. This year "fleet utilisation will remain close to 100% this year, as rising demand will continue due to the lack of reefer capacity, coupled with longer routes and an increase in tonnage per mile," the company forecasts.

However, Seafield Shipbrokers' analysis highlights the point that "despite booming cargo levels, the conventional reefer container fleet continued to shrink in 2021, with a net loss of

> more than 83,000 cubic metres".

Meanwhile, The Dynamar consultancy firm reports that "in the second half of 2021, scrappage picked up

again, with twelve units scrapped in a period of just four months". Moreover, with new environmental regulations requiring operators to reduce their fuel consumption, a significant number of vessels "will be uneconomical".

The consultancy adds that "as legislation will be even stricter in 2026 and modernisation

costs are too high, it is likely that many ships will be sold for scrapping by then." Dynamar's analysis also reveals that conventional reefer operators "had a good financial year in 2021".

Finally, the Drewry consultancy revealed that the major container shipping lines made an "all-time record" profit of around \$190 billion last year. Much of this money has been spent shipbuilding.



The major container shipping lines made record profits last year.

Gesinflot leads the Spanish market with the launch of its business intelligence tool

CONVENTION

SHRINKS AS

AL FLEET

IT AGES

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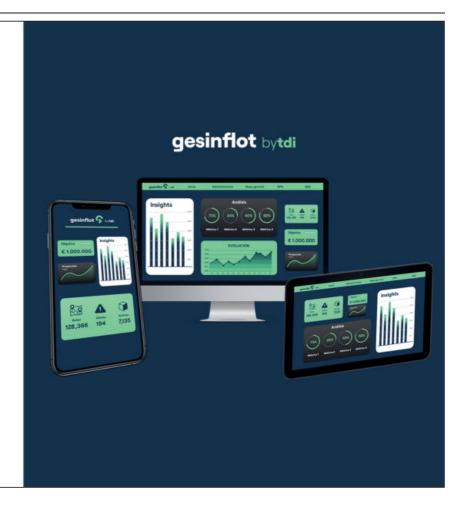
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STABLE, CONSOLIDATED FLOWS

SPANISH PORTS MOVED MORE THAN 8.6 MILLION TONNES
OF CONTAINERISED FRUIT AND VEGETABLE PRODUCTS IN 2021

Traffic of fruit and vegetable products remained stable in 2021, with Spanish ports moving more than 8.6 million tonnes according to state ports body Puertos del Estado.

This trade is largely moved in reefer containers, but the statistic only refers to agri-food products moved by container and suggests that around 5% of containers at Spanish ports would be loaded with this type of cargo. This amounts to some 800,000 TEUs in the Spanish market, to which a further 200,000 TEUs of other types of foodstuffs, both frozen and refrigerated, would be added.

The implementation of

specific data gathering statistics for reefer container traffic remains a pending issue for Puertos del Estado. Therefore, together with the estimate of the reefer flow by the registered tonnage of agrifood products and in accordance with the data supplied by several Spanish ports to Transporte XXI, it can be concluded that Spain's annual volume of this business would be around 700,000 900,000 TEUs per year of international traffic, excluding 50,000 to 100,000 TEUs per year of cabotage

trade between Spanish ports

While the ports of Valencia and Barcelona both exceed 200,000 TEUs of reefer traffic annually, with notable growth in the frozen meat sectors, Algeciras handled 71,000 TEUs in 2021, with significant movement in traffic of fruit. "particularly with Latin America". Algeciras has generated 18% growth in the last two years. Alongside these three ports, traffic is increasing in the Canary Islands ports, and in the Galician ports of Marin and Vigo.

Collectively, they provide new added value to the logistics and port communities in their respective

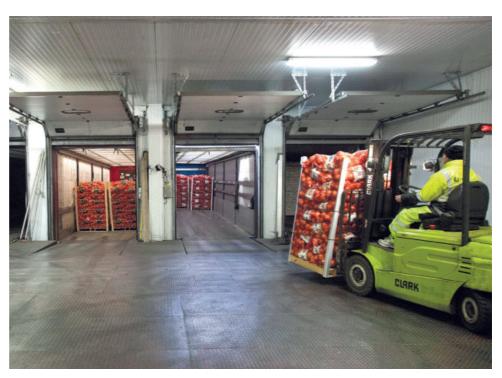
MAINTENANCE OF VOLUMES

Annual traffic of containerised agri-foodstuffs reached over 8.6 million tonnes last year.

	2021	%21/20	%21/19	2020	2019
Bay of Algeciras	3,972	+5%	+18%	3,790	3,356
Valencia	2,330	-11%	+14%	2,612	2,037
Barcelona	678	-7%	-63%	732	1,821
Las Palmas	661	-7%	+14%	714	579
S.C. Tenerife	219	+16%	+7%	190	205
Vigo	177	+16%	>999%	153	14
Málaga	104	+141%	+287%	43	27
Bay of Cádiz	103	+128%	>999%	45	4
Alicante	98	-14%	-29%	113	137
Bilbao	71	-13%	-47%	82	135
Gijón	71	-30%	-20%	101	88
Tarragona	52	+19%	0%	44	52
Cartagena	14	-40%	-49%	24	28
Huelva	14	-35%	-34%	21	21
Sevilla	14	+20%	-11%	11	15
Santander	12	+651%	>999%	2	0
Vilagarcía	12	-30%	-33%	17	18
Castellón	11	-24%	-22%	15	15
Baleares	4	+644%	+128%	1	2
Almería	2	+83%	+65%	1	1
Marín - Pontevedra	0	-93%	-100%	6	149
Other	0	-76%	-97%	2	14
TOTAL	8,620	-1%	-1%	8,718	8,719

Thousands of tonnes. 2021, provisional. Source: Puertos del Estado

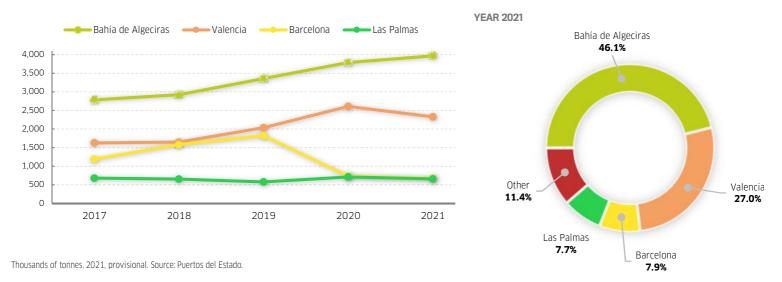
geographic areas, with facilities dedicated to processing cold products. In the next few years, ports such as Valencia or Huelva will be opening new facilities for processing perishable goods, a new opportunity to establish new reefer shipping streams.



ALGECIRAS HAS GENERATED 18% GROWTH IN THE LAST TWO YEARS

ALGECIRAS HANDLES 46% OF CONTAINERISED AGRI-FOOD FLOWS

The Andalusian port saw its traffic improve in 2021 with a throughput of almost 4 million tonnes, an increase of 5% on 2020.



AROUND 5% OF CONTAINERISED FLOWS ARE AGRICULTURAL TRAFFIC



GENERATING A VALUE-ADDED SUPPLY

SPANISH PORTS IMPROVE THEIR FACILITIES TO GUARANTEE THE REGULAR FLOW OF REEFER TRAFFIC

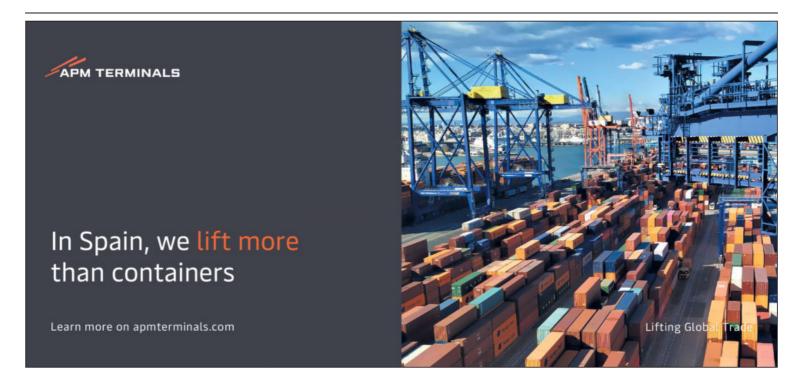
TOGETHER,
ALGECIRAS,
VALENCIA,
BARCELONA
AND VIGO HAVE
MORE THAN
13,500
CONNECTIONS
FOR REEFER
CONTAINERS

Spanish ports are increasingly handling reefer containers, say operators and freight forwarders that specialise in this niche business, which generates high added value.

The growth of the reefer market, underpinned by fruit and vegetable, pharmaceutical, meat and fish shipments, is clearly visible in the terminals of Spain's busiest ports, where the facilities dedicated to electric connection of containers have become increasingly prominent.

Algeciras, Valencia, Barcelona and Vigo, Spain's four major maritime distribution centres for refrigerated containerised cargo flows, provide more than 13,500 connections for reefer containers. Such infrastructure at these mainland ports will have to be expanded soon, due to the constant increase in demand, according to forecasts by consultants such as Drewry, which estimates that refrigerated maritime





COOL LOGISTICS



Terminals are increasing reefer space. transport will grow by an average of 3.7% between 2020 and 2024.

The terminals have been encouraging this type of traffic in recent years. Sensors in special facilities, together with refrigerated platforms and inspection centres, are necessary to guaran-

CONTAINER

AND THE

TRACEABILITY

STREAMLINING

OF INSPECTION.

MORE FLEXIBLE

CHALLENGES

FOR MAKING

NEW FLOWS

tee the development of a market that is achieving higher security in the supply chain as it passes through the ports, flows that have proved to be essential during the COVID-19 pandemic.

Dedicated areas

Together with the growth of 'import-export' cargo, terminal operators and the shipping lines themselves are beginning to ensure the provision of dedicated areas in order to attract container movements to third countries, with the aim of positioning Spain as an inter-

oceanic platform and cargo distributor in Southern Europe.

Along with the improvement in the supply of infrastructure, Spanish ports are also offering discounts on dues to attract new flows of agri-food cargo through their container terminals, including up to 30% discounts on cargo

Several port authorities, leading logistics operators, and shipping companies, committed to increasing their business volumes, have included the

> development of new port spaces for reefer logistics in their investment plans.

> Frigoríficos Portuarios del Sur in Huelva, for instance, is developing a 15 million euroslogistics centre intended as a regulatory warehouse for the regional red fruit industry.

Meanwhile, the Mediterranean Shipping Company (MSC) has pledged, under the management of Medlog Spain Logistic, to invest an estimated 35.7 million euros to install a 25,400 square metre re-

frigerated platform for the consolidation and deconsolidation of reefer containers in the Port of Valencia's ZAL (Zona de Actividades Logísticas), once the project's bureaucratic and legal problems have been resolved.





COOL TRADE COMMITS TO SHORT SEA SHIPPING

THE HAULIER RELIES ON PRESERVING THE COLD CHAIN WITH THE DRIVER ON BOARD, ALTHOUGH WE NEED TO FURTHER DEVELOP THE 'UNACCOMPANIED' MODE, SAYS SPC-SPAIN

The refrigerated transportation of fruit and vegetable products moved on short sea shipping services is growing in line with the development of short sea shipping as a whole. This trend translated into record traffic in international short sea ro-ro services last year, according to analysis of the observatories published by the Spanish Association for the Promotion of Short Sea Shipping (SPC-Spain) since 2009.

It also means that this type of traffic is currently being "affected by production behaviour itself, shown, for example, in the 2% fall in the first quarter of this year, and by the lower volumes during the cu-

rrent summer season," says Pilar Tejo, technical director of the Spanish Association for the Promotion of Short Sea Shipping.

The shortage of drivers "is undoubtedly an incentive" for the refrigerated freight haulier to transport the entire vehicle or trailer aboard ships. However, "transport operators need the shipping company to assure them that the temperature of

SHIPS ARE BECOMING MORE ATTRACTIVE DUE TO THE SHORTAGE OF DRIVERS the semi-trailer is maintained at the appropriate level required for the products being transported," the expert warns. This assurance "is now achieved through the 'accompanied' mode, thanks to the drivers who have this responsibility". With regard to the 'unaccompanied' mode, "it should be left to the shipping company to provide this assurance". Taking these conditions into account, "the shortage of drivers ought to encourage greater use of the 'unaccompanied' mode (the trailer or the platform)", adds the expert.

Apart from this issue, the future prospects for this type of transport are good. "Bearing in International ro-ro SSS achieved record flows in 2021.

mind that Spain supplies most of the countries of the European Union with fruit and vegetable products, and considering the evolving transport market, with the problems suffered by road transport, we believe that short sea shipping offers a very interesting and attractive alternative to the road operators". And proof of this "is that it is being used". However, "the 'unaccompanied' option, which offers the greatest benefits to its users, has yet to be further developed", emphasises Pilar Tejo. Eco-incentives "could accelerate the implementation of new services, in particular projects in Southern Spanish ports".

Long-standing demand

In early May, the Ministry of Transport, Mobility and Urban Agenda launched the first phase of the 'eco-incentives' programme, aimed at encouraging hauliers and loading companies to put lorries or trailers on board ships. In this first phase, the Ministry selects the shipping lines eligible for funding under the Next Generation EU funds, which have an initial budget of €60 million, and which had not been chosen at the time of going to press. This type of aid is a longstanding demand of SPC-Spain and the sector in general, and will soon come to fruition. The association is "satisfied" with the measure. However, "there are limitations that we are confident can be overcome throughout the course of the programme," adds SPC-Spain's technical director. These limitations include the exclusion of short sea shipping services with non-European third countries from receiving aid.

In Spain's case, two impor-

tant markets are affected: those users of mainland lines with Morocco and Great Britain will not benefit from the incentives. "It affects us greatly, because these are countries with which we have a significant trade relationship".

ECO-INCENTIVES, A BOOST FOR SHORT SEA SHIPPING

The plan provides incentives for lorries, semi-trailers, and articulated lorries to get on ships, but cargo on Mafi trailers is excluded, which is another significant limitation, according to SPC-Spain. Mafi trailers "are working well on some services and is efficient for certain types of goods (very heavy cargo).)".

SPC-Spain is in favour of a minimum frequency requirement of two weekly frequencies, or even less if justified, for the short sea shipping lines that would benefit from it. The European Commission (EC) regards services of at least three frequencies per week, a "relatively high frequency for certain routes", as a motorway of the sea.

There are other measures pending that are equally long overdue, such as the improvement of customs services, which is all the more urgent, if possible, due to Brexit, according to SPC-Spain.

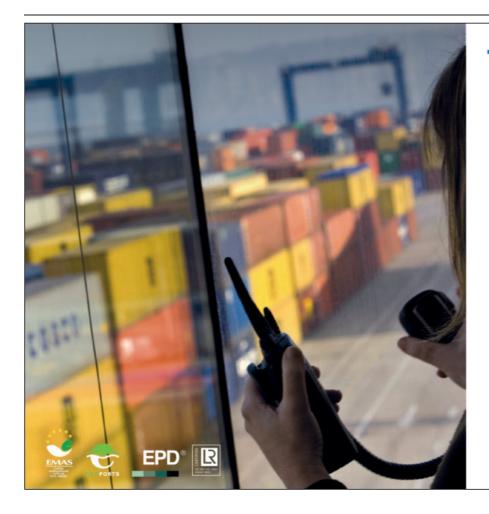
The association is also calling to have the discount system applied to the ship tax, which is linked to a certain number of port calls, to be replicated for port services. This "would make it possible to reduce port costs", which represent a heavy burden on the profit and loss account of short sea shipping companies due to the numerous calls at port they make compared to transoceanic services.

Historic record

International ro-ro short sea

shipping achieved its best ever record in the Spanish port system last year. Ro-Ro freight transported on international services (excluding vehicles in freight operations) exceeded pre-pandemic volumes, with 25.8 million tonnes of freight moved in 2021, growing by 25.7% more than in 2020 and 21.6% more than in 2019, according to the latest SPC-Spain Observatory.

Such flows have doubled in a decade, from 13 million tonnes in 2011 to almost 26 million tonnes in 2021. The Mediterranean seaboard is key to this trend. The Mediterranean Arc ports handled 22.38 million tonnes in 2021, an increase of 12.49 million tonnes over ten years. The Atlantic seaboard ports achieved their best ever performance last year, but only narrowly, moving 3.39 million tonnes, just 240,000 tonnes more than in 2011. While the Mediterranean Arc has seen a 126.3% increase over the last decade, the Atlantic Arc has only risen by 7.3%.



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ALGECIRAS, THE COOL HUB ON THE STRAIT

THE MOVEMENT OF REFRIGERATED LORRIES IS GROWING IN DOUBLE FIGURES, THANKS TO MOROCCO'S FRUIT AND VEGETABLE EXPORTS TO EUROPEAN COUNTRIES



Algeciras, the principal port of call on the European side of the Strait of Gibraltar, is the logistical gateway for road traffic from North Africa, moving increasing volumes of Moroccan produce to the European market.

Unaffected by seasonal economic crises

ALGECIRAS:

MOROCCAN

THE HUB

EXPORTS

FOR

and the COVID-19 pandemic, flows have increased by 32% over the last five years, from 321,324 lorries in 2017 to 425,699 units last year.

While the overall volume of this traffic does not differentiate between dry cargo and refrigerated or reefer cargo, according to different operators consulted, for the majority of the year about half of the trade tends to be trailers with perishable goods. This type of traffic has been experiencing high growth according to the Border Control Post (BCP) activity rates at the Andalusian port. Docks, a subsidiary of the Grupo Romeu, has been ma-

naging the BCP since 2002.

Covering 5,000 square metres, for the inspection of goods of animal, plant, and live animal origin, the BCP handles 30% of the goods of animal origin imported into Spain and 31% of those of non-animal origin, showing the extent of the volumes it handles and the

Refrigerated lorries travelling on the access bridge to the port of Algeciras.

continuous necessity of having adequate resources to carry out its functions.

It is the only Spanish BCP classified as first-class and authorised by the European Union to import and export all types of products and live animals.

Improvement of facilities

The importance of flows through the Strait of Gibraltar can be seen in Morocco's performance in agri-food traffic, as the leading supplier to the Spanish market. Its imports are growing every year, and everything points to further medium term growth with the political agreement between Spain and the Alaouite kingdom on the Sahara, a boost to the North African country's agri-

cultural trade with the European

Importantly, ro-ro traffic, which plays a key role in import-export trade, and has a significant impact on the economy of Algeciras (involving a large number of warehousemen, forwarding agents, customs agents, transporters, and warehouses), is the port's second most important cargo flow, after containers.

Along with the BCP, in the coming months the port of Algeciras will have new parking zones for heavy goods vehicles in the Isla Verde Exterior area, with the opening of a new Heavy Traffic Terminal, increasing the site's capacity to more than 1,600 parking spaces.

The new 542-space car park will be an addition to the existing one at the Isla Verde Quay, operated by the company Continental Parking, which provides 1,098 parking spaces.

Furthermore, as well as new works on the access roads to the port, Algeciras is also investing in

new technologies to digitalise the flow of goods, a key tool for the optimisation of shipments between the Spanish port and Tangier-Med's Moroccan hub.



Embarkation operations in the port of Algeciras.



SUPPLY CHAIN | RAIL TRANSPORT

CONTAINER GAINS

ECO-RAIL GAINS APPEAL

GROWING CONCERN FOR THE ENVIRONMENT IS BECOMING A CATALYST FOR 'REEFER' RAIL TRAFFIC FOR INDUSTRIES SUCH AS AGRI-FOOD, CHEMICALS AND PHARMACEUTICALS

Freight companies are increasingly taking their carbon footprint into account when it comes to the transport phase, both in the supply and distribution of goods. As a result, railways are beginning to gain ground in the projections of agri-food, chemical and pharmaceutical industries, which require tailored services at controlled temperatures.

In this new scenario, new rail services carrying reefer containers have emerged on the market. One of the most recent is a new refrigerated freight rail service, which moves agrifood, chemical and pharmaceutical products between the port of Barcelona and the Intermodal Terminal of Navarra (TIN), in Noáin. Launched by Synergy, Hutchison Ports' logistics operator's rail brand (Hutchison Logistics

Synergy), the service is aimed "at importers and exporters of frozen, refrigerated or temperature-controlled goods in TIN's geographical area of influence and also for customers in southwest France," says Pablo Garcia, Synergy's managing director.

This year also saw the launch of the Maersk shipping company's new refrigerated service between the southern Spanish port of Algeciras and Marín in Galicia. Spain's national rail operator Renfe's freight subsidiary, Renfe Mercancías, is responsible for the traction of this service, which began on a weekly basis, although it is expected that the frequency will continue to be increased. The train, which covers the distance in 36 hours, is made up of 21 wagons, and has two generators; one of which is in use throughout

the journey, while the second is only used if necessary, according to Renfe Mercancías. Maersk also operates reefer services connecting Zaragoza with Vigo and Barcelona.

Sustainability

Renfe Mercancias has focused on the promotion of refrigerated trains, as they "open up new opportuni-

ties for a sustainable transport strategy for companies that work with perishable products, allowing them to transport large loads of frozen or refrigerated food over long distances, arriving

at their desti- nation in perfect condition", according to the company.

ne seneces-Renfe also rvices

RENFE

BOOST

SEEKS TO

'REEFER'

MERCANCÍAS

The CoolRail refrigerated container rail service, specialising in the export of

> Spanish fruit and vegetable products to the northern European market, is one of the most well-esta-

blished lines. Operated by Transfesa Logistics and EuroPool System, the service has

a transit time of 48 hours between Almussafes (Valencia), Cologne, Brussels and Rotterdam, 72 hours

new refrigerated freight rail cías, is responsible for the service, which moves agritraction of this service, food, chemical and pharwhich began on a weekly maceutical products betbasis, although it is expecween the port of Barcelona ted that the frequency will THE and the Intermodal Termicontinue to be increased. REFRIGERATED nal of Navarra (TIN), in The train, which covers the

FLOWS

Synergy, Hutchison Ports' de up of 21 wagons logistics operator's rail brand (Hutchison Logistics which is in use through the Hengres carridor in the Hengres carridor







with the United Kingdom, and 96 hours with the Nordic and Eastern European countries. CoolRail, which includes road haulage as part of the 'door-to-door' service, reduces CO2 emissions by 80%, according to Transfesa Logistics.

Meanwhile, refrigerated containers for export from

Spain on the VIIA rail motorway are also experiencing a notable upward trend. For example, up to 70% of the goods that move from Spain to the UK via VIIA are reefer - mainly fruit and vegetables.

Shipping companies

On the whole, in recent

The VIIA rail motorway is increasing refrigerated cargo transportation year

on year.

years, the major shipping lines have also become important for the growth of refrigerated rail freight traffic in Spain. In addition to the aforementioned Maersk services, MSC and CMA CGM also move refrigerated cargo by rail.

Three years ago, MSC started operating a significant flow of refrigerated cargo containers by rail from Aragon, with connections between the terminals of Zaragoza Plaza and Monzón Intermodal Terminal (Huesca) and the ports of Valencia and Barcelona. Several months ago, CMA CGM started connecting Zaragoza and the port of Valencia via a reefer rail corridor. The new service is an addition to its consolidated fruit and vegetable products service running between Murcia and the port of Bilbao, which has been operated by its subsidiary Containerships in conjunction with Grupo Logístico Fuentes for almost a decade.

THE MAJOR SHIPPING LINES BOOST TRAFFIC



OPINION | DIGITALISATION

CHALLENGES AND OPPORTUNITIES

GINÉS HERNÁNDEZ ROSIQUE Founding partner of TDI, Técnicas de Ingeniería (GesInflot)



year ago, in this publication, I spoke of how digitalisation brings challenges and opportunities for each of the players in the logistics chain, as set out in the "Next Generation" programmes. In that article, I defined digitalisation in transport as data capture, its transportation, storage, and processing, according to the specific purposes required by each of these players. The digitalisation of the transport and logistics sector is essential to streamline the flow of information required by all those involved in the logistics chain, and to guarantee service provision, compliance with legal regulations and the industry's own standards. I defined data

capture as the first problem to address to ensure proper digitalisation: where from, from what source, with what precision, at what speed of acquisition; especially given the fact that telematic systems (on-board computing) allow the maximum amount of data to be obtained with the minimum number of technologies or operators involved, thus providing a simplified and correct a starting point as possible.

In this scenario, the wide range and variation of digitalisation service possibilities is dependent on the activity of the logistics chain in which we find ourselves. Finding standard solutions that can use and analyse the data that each company

needs is a tough task, especially concerning their business models, which must be distinctive to ensure their survival in today's highly competitive and demanding environments. The Recovery, Transformation and

Resilience Plan (Next Generation) was supposed to be a good opportunity to undertake disruptive projects within our companies, allowing them to secure a strong position within the framework of the digitalisation of the sector, regardless of their size and economic capacity. Digitalisation project investment would allow companies to programme a "datafication" framework for all processes and in all departments, including "Big Data" actions to enable datamining in line with business models, as well as the appropriate training of personnel on the new systems. Now, more than ever, what with the war in Ukraine, the energy crisis and the outlook for autumn

predicted by all the economic and political forecasts, we must undertake these distinctive projects, which showcase the added value services of our companies, thus differentiating them from competitors, and improve customer relations. However, we need to implement them now, regardless of a Recovery Plan or Next Generation funds. If we wait for European funds to be correctly administered, or for them to arrive in our sector, we may lose the opportunity to secure a good position within the framework of the digitalisation of the sector, regardless of the size and economic capacity of each company. The time has come to implement these actions.

There can be no further delays to the search for a digitalisation model that best suits our needs, bearing in mind that Spain, due to its status as a peripheral country in Europe, its agri-food production model, and Africa's rise in growth, needs technological solutions that are, in many cases, different from those implemented in a more standardised way in the rest of Europe.

THE TIME IS RIPE FOR DIGITALISATION PROJECTS, AND WE MUST NOT DELAY ANY LONGER

SPAIN NEEDS TECHNOLOGICAL SOLUTIONS THAT ARE DIFFERENT FROM THOSE IMPLEMENTED IN THE REST OF EUROPE **SUPPLY CHAIN | RAIL TRANSPORT**

RAMPING UP REEFER SERVICE

SPANISH INLAND RAIL TERMINALS GEAR UP TO MEET DEMAND FOR GROWING REFRIGERATED CONTAINER VOLUMES

Market adaption efforts made by many intermodal terminals have played a key role in the rise of refrigerated rail freight flows in the Spanish market. Terminal Marítima de Zaragoza (TMZ), for instance, which pioneered reefer services in 2016, continues to increase the traffic handled in this niche activity. The Aragonese pork sector, which has experienced significant growth in sales in the Asian market, has been the main user of the Aragonese terminal's cold

logistics. The TMZ terminal recorded a 19% increase in its activity in temperature-controlled perishable goods traffic for the agri-food industry.

This summer the growth prompted TMZ's board of directors to approve a new 10.5 million terminal expansion, which will double the rail terminal's capacity.

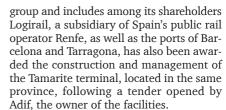
The expansion work, which is scheduled to

TMZ PLANS TO DOUBLE **TERMINAL** CAPACITY

begin before the end of the year, will involve extending the three main loading and unloading tracks from the current 580 metres to 1km in length, allowing 750-metre-long trains

to operate. The construction of a new terminal access point to Spain's national rail infrastructure network, Adif, to the north is also planned, thus making TMZ a through terminal and guaranteeing a reduction in the time and cost of railway operations. At the same time, the container storage area will be expanded by 40% to almost 20,000 square metres. TMZ currently has a surface area of 111,649 square metres, which will be extended by a further 49,166 square metres, of which 28,562 is land belonging to Mercazaragoza and 20,604 is land belonging to Adif. TMZ is owned by Mercazaragoza (56.7%), the Port of Barcelona (21.5%), the regional council of Aragon (20.5%) and other private partners (1.3%). Meanwhile, volumes handled at Huesca's Monzón Intermodal Terminal (TIM) have increased since it first moved refrigerated container traffic in April 2020. Its facilities have been adapted to store refrigerated units connected to the

Aerial view of the Zaragoza Maritime Terminal (TMZ).



The new Tamarite Intermodal de Mercancías (TIM2), which is expected to be operational in 2023, will have a specific area for the storage of containers, as well as an area equipped with 30 electrical connections for refrigerated containers.

Burgos dry port is another inland terminal that is making a strong commitment to refrigerated container rail traffic. The Castilian terminal has consolidated this type of traffic having first launched services at the beginning of 2020, at the height of the pandemic. The bulk of the volumes are linked to the Spanish meat multinational Campofrío, and are destined for the port of Barcelona for subsequent export by sea.



network and have established a regular operation of reefer containers linked to the Aragonese agri-food sector. TIM facilities feature a dedicated terminal, called Termo-TIM, which has a 1,420 square metre concrete bay that can store 60 reefer units connected to the network to maintain the cold chain.

Projects

The company Terminal Intermodal Monzón, which is majority owned by the Samca **TAMARITE WILL HAVE** A SPECIFIC **AREA FOR** REFRIGERATION



Transport of perishable goods, in this case flowers, by the airline Iberia at Adolfo Suárez Madrid-Barajas airport.

SUPPLY CHAIN | AIR TRANSPORT

HIGH-FLYING REFRIGERATION

PERISHABLE GOODS AND PHARMACEUTICALS GAIN IMPORTANCE AS HIGH ADDED-VALUE GOODS IN AIR TRAFFIC

Air transport of temperature-controlled products requires a high degree of specialisation. The cold chain is subject to a number of crucial issues that pose a constant challenge.

These critical issues range from the loading and unloading of the aircraft, the period the cargo spends in the hold, the storage phase in the terminal and the waiting time for the cargo to enter and leave the terminal.

A business that requires specialists, including carriers, freight forwarders, handling operators, airlines, and GSAs. Specifically, temperature-controlled air cargo also has its own equipment, such as isothermal containers, insulated packaging, and all kinds of refrigerated equipment.

The main refrigerated goods moved by air are perishables and pharmaceuticals. Perishable goods, such as fruit, vegetables, meat, and flowers, are some of the goods that have traditionally had the greatest impact at the airports of Madrid and Barcelona, particularly on transcontinental connections with Latin America. Therefore, long-

4,500

MILLION,
VALUE OF
"PHARMA" CARGO
HANDLED IN 2021
AT MADRID-

BARAJAS

haul is its preferred domain. In fact, food is the third type of merchandise by volume of tonnes exported at Adolfo Suárez Madrid-Barajas airport, only behind fashion (Inditex effect) and mechanical and electrical equipment. On the other hand, it is the leader in imports, ahead of the two aforementioned goods.

REFRIGERATED AIR CARGO IS SUBJECT TO A NUMBER OF CRUCIAL ISSUES

Pharmaceuticals have been experiencing significant growth in air traffic in recent years, including in connections to Latin America, and more recently to Asia as a result of the pandemic.

In the past year, the most significant impact on this market niche has come from vaccines, which have made air travel the ideal way for record time transportation, in order to cope with the various campaigns conducted by public health authorities.

Last year, pharmaceutical products ranked second in value at Madrid's airport, both in terms of exports and imports, Barajas being the main airport for this type of merchandise. Pharma moved on the Madrid runways amounted to more than €4.5 billion in 2021, a figure very close to pre-pandemic levels. Pharmaceuticals exports exceeded €1.43 billion, while imports amounted to €3.07 billion.

In terms of value, traffic in health products exceeded 11% in imports and 12% in exports in the years prior to the pandemic at all Spanish airports.

Meanwhile, in a further boost to cold chain prospects, Spanish airports will soon have a new 'Cargo Community System' (CCS) tool to streamline and digi-

LONG-HAUL FLIGHTS ARE THE PRINCIPAL MODE OF TRANSPORT OF PERISHABLE GOODS

talise processes for ground operations - one of the key aspects for the proper functioning of the cold chain in air transport. Known as Vellore CCS, the tool is designed by logistics technology company Portel for Aena, Spain's national airport operator. The first phase of this technological platform is already operational. "The project will expand according to cargo community demands and the working groups will be important for this," says Alfonso Gonzalez, Portel's director of innovation. Furthermore, the

THE GROUND SIDE IS KEY FOR AIR CARGOES OF PERISHABLES AND PHARMACEUTICALS

first digital corridor between Madrid and Montevideo was launched a few months ago, with the support of IATA, the international air transport association, facilitating the processing of completely digital shipments and in real time, and deciding what data is shared and with whom.

EXCELLENCE IN AIRFREIGHT COLD LOGISTICS

Air transport of pharmaceuticals is one of the fastest growing sectors on Spanish runways. Demand for transportation of perishable goods by air is rising, leading to constant adaptation to meet the demands of transport and delivery times and temperature control throughout the chain to avoid loss of food quality.

nals, handling operators and freight forwarders to become centres of excellence for perishable goods logistics.

"Perishable goods products are a growth market for air cargo. It is essential to ensure that these fragile products with a short

shelf life reach the customer intact, with minimal waste and loss," IATA points out. "Carriers will have the reassurance that companies certified by 'CEIV Fresh' operate to the highest quality and standards in the transportation of perishable goods," it says.

IATA is also promoting another certification in the field of cold logistics. This is 'CEIV Pharma', which guarantees the quality of processes in the air transportation of pharmaceutical products at controlled temperatures.

This certification was developed in collaboration with the

World Health Organisation (WHO). Today, around five hundred multinational and local companies, including airlines, cargo terminals, handling operators and freight forwarders, are certified world- wide.



Just three years ago, IATA created a new air cargo industry certification called 'CEIV Fresh'. The aim is to address the lack of standardised procedures and improve practices. Certification enables airlines, termi-







LEADING GREEN LOGISTICS

