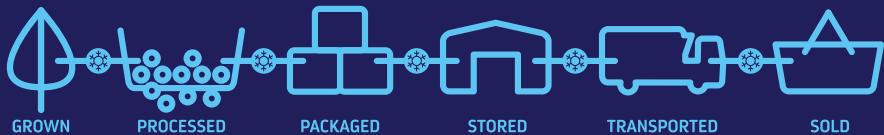


COLD CHAIN REPORT



COLD CHAIN REPORT 2026 /

FROM PRODUCER TO CONSUMER



THE UK COLD CHAIN IS:

- Critical to perishable supply chains
- Vital to our economy
- At the forefront of global environmental challenges

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WELCOME TO THE COLD CHAIN REPORT 2026

The *Cold Chain Report* began as a 15-page overview of temperature-controlled logistics in the UK. Now in its fourth iteration, the Report has evolved into over 50 pages of essential statistics, benchmarks and research, utilising government data, specially commissioned research and Cold Chain Federation surveys of our members. It now encompasses unmissable data on cold storage, refrigerated distribution and the trade in refrigerated cargo as well as the economic benefit of cold chain to the UK economy and new for 2026, new research into the people who make the sector what it is today.

In many ways evolution of the *Cold Chain Report* echoes that of the industry it champions, driven by sustained growth, investment and professionalism – an essential service.

I hope you value this year's Report.

Tom Southall, Deputy Chief Executive

WHATS NEW IN 2026

As well as an annual update to key statistics and benchmarks for cold storage and refrigerated transport, there are three major updates for this year's edition of *The Cold Chain Report*:

- New information from the Federation's energy benchmarking service for cold storage, including energy improvements over the last five years and an all-new benchmark on the maximum renewable energy generation achievable in cold storage sites (Pages 14-15).
- New data on the trade of perishable imports and exports of perishable products, including maps of major UK trading partners (Pages 19-21).
- A major study of members into people, diversity and recruitment in the cold chain revealing for the first time gender and age profiles, working patterns and recruitment challenges across 11 key job roles in cold chain businesses (Pages 22-35).

COLD CHAIN REPORT 2026 / PART 1: UK COLD CHAIN IN NUMBERS

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- 10 TEMPERATURE CONTROLLED DISTRIBUTION**
- 12 PROGRESS TO NET ZERO**
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VISUALISING THE COLD CHAIN

The cold chain is the network of specialist facilities, vehicles and other infrastructure which ensure perishable goods are kept in a secure temperature-controlled environment as they pass from production to the point of usage or consumption. It is the backbone of a healthy society, safeguarding the quality and safety of food, medicine, and countless other products that underpin our daily lives.

Cold Chain in Numbers is the result of six years of research and analysis to provide a visualisation of the size, makeup and health of the UK's cold storage and temperature-controlled distribution infrastructure.

Major updates for the Cold Chain Report 2026 include updated annual data for key areas such as cold storage capacity, energy and fuel costs and the import and export of refrigerated shipping containers in and out of the UK. New information includes brand new benchmarks for the utilisation of renewable energy in cold chain sites (page 15) and mapping of the largest port and national trading partners for UK imports and exports of cold chain products (pages 19-21).

As well as providing an invaluable tool for cold chain businesses to benchmark their own operations against national standards, our ambition is that *Cold Chain in Numbers* will continue help drive awareness across Governments, regulators and the business community of the scale and breadth of our sector and the factors which influence its ongoing success. We hope this will ultimately lead to better and more informed policy decisions on the issues that matter to us as an industry.

UK COLD CHAIN IN NUMBERS / THE COLD CHAIN

TYPES OF BUSINESS IN THE COLD CHAIN

The cold chain is a connected network of specialist facilities, containers and vehicles that store perishable goods in a secure temperature controlled environment. It is critical infrastructure which we all rely on. The scope of this report includes:

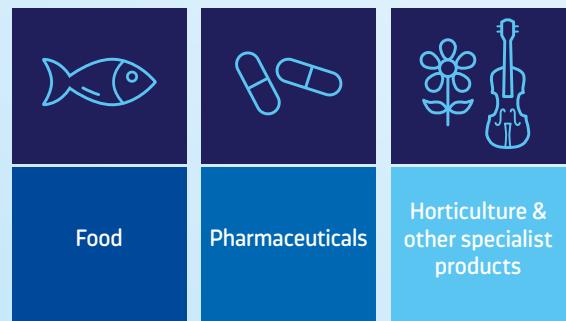
Cold Storage



Distribution



Products



OTHER TYPES OF COLD CHAIN

There are other types of cold chains in the UK not covered by this report. The CCF's strategy includes building new relationships with these sectors and understanding their impacts on our members.

Consumer refrigeration

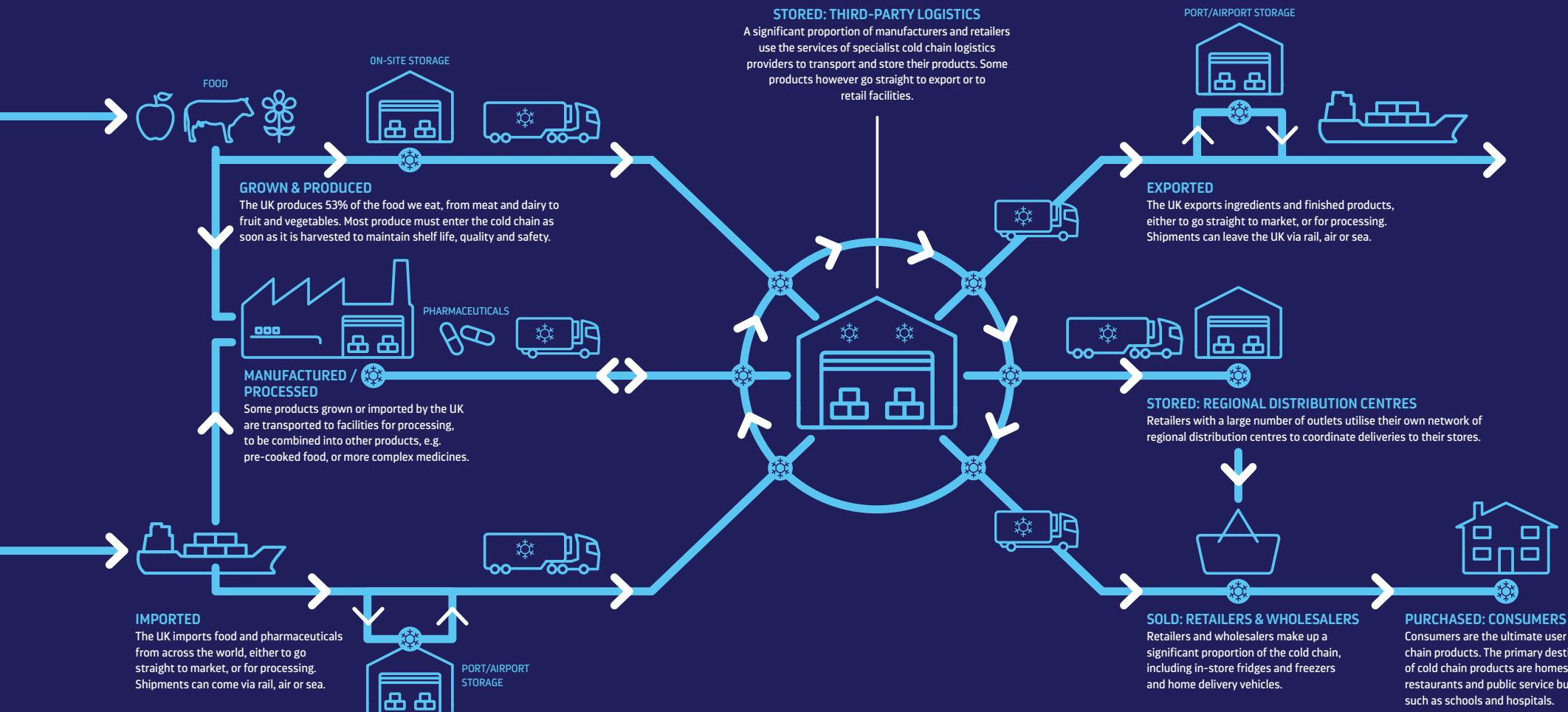


Refrigeration in research and development



UK COLD CHAIN IN NUMBERS / THE COLD CHAIN

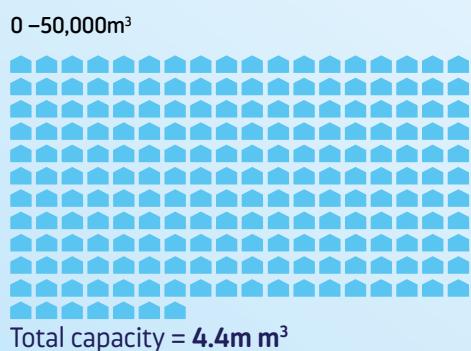
THE COLD CHAIN ECOSYSTEM: HOW IT ALL FITS TOGETHER



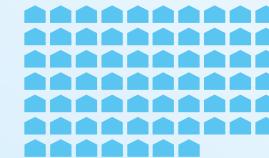
UK COLD CHAIN IN NUMBERS / TEMPERATURE CONTROLLED STORAGE

This section details information about the cold stores operated by members of the Cold Chain Federation. The information presented is from the facilities registered under our Climate Change Agreement (CCA) Scheme which includes around 440 facilities of which 402 report their throughput in m³. Around 38 sites report in other units and are therefore not included in this analysis.

SIZE OF UK COLD STORES



50,000 – 100,000m³



4.9m m³

100,000 – 150,000m³



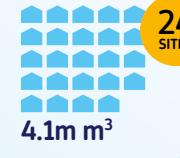
4.5m m³

150,000 – 200,000m³



4.1m m³

200,000 – 250,000m³



3.3m m³

250,000 – 300,000m³



3.0m m³

300,000m³+



9.8m m³

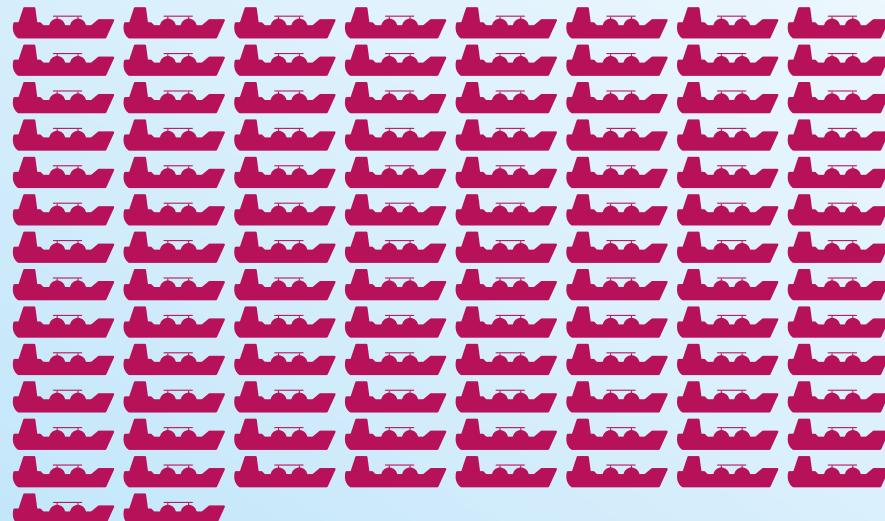
Average size of a UK cold store

84,494m³

Total volume of UK cold storage
33,966,588m³

That's the equivalent of:

106 OIL
TANKERS



Why are these figures
unchanged from 2024?

Whilst we have added new data on the total capacity of the seven size groupings in this graphic, the underlying data remains unchanged. Our analysis on the size of UK cold storage is derived from facilities signed up to the Climate Change Agreement for Cold Storage.

The scheme restricts when new sites can join and in 2025 no new sites have joined. New sites are permitted to join from 2026, which mean these figures will be updated in the Cold Chain Report 2027 which will likely show an increase in total UK cold storage capacity.

UK COLD CHAIN IN NUMBERS / TEMPERATURE CONTROLLED STORAGE

COLD STORAGE CAPACITY LEVELS

We collect capacity data from our members on a monthly basis and feed this information directly to the UK Government. This was developed during the Covid pandemic when the lack of available cold storage space presented real resilience concerns for the UK's food supply.

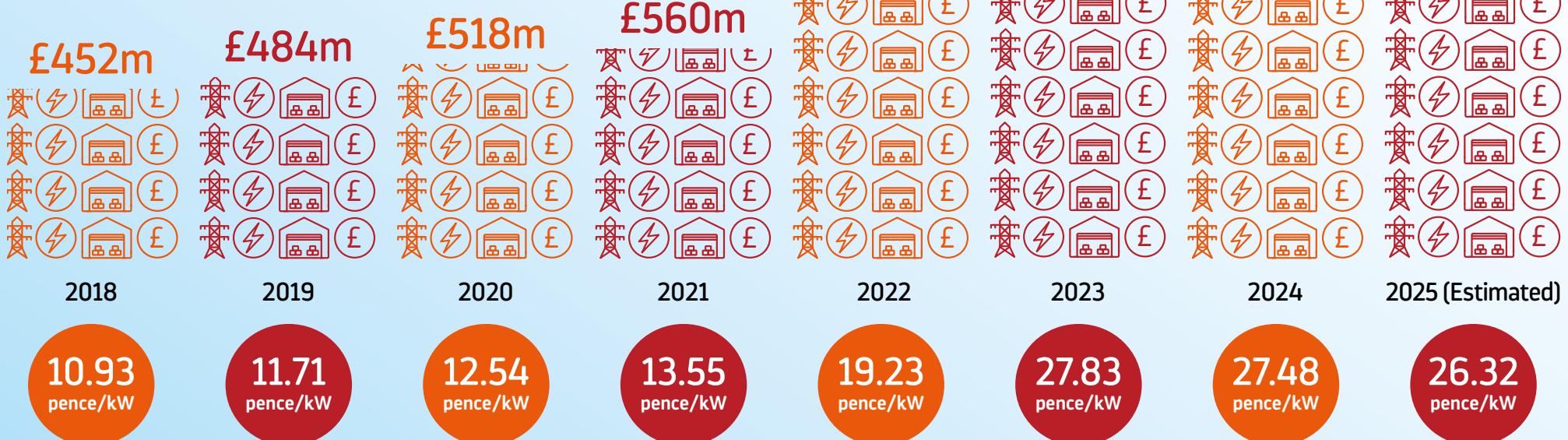


UK COLD CHAIN IN NUMBERS / TEMPERATURE CONTROLLED STORAGE

ELECTRICITY COST IN COLD STORAGE

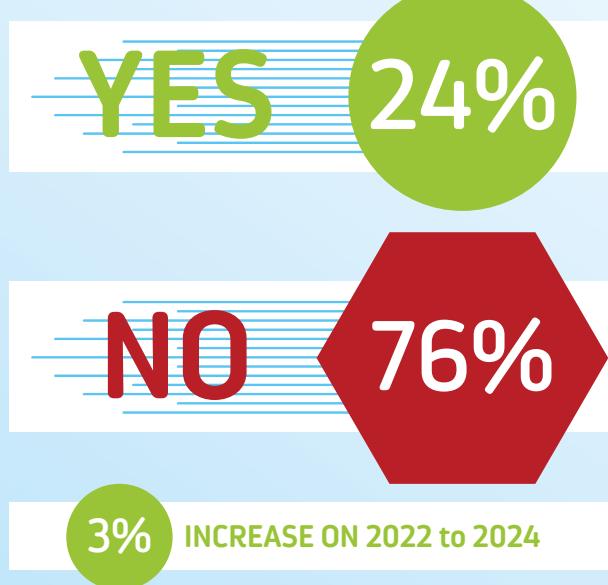
The estimated energy cost for 2025 is based on actual rates up to the 31st March (Q1) and predicted costs for the remainder of the year.

**WHOLESALE ENERGY COSTS
BETWEEN 2018 AND 2025
HAVE SHOWN A 141% INCREASE**

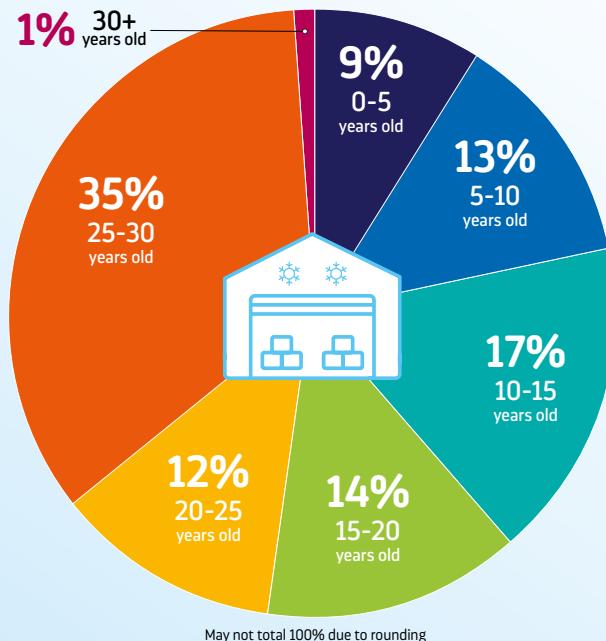


UK COLD CHAIN IN NUMBERS / TEMPERATURE CONTROLLED STORAGE

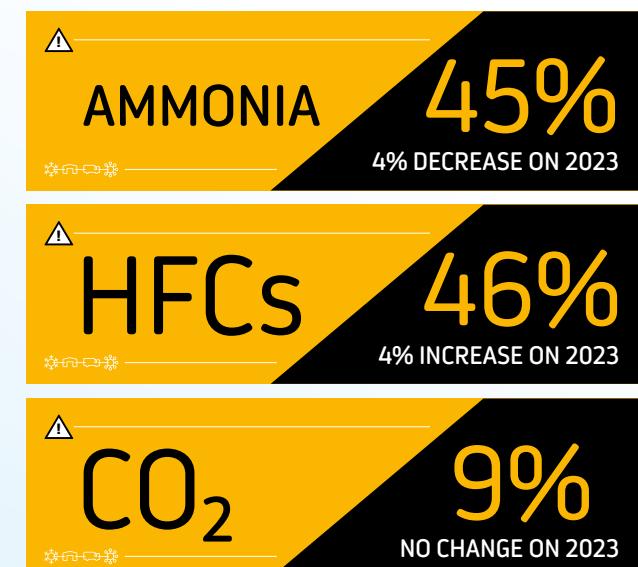
BLAST FREEZING OFFERED AS AN ADDITIONAL SERVICE



AGE OF COLD STORES

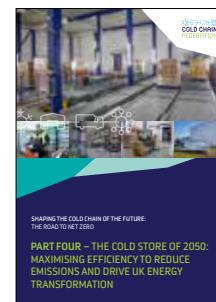


REFRIGERANT TYPE



SUSTAINABILITY TRANSITION

The **Cold Store of 2050** is the industry's vision for how temperature-controlled warehouses could evolve to achieve a step change in energy efficiency. It also aims to drive energy transformation in the UK, as part of the transition towards a net zero economy by 2050. The report details the technologies which could become more widespread, the barriers to their adoption and how businesses, government and those responsible for the UK energy network will need to collaborate to ensure the opportunities and benefits detailed in this report are achieved.



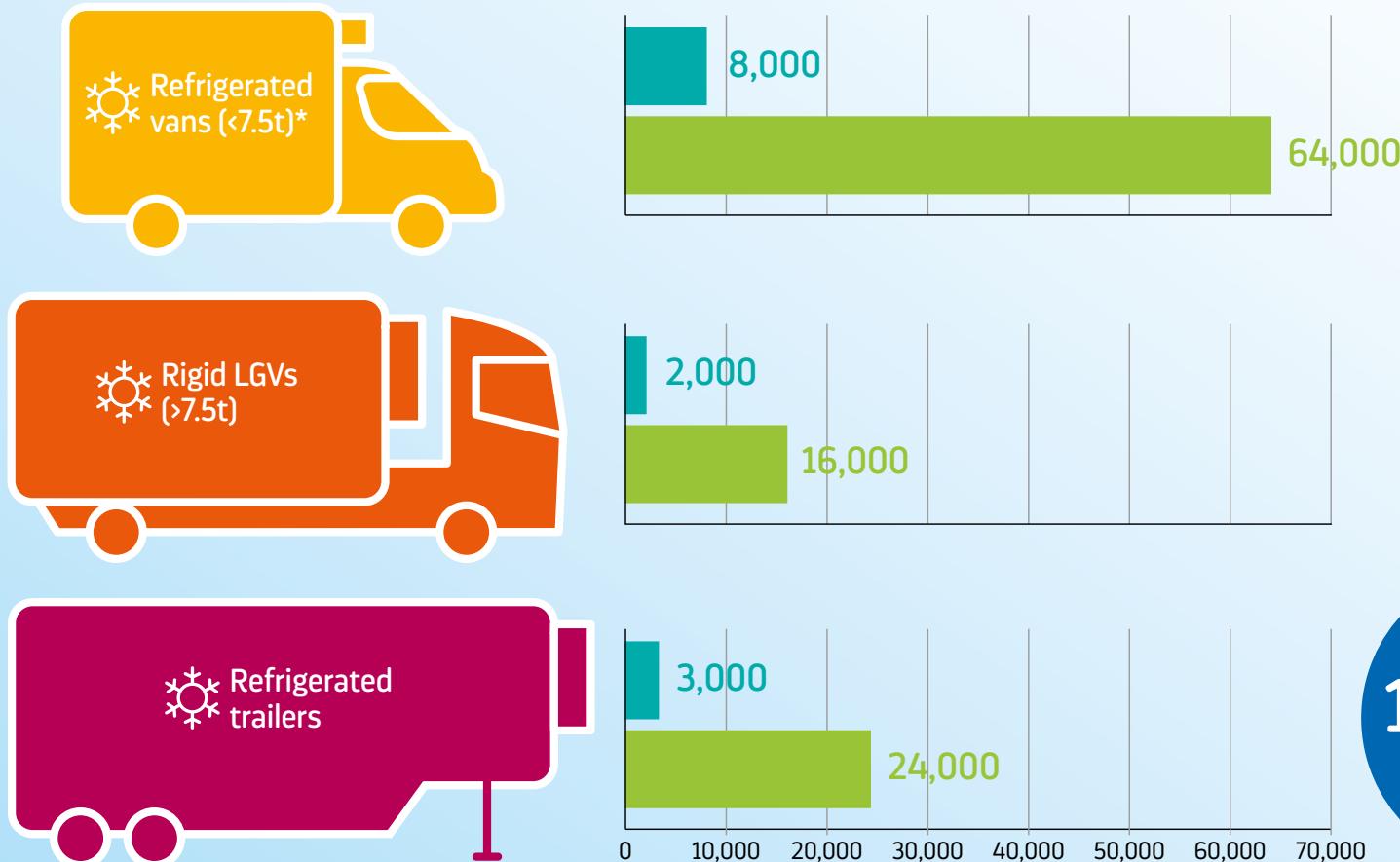
TOP THREE POLICY CHALLENGES FOR COLD STORAGE

- Clarity over specific Government targets for energy efficiency in cold stores to 2050 as part of net zero policy.
- Planning constraints for new, bigger cold stores and associated infrastructure such as onsite energy production.
- Grid connections and capacity issues are preventing investments, particularly in rural areas.

UK COLD CHAIN IN NUMBERS / TEMPERATURE CONTROLLED DISTRIBUTION

The UK's fleet of temperature-controlled vehicles, trailers, shipping containers and other transport infrastructure ensures perishable products are kept safe as they are transported throughout the cold chain.

NUMBER OF VEHICLES



Why is this an approximate figure?

There is currently no requirement in the UK for registration of refrigerated vehicles and trailers to allow a conclusive calculation of fleet size. Most existing estimations from sales data or other sources are in the region of 100,000. A key priority for the Cold Chain Federation is to work with our members and the Government to introduce an industry led registration scheme to allow an effective measure of the refrigerated vehicle fleet and track emissions reductions.

 Refrigeration units manufactured in the UK per year
 Approximate number of UK refrigerated vehicles**

* This includes approximately 4-5,000 supermarket home delivery vehicles

** Assumes an 8-year life on UK roads

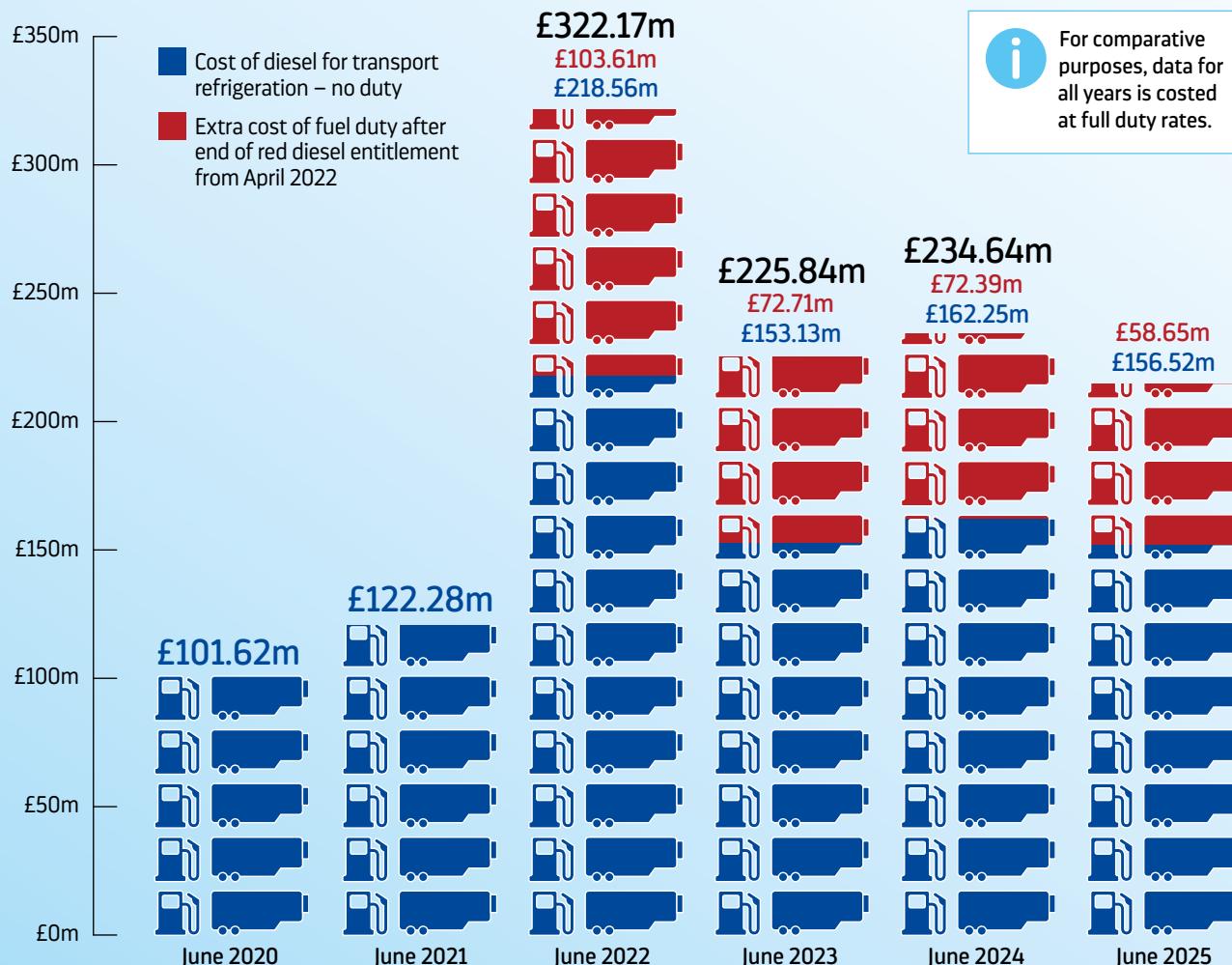
**TOTAL
104,000
VEHICLES**



UK COLD CHAIN IN NUMBERS / TEMPERATURE CONTROLLED DISTRIBUTION

COST OF DIESEL IN UK TRANSPORT REFRIGERATION

From April 2022, operators of transport refrigeration units (TRUs) were no longer entitled to use red diesel, adding to the inflationary costs of fuel for transport refrigeration.



TOP THREE POLICY CHALLENGES FOR TEMPERATURE CONTROLLED DISTRIBUTION

 Formal adoption by the Department for Transport of oversight for decarbonising transport refrigeration units. Currently, the challenges facing operators of this crucial infrastructure are not adequately recognised or supported by any single government department.

 The introduction of grant based support for the mass adoption of emission-free transport refrigeration units to enable operators to bridge the enhanced capital cost of emerging technologies. This approach has been proven to increase adoption in other global markets.

 Guidance from government on how refrigerated hauliers can overcome grid connection challenges, particularly in rural areas, to enable the installation of charging infrastructure for the next generation of electric refrigerated trailers.

UK COLD CHAIN IN NUMBERS / PROGRESS TO NET ZERO

EMISSIONS FROM COLD CHAIN STORAGE AND DISTRIBUTION



Are these the only emissions from the cold chain?

TRUs also contribute to harmful air pollution, including NOx and Particulate Matter. The exact emissions are highly variable depending on factors such as age and how they are operated, however transitioning from diesel powered TRUs to sustainable alternatives will be crucial to reducing this impact.

RELATIVE ENERGY EFFICIENCY PROGRESS IN COLD STORAGE UNDER THE CLIMATE CHANGE AGREEMENT



KEY INSIGHTS:

- For the first time in 2024 the cold storage energy sector just missed the government target, demonstrating the difficulty in finding continual improvement in energy efficiency.

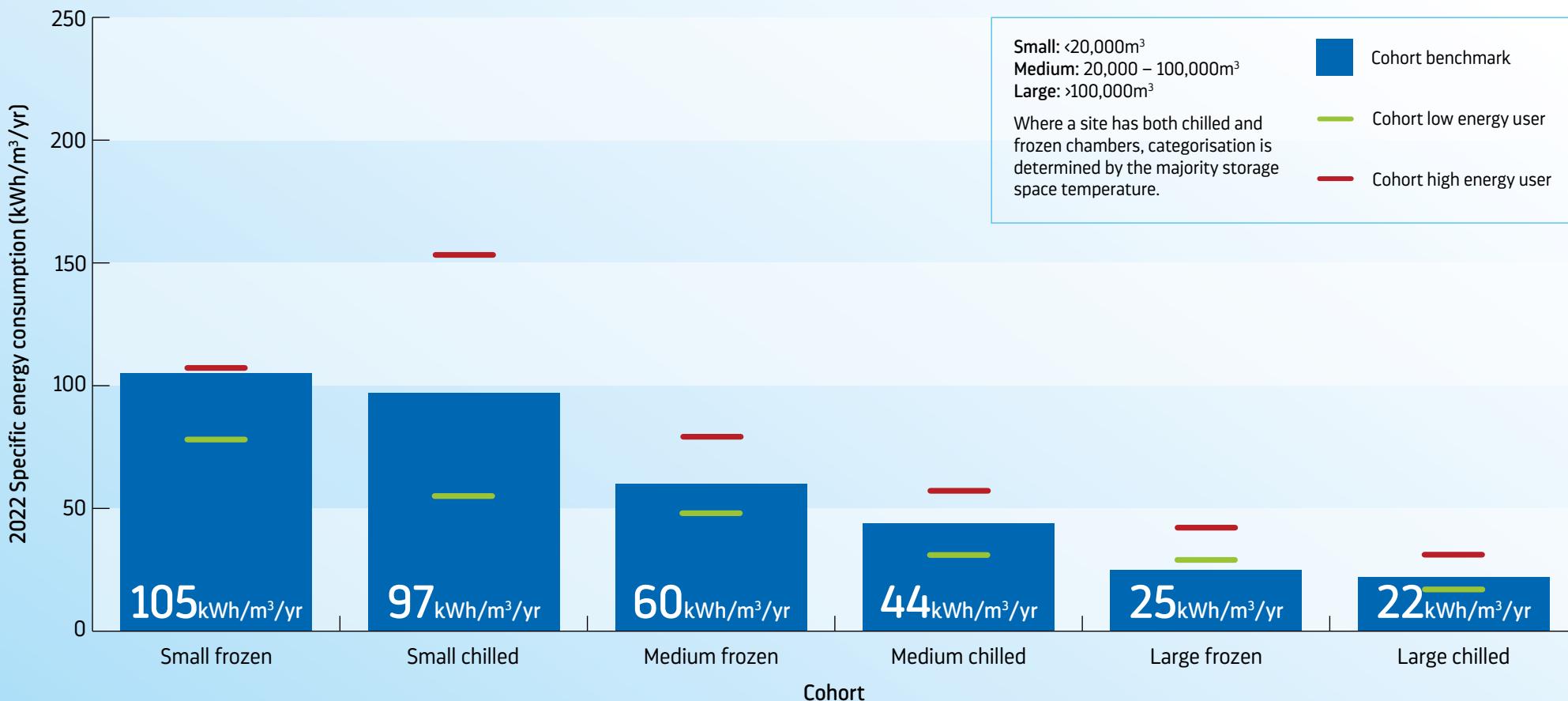


Data: Sample of 450 UK cold stores.

UK COLD CHAIN IN NUMBERS / PROGRESS TO NET ZERO

ENERGY BENCHMARKS FOR COLD STORAGE

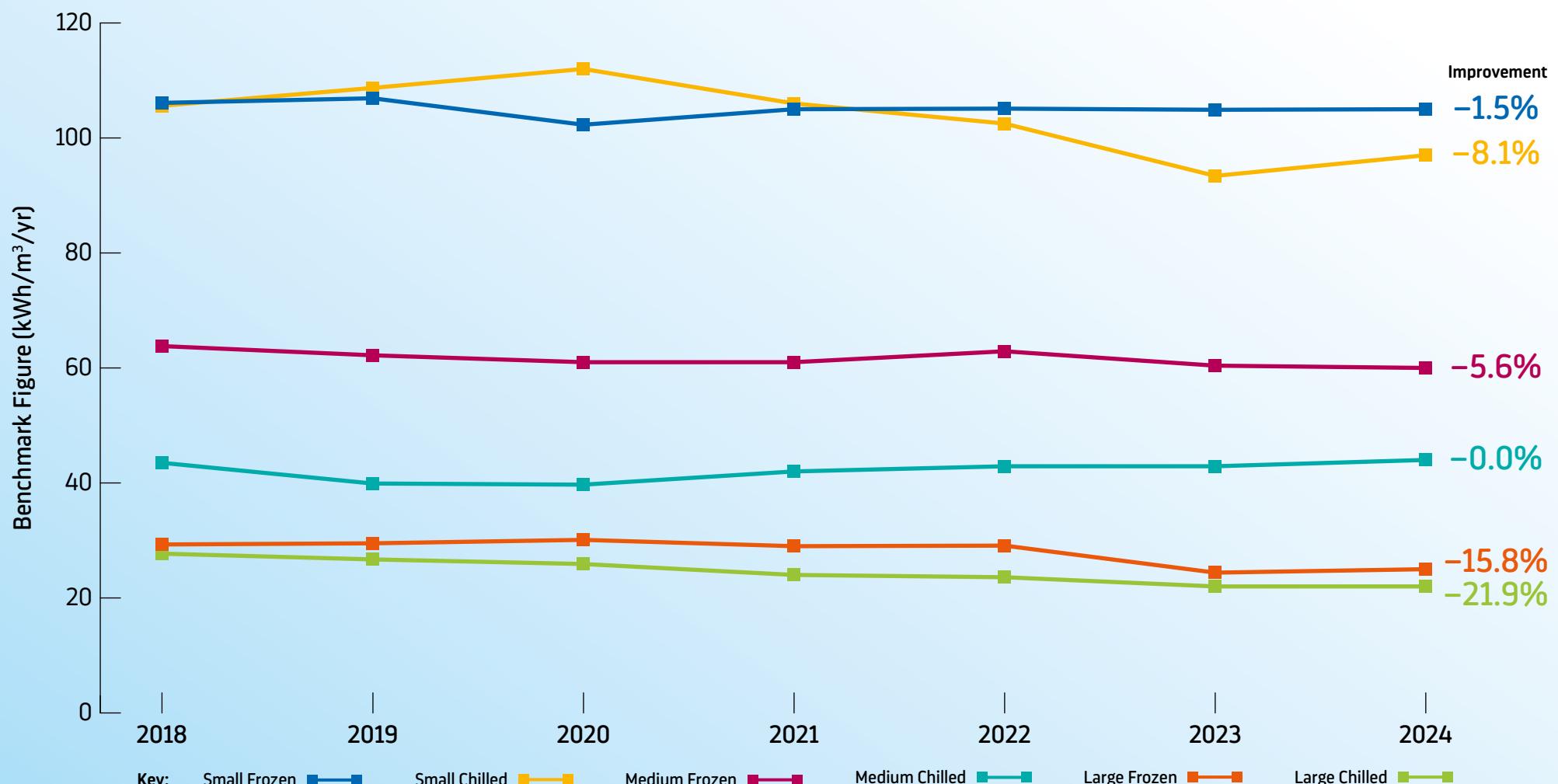
The CCF's Energy Benchmarking Project commenced in 2022. Each year we use energy data from over 400 cold stores to benchmark performance, with cold stores grouped by size and temperature regime, providing an invaluable tool for our members to gauge their performance. This page provides benchmarks for the latest year of data, 2024. Benchmarks are presented in kWh/m³/yr, or in other words, the amount of energy needed to cool a m³ of space for a year.



UK COLD CHAIN IN NUMBERS / PROGRESS TO NET ZERO

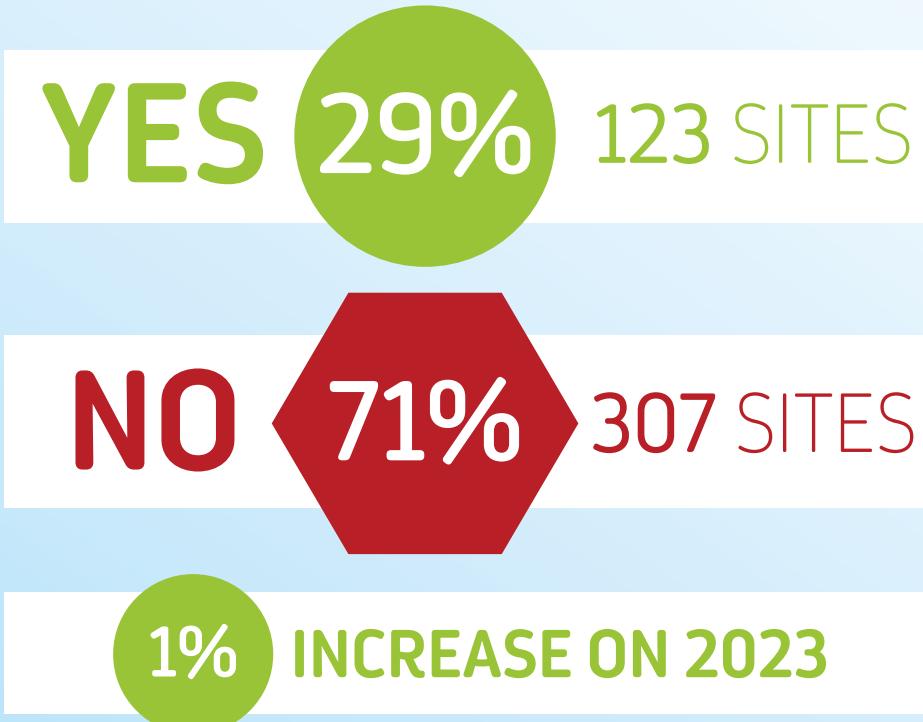
BENCHMARK IMPROVEMENT OVER TIME

This chart shows the change in the average energy performance of six cohorts of cold stores from 2018 to 2024. All cohorts have improved, except for Medium Chilled, with Large sites showing the most significant improvements.



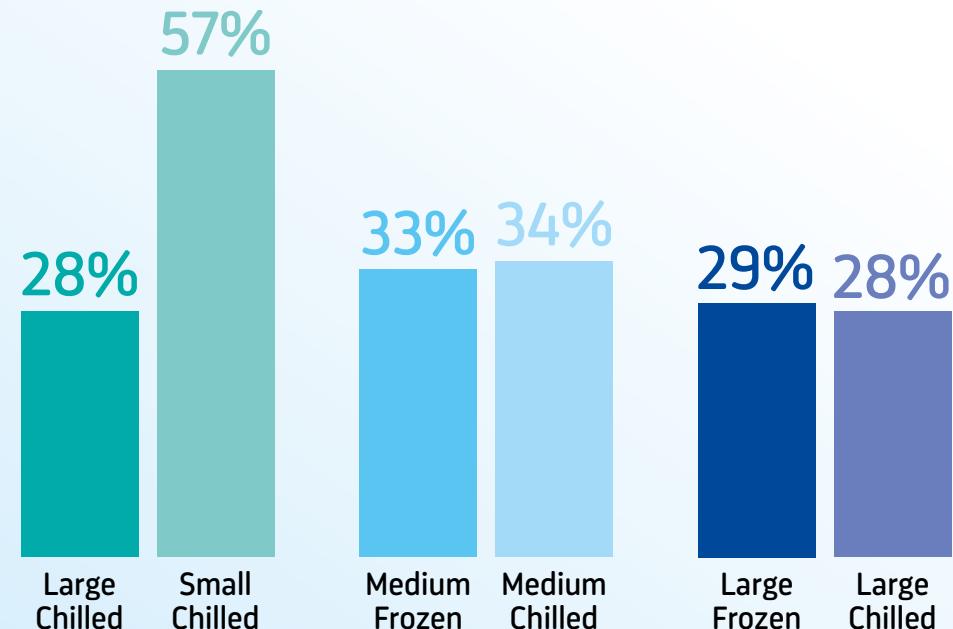
UK COLD CHAIN IN NUMBERS / PROGRESS TO NET ZERO

PROGRESS TO SUSTAINABILITY: COLD STORAGE SITES WITH RENEWABLE ENERGY



BENCHMARK FOR RENEWABLE ENERGY GENERATION

This percentage represents the site in each cohort that generated the highest proportion of renewable energy relative to its total energy consumption.



58,298,301 kWh per year **renewable** energy generated



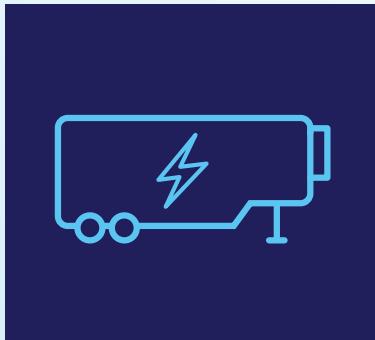
4% of total energy consumption is generated by on-site renewables

UK COLD CHAIN IN NUMBERS / PROGRESS TO NET ZERO

PROGRESS TO SUSTAINABILITY: TRANSPORT REFRIGERATION UNITS (TRUs)



Electric van



Electric refrigerated trailer



HGV with direct drive to fridge



Zero emission refrigerant



Hydrotreated vegetable oil (HVO)

AN INDUSTRY LED APPROACH TO TRACKING EMISSION REDUCTIONS IN TRANSPORT REFRIGERATION

There is a critical need for a mechanism to be developed to enable the tracking of emissions reductions in transport refrigeration. Evidence on the impact of diesel TRUs is growing and the positive actions of operators need to be tracked.

The CCF has commenced work, overseen by our Refrigerated Transport Expert Group of members, to develop an industry

led TRU registration and emissions reduction scheme. The scheme is being created with the ambition of drawing on our successful administration of the Climate Change Agreement scheme for cold storage. Its aim is to secure government incentives for those companies joining the scheme and investing in reducing the environmental impact of TRUs.



UK COLD CHAIN IN NUMBERS / PROGRESS TO NET ZERO

MOVE TO -15°C

The concept of reducing the industry standard minimum temperature adhered to across the frozen food supply chain is attracting global attention. -18°C (or 0°F) has been the standard for well over 100 years. However, evidence is growing that for most products, this setpoint could be overly risk-averse. Transitioning to a higher setpoint (for example, -15°C) would not affect food safety or overly impact food quality, and could provide an opportunity to significantly reduce energy use and associated emissions, without the need for major legislative change or significant financial investment.

Although the early signs are promising, more research and collaboration is needed to fully assess the potential of a set-point change, and what the new temperature could be.

The Cold Chain Federation is working with our members and other stakeholders to identify, plan and carry out research targeted at assessing the potential of a cold chain wide set point change and/or changes to temperature risk tolerances.



525
downloads
since launch



SHAPING THE COLD CHAIN OF THE FUTURE:
THE ROAD TO NET ZERO

**PART FIVE – INCREASING TEMPERATURE
SET POINTS FOR FROZEN FOOD TO CUT
EMISSIONS ACROSS THE UK COLD CHAIN**

UK COLD CHAIN IN NUMBERS / TRADE IN COLD CHAIN PRODUCTS

UK REFRIGERATED CONTAINER (REEFER) IMPORTS AND EXPORTS BY PORT

Temperature-controlled products are a strongly traded commodity world-wide. This graphic shows the number of individual product laden refrigerated shipping containers (TEU*) leaving and entering the UK each year and from/to which UK Port. Figures are for container shipping only and do not include refrigerated container trade via ferry.

Imports  Exports 

1 LONDON GATEWAY

2024	
183,873	32,253
Change from 2023	
+9,692	-1028

2 SOUTHAMPTON

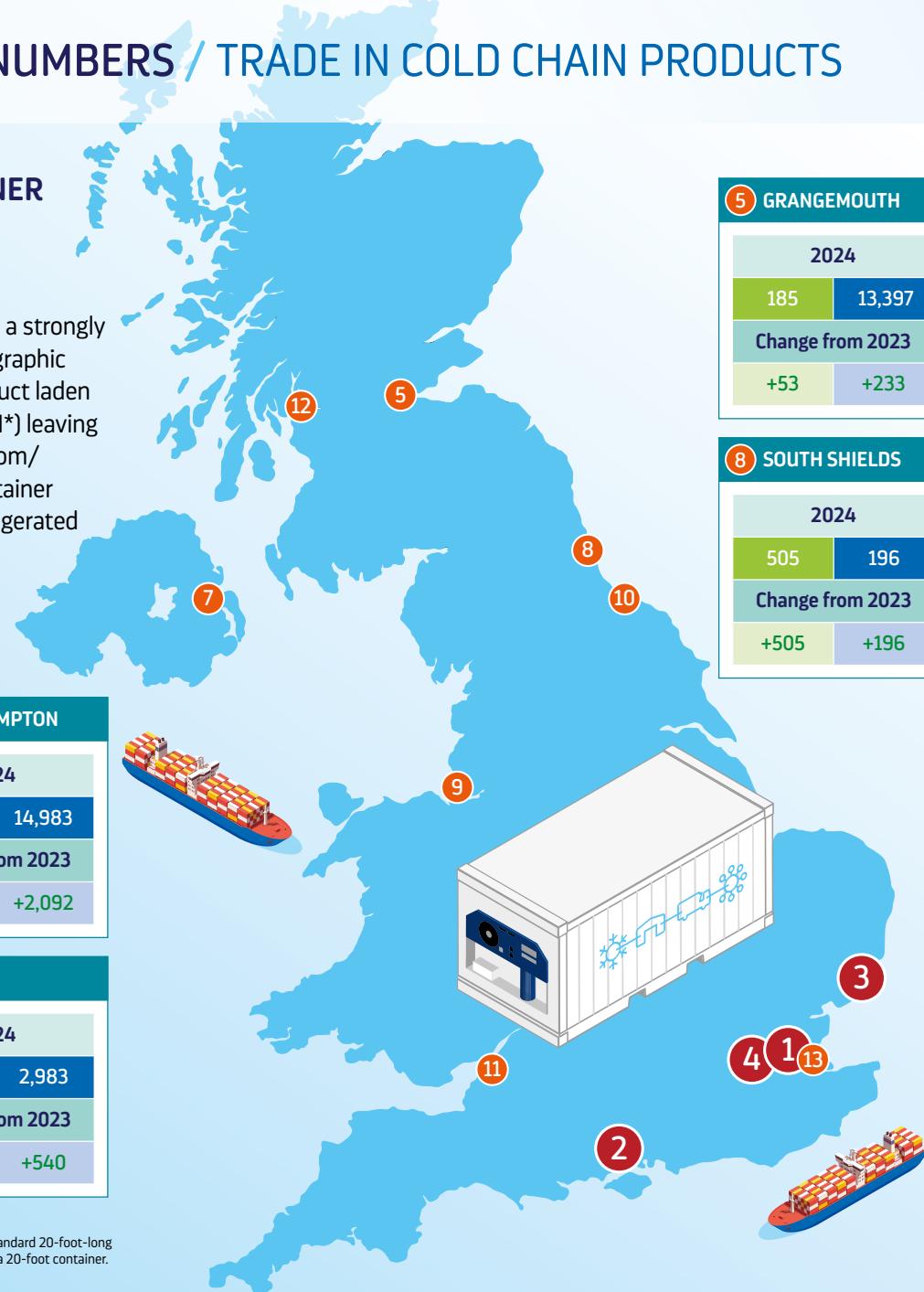
2024	
78,085	14,983
Change from 2023	
+6,139	+2,092

3 FELIXSTOWE

2024	
71,005	16,030
Change from 2023	
+15,706	-2105

4 TILBURY

2024	
20,555	2,983
Change from 2023	
-1098	+540



5 GRANGEMOUTH

2024	
185	13,397
Change from 2023	
+53	+233

6 OTHER UK PORTS

2024	
7,263	4,318
Change from 2023	
-154	-919

7 BELFAST

2024	
1,293	12,970
Change from 2023	
+374	+1,457

8 SOUTH SHIELDS

2024	
505	196
Change from 2023	
+505	+196

9 LIVERPOOL

2024	
6,016	4,646
Change from 2023	
-444	-122

10 TEESPORT

2024	
4,276	542
Change from 2023	
+157	-471

11 PORTBURY

2024	
20	1,461
Change from 2023	
+16	+217

12 GREENOCK

2024	
140	812
Change from 2023	
-154	+526

13 THAMESPORT

2024	
404	0
Change from 2023	
+403	-25

ALL UK PORTS

2024	
373,620	104,591
Change from 2023	
+31,195	+591

*Twenty-Foot Equivalent Unit: A TEU refrigerated container is a standard 20-foot-long refrigerated container, where one TEU represents the capacity of a 20-foot container.

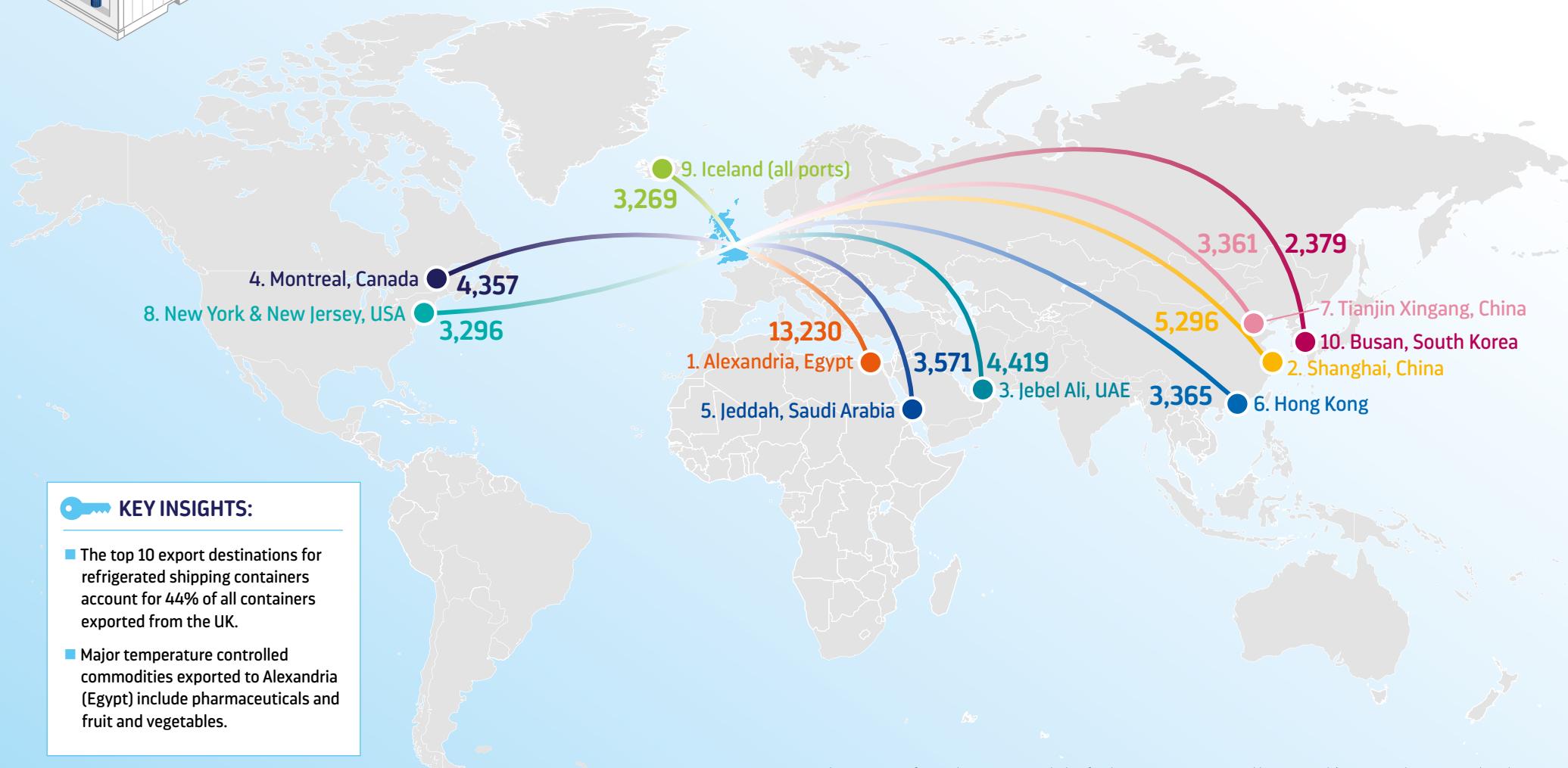
Data: © World Liner Data Ltd / Container Trades Statistics Ltd, London, 2025. Volumes may be restricted where a Safety Mechanism applies.

UK COLD CHAIN IN NUMBERS / TRADE IN COLD CHAIN PRODUCTS



TOP 10 PORT DESTINATIONS FOR UK REFRIGERATED CONTAINER EXPORTS

This map examines the Top 10 individual port destinations for the export of refrigerated shipping containers (TEU*) from the UK in 2024.



KEY INSIGHTS:

- The top 10 export destinations for refrigerated shipping containers account for 44% of all containers exported from the UK.
- Major temperature controlled commodities exported to Alexandria (Egypt) include pharmaceuticals and fruit and vegetables.

*Twenty-Foot Equivalent Unit: A TEU refrigerated container is a standard 20-foot-long refrigerated container, where one TEU represents the capacity of a 20-foot container.

Data: © World Liner Data Ltd / Container Trades Statistics Ltd, London, 2025. Volumes may be restricted where a Safety Mechanism applies.

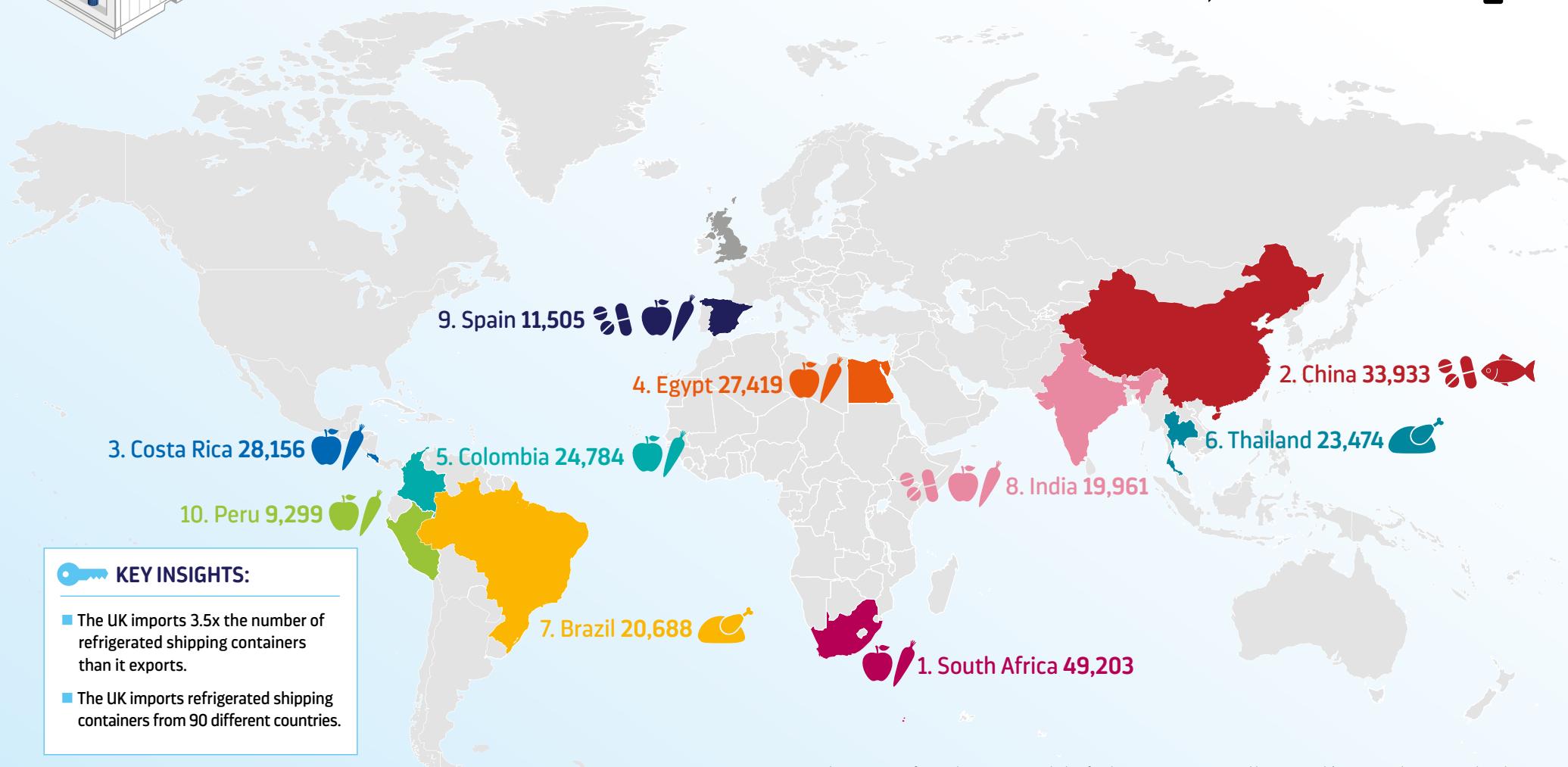
UK COLD CHAIN IN NUMBERS / TRADE IN COLD CHAIN PRODUCTS



TOP 10 IMPORT NATIONS FOR UK REFRIGERATED CONTAINER TRADE

This map details the top 10 countries of departure for **UK imports** of refrigerated shipping containers and the number of containers traded (TEU*) and the largest traded perishable commodities.

KEY: Pharmaceuticals Seafood
 Fruit & Vegetables Meat Dairy



KEY INSIGHTS:

- The UK imports 3.5x the number of refrigerated shipping containers than it exports.
- The UK imports refrigerated shipping containers from 90 different countries.

*Twenty-Foot Equivalent Unit: A TEU refrigerated container is a standard 20-foot-long refrigerated container, where one TEU represents the capacity of a 20-foot container.

Data: © World Liner Data Ltd / Container Trades Statistics Ltd, London, 2025.
Volumes may be restricted where a Safety Mechanism applies.

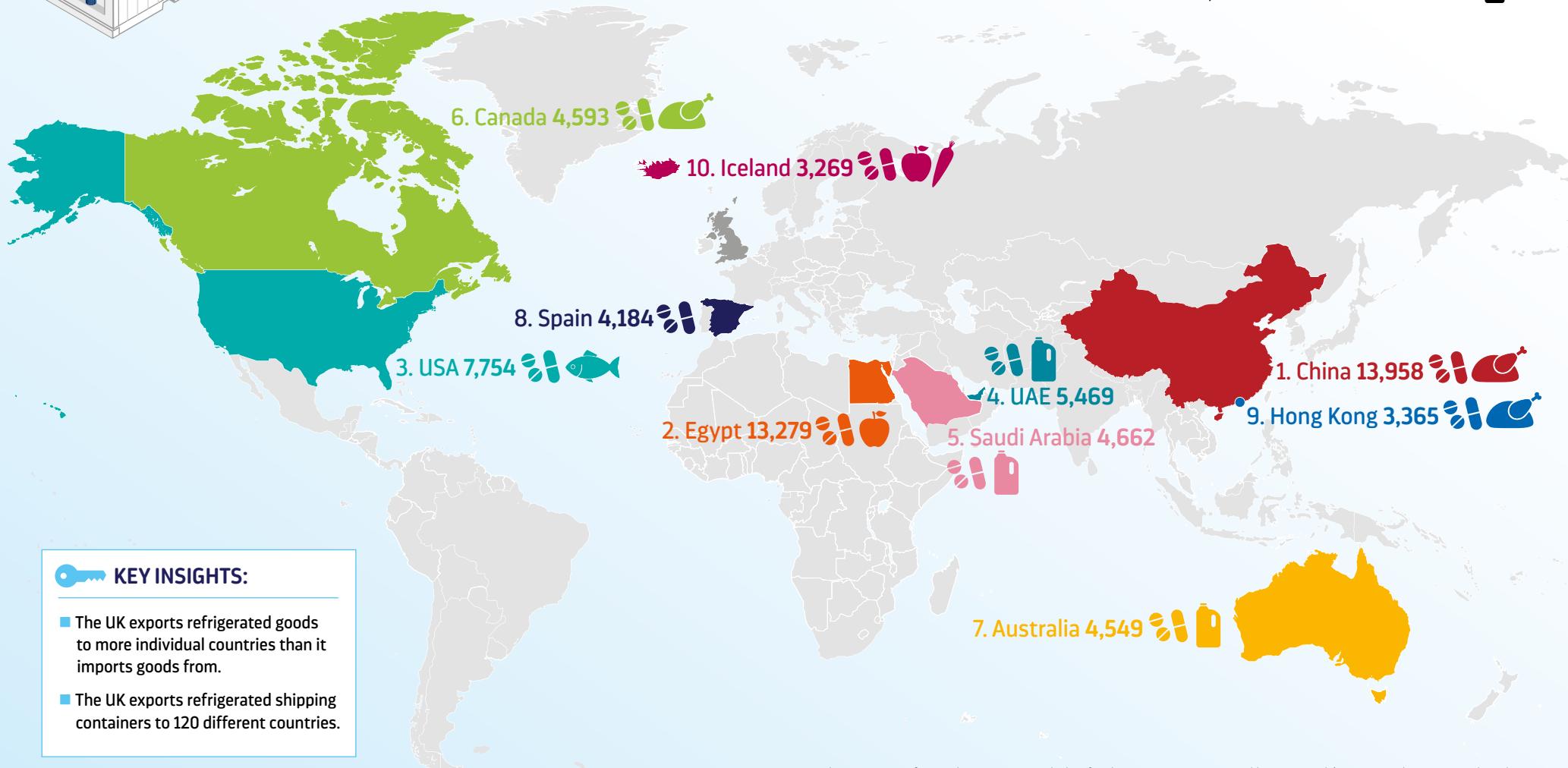
UK COLD CHAIN IN NUMBERS / TRADE IN COLD CHAIN PRODUCTS



TOP 10 EXPORT NATIONS FOR UK REFRIGERATED CONTAINER TRADE

This map details the top 10 destinations for **UK exports** of refrigerated shipping containers and the number of containers traded (TEU*) and the largest traded commodities.

KEY:  Pharmaceuticals  Seafood
 Fruit & Vegetables  Meat  Dairy



KEY INSIGHTS:

- The UK exports refrigerated goods to more individual countries than it imports goods from.
- The UK exports refrigerated shipping containers to 120 different countries.

*Twenty-Foot Equivalent Unit: A TEU refrigerated container is a standard 20-foot-long refrigerated container, where one TEU represents the capacity of a 20-foot container.

Data: © World Liner Data Ltd / Container Trades Statistics Ltd, London, 2025.
Volumes may be restricted where a Safety Mechanism applies.

COLD CHAIN REPORT 2026 / PART 2: PEOPLE IN THE UK COLD CHAIN

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- 25 AGE DEMOGRAPHICS**
- 26 FULL TIME Vs PART TIME WORKERS**
- 27 THE 24/7 COLD CHAIN**
- 28 NATIONALITY OF WORKERS**
- 29 COMPANIES APPROACH TO FLEXIBLE WORKING**
- 30 VACANCIES AND CHURN**
- 31 DIFFICULTY OF RECRUITING NEW STAFF**
- 32 RECRUITMENT INITIATIVES**
- 33 INDUSTRIAL REFRIGERATION ENGINEERS**
- 34 TRANSPORT REFRIGERATION ENGINEERS**
- 35 THANK YOU TO OUR HARDWORKING COLLEAGUES**

PEOPLE IN THE COLD CHAIN INTRODUCTION

Each year in the Cold Chain Report our ambition is to introduce new research and statistics on what makes our industry tick. Following on from last year's groundbreaking project to determine the economic benefit of the UK cold chain industry (see Part 3), in January 2025 we embarked on an initiative with specialist logistics consultancy Aricia Consulting. The aim is to shed light on the people who make up the cold chain industry, and without whom the nation's supply of food, pharmaceuticals and other perishable products would grind to a halt.

This first of its kind study began with a major survey of Cold Chain Federation members seeking information on diversity, shift patterns and recruitment practices across staff in 11 categories from Directors, through to cold store operatives, drivers and specialist staff. With responses from companies across the cold chain spectrum representing over 8,000 employees, the results provide a comprehensive health check on the makeup of the workforce powering our sector.

Elements of our *People in the Cold Chain* survey make challenging reading. Just 14% of cold chain workers are female and only 14% are under the age of 30 – both below the national average. Furthermore, seven out of 10 job categories were classified as 'difficult' or worse to recruit new staff into.

Other elements are enlightening, revealing the importance of night workers to the UK cold chain, 28% of job roles are either night shifts or involve an element of night working.

There's positivity too, the churn rate of staff in the cold chain (23%) is well below the national average, and we are making a real difference supporting initiatives to provide jobs to ex forces personnel (61% of companies surveyed) and reformed prisoners (33% of companies surveyed).

These results provide cold chain businesses with a wealth of benchmarks and data to evaluate their own strengths and weaknesses, whilst providing the Cold Chain Federation with an action plan on how we can promote diversity and lessen recruitment challenges among our members.

Our ambition is to repeat this research in three years to see, together, what progress we have made.

PEOPLE IN THE UK COLD CHAIN / ABOUT THE SURVEY RESPONSES AND STAFF NUMBERS

ABOUT THE SURVEY RESPONSES

The research presented in the following pages is based on a survey of Cold Chain Federation members undertaken in early 2025.

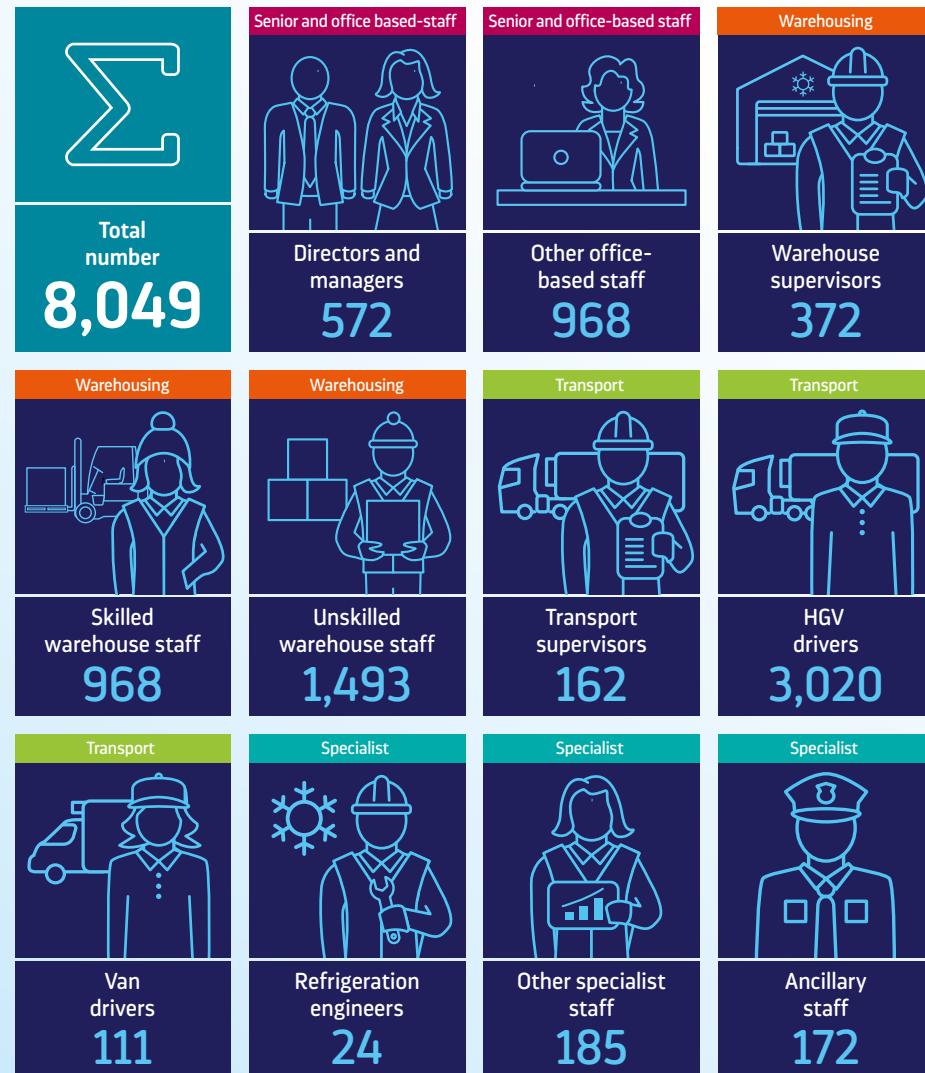
Responses were received from cold chain operations covering 41 sites across England, Wales and Northern Ireland. Companies responding included sites operating chilled and frozen logistics services (cold storage and/or distribution) from third-party logistics, food service, wholesale and private, or internal, logistics operations. Retail operators were not included.

Where a company also provided ambient logistics services and staff roles could not be differentiated between cold chain and non-cold chain, workers in the cold chain were determined by applying a corrective factor based on the % of cold storage or refrigerated vehicles in the total operation. For example, if a site had 100 staff, but 20% of their storage was ambient, 20 staff were removed from the results. This brought total numbers of staff surveyed down from 11,342 to 8,049 but allows a greater confidence in the findings presented.

JOB ROLE DEFINITIONS

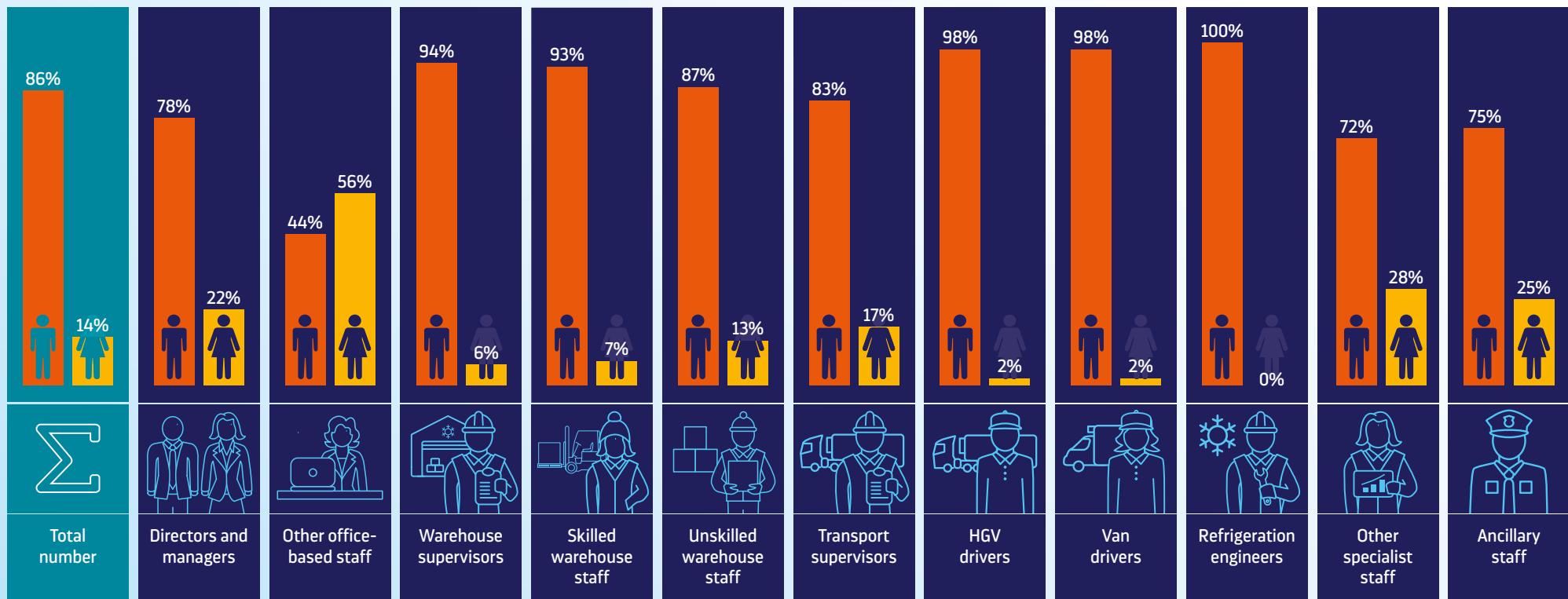
- **Directors & Managers:** All directors and managers based on site.
- **Other office-based staff:** All clerks and assistants including stock control and transport.
- **Warehouse supervisors:** Operational staff who are working in the warehouse and managing other staff.
- **Skilled warehouse staff:** Examples include fork-lift truck drivers and other specially trained staff.
- **Unskilled warehouse staff:** Warehouse operatives with minimal training who are only using handling equipment at ground-level.
- **Transport supervisors:** Operational staff below management level but who are managing other staff.
- **HGV drivers:** Drivers who require HGV qualifications to carry out their roles.
- **Van drivers:** Drivers who require only car licences to carry out their roles.
- **Refrigeration engineers:** Engineers and technicians installing, repairing and maintaining refrigeration equipment.
- **Other specialist staff:** Including other engineers and technicians, veterinarians.
- **Ancillary staff:** All ancillary staff including cleaners, security guards.

NUMBER OF STAFF WORKING IN COLD CHAIN OPERATIONS



PEOPLE IN THE UK COLD CHAIN / GENDER OF STAFF WORKING IN COLD CHAIN OPERATIONS

KEY: █ % Male █ % Female



KEY INSIGHTS:

- 14% of workers in the cold chain are female.
- The only category for which there were more women than men was office-based staff.
- In the cold store, unskilled warehouse staff are more likely to be female than in the supervisory and skilled warehouse roles.
- Only 2% of either HGV drivers or van drivers working in the cold chain were female.
- There were no female refrigeration engineers (although the sample size was small).

COMPARISON WITH WIDER WORKFORCE:

- 14% of women working in cold chain operations is slightly less than other sectors within Logistics at 17%.
- 22% of directors and managers working in the cold chain were female, this compares with 21% for the whole Logistics, Transport & Storage sector.

PEOPLE IN THE UK COLD CHAIN / AGE DEMOGRAPHICS

KEY: % Aged under 30 % Aged 30-44 % Aged over 45

Total number	14%	38%	47%
Directors and managers	3%	38%	59%
Other office-based staff	26%	39%	35%
Warehouse supervisors	10%	48%	42%
Skilled warehouse staff	20%	43%	36%
Unskilled warehouse staff	23%	40%	37%
Transport supervisors	17%	45%	38%
HGV drivers	6%	35%	59%
Van drivers	16%	29%	55%
Refrigeration engineers	29%		71%
Other specialist staff	23%	35%	41%
Ancillary staff	12%	32%	56%

KEY INSIGHTS:

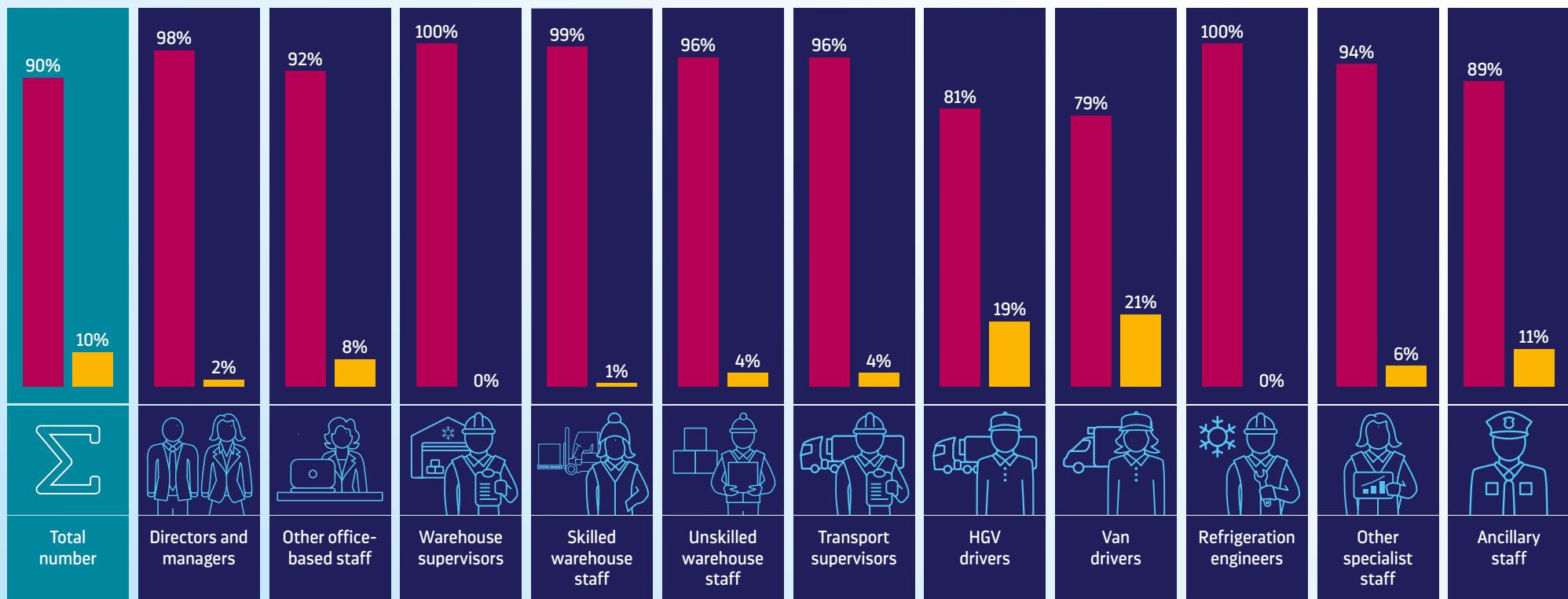
- Over 50% of directors and managers, HGV drivers, ancillary staff and van drivers are over 45.
- There were no refrigeration engineers under 30 in the survey and only 6% of HGV drivers working in the cold chain are under 30.
- More than 7 out of 10 refrigeration engineers were over 45 years old (in a small sample size of 24).

COMPARISON WITH WIDER WORKFORCE:

- Overall 47% of employees working in the cold chain were over 45 years old, which is very similar to that for Logistics occupations generally (46%) and the whole UK workforce (44%).
- Under 30s represent 14% of all surveyed staff in the cold chain, compared with 21% for the whole UK workforce.
- 3% of directors and managers in the survey are under 30 compared with over 10.5% across the whole UK workforce.

PEOPLE IN THE UK COLD CHAIN / FULL TIME Vs PART TIME WORKERS

KEY: █ Full time █ Part time



KEY INSIGHTS:

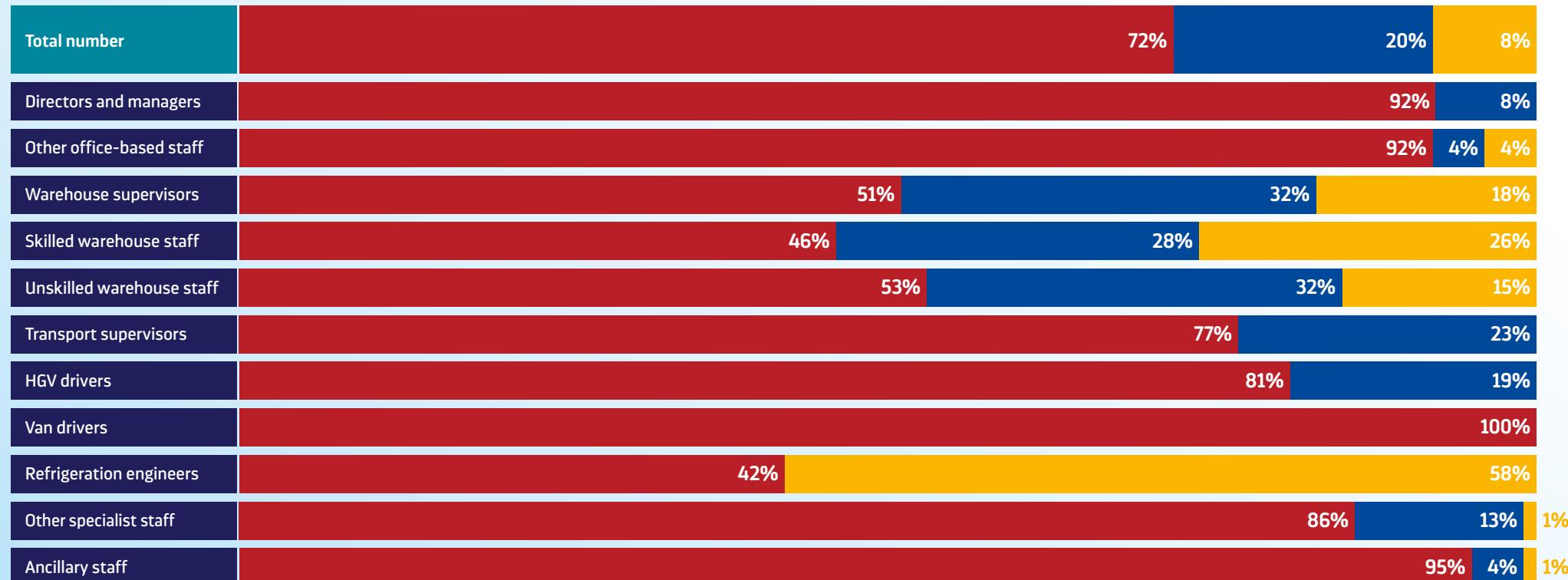
- 10% of cold chain staff work part time compared with 16% in all logistics occupations and 25% for the whole UK workforce.
- There are no refrigeration engineers who work part time (smaller number in total), and virtually no warehouse supervisors (less than half a percent work part time).
- The job profile with the largest proportion of part-timers is HGV drivers at 19% and van drivers at 21% (much smaller number of van drivers).

COMPARISON WITH WIDER WORKFORCE:

- At 19%, the percentage of part time refrigerated HGV drivers is much higher than the wider haulage industry (6%).
- At 4%, the percentage of part time unskilled warehouse staff was also much lower than the wider warehousing sector (21%).

PEOPLE IN THE UK COLD CHAIN / THE 24/7 COLD CHAIN

KEY: % Day shift % Night shift % Mixed shifts



KEY INSIGHTS:

- Half of all warehouse staff in the cold chain don't work a standard day shift, with over 30% of warehouse staff working nights.
- Overall 72% of staff in the cold chain worked Days, 20% Nights and 8% a variety of other shifts*.

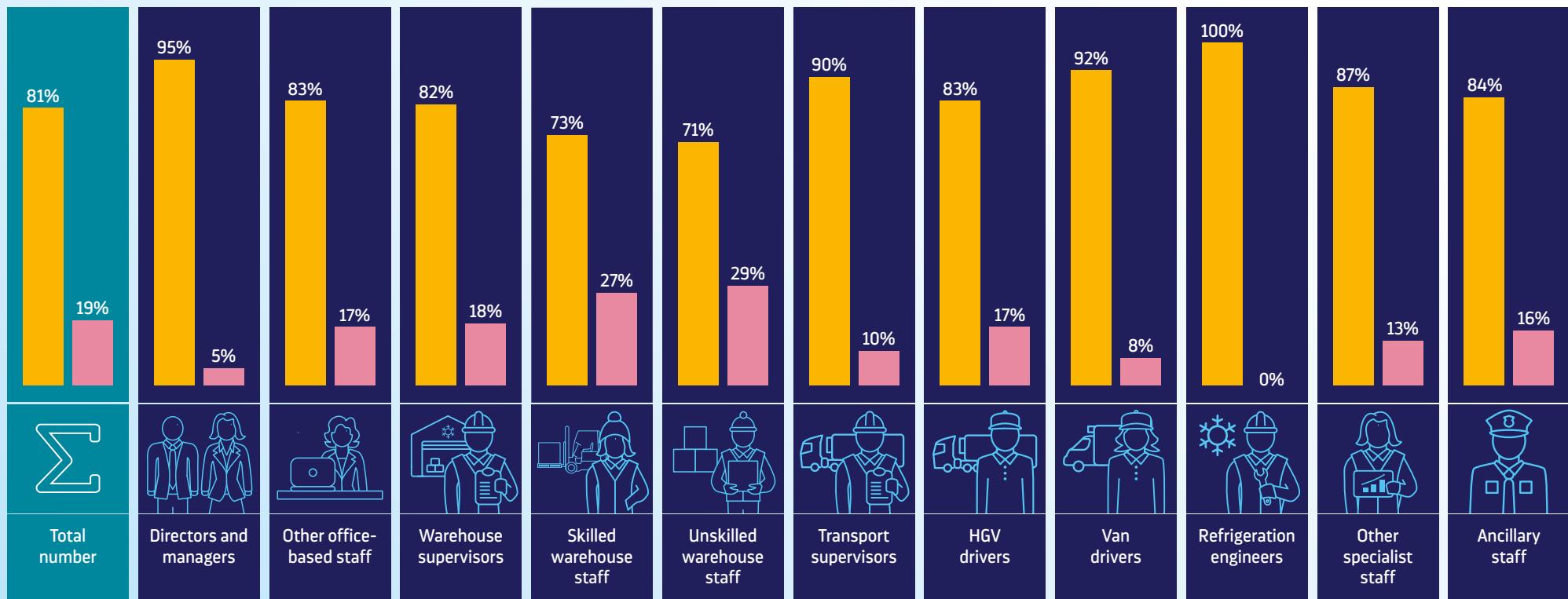
*Other shifts operated by respondents included (in order of popularity use): 4 on 4 off, Backshifts 2pm-10pm, Earlies 6am-2pm, Mid-shifts eg 10am-6.30pm and Rotating shifts, among others.

SEASONAL PEAKS:

- The months of May, November and December see the highest demand for unskilled warehouse staff.
- Although the overall number of seasonal staff required is low overall compared with permanent staff, for individual operations the impact can be acute with the need to find up to an extra 2.5x the number of regular skilled staff.

PEOPLE IN THE UK COLD CHAIN / NATIONALITY OF WORKERS

KEY:  UK nationals  Non-UK nationals



KEY INSIGHTS:

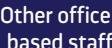
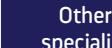
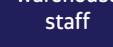
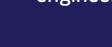
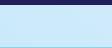
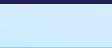
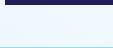
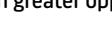
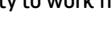
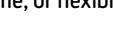
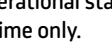
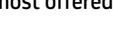
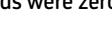
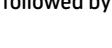
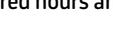
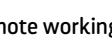
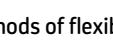
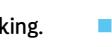
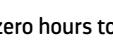
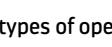
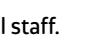
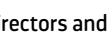
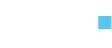
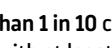
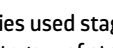
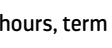
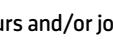
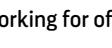
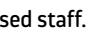
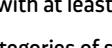
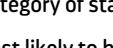
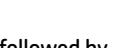
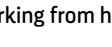
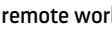
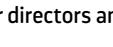
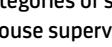
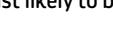
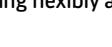
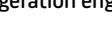
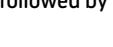
- 81% of all staff in the cold chain in the survey were UK citizens, with 81% of HGV drivers and 71% of unskilled warehouse staff.
- Unskilled warehousing staff are most likely to be non-UK citizens (29%).

- Special requests for data from the ONS showed consistency with these figures for UK citizens in the wider sector of HGV drivers (84%) and warehouse operatives (73%) in 2024.

PEOPLE IN THE UK COLD CHAIN / COMPANIES APPROACH TO FLEXIBLE WORKING

KEY:  Offered for the role by at least one surveyed business

 Not offered for the role by any surveyed business

Hybrid										
WFH/Remote										
Flexitime										
Zero hours										
Staggered hours										
Term time only										
Compressed hours										
Job share										
Type of flexible working										
Directors and managers										
Other office-based staff										
Warehouse supervisors										
Skilled warehouse staff										
Unskilled warehouse staff										
HGV drivers										
Van drivers										
Refrigeration engineers										
Other specialist staff										
Ancillary staff										

KEY INSIGHTS:

- Office staff and directors have much greater opportunity to work from home, or flexibly than warehouse and vehicle operators.
- Hybrid and working from home/remote working were the most used methods of flexible working.
- More than 55% of companies had hybrid working for directors and managers.
- A third of companies used hybrid working for office-based staff.
- More than 1 in 5 companies had working from home or remote working for directors and managers and other office-based staff.
- For operational staff the most offered methods were zero hours followed by staggered hours and term time only.
- 1 in 6 companies offered zero hours to some types of operational staff.
- More than 1 in 10 companies used staggered hours, term time only, compressed hours and/or job share with at least one category of staff.
- The categories of staff least likely to be working flexibly are refrigeration engineers followed by warehouse supervisors.
- The companies surveyed had received 175 requests for flexible working in the past year. This equates to 1 per 65 members of permanent staff.

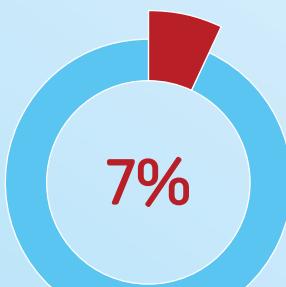
PEOPLE IN THE UK COLD CHAIN / VACANCIES AND CHURN

As of Spring 2025

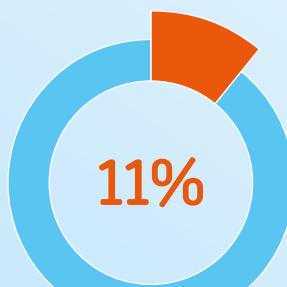


jobs in the cold chain were a vacancy, mirroring the average across all sectors

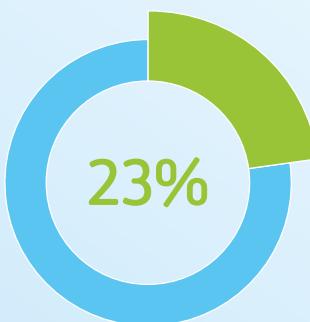
CHURN AS PERCENTAGE OF ALL CURRENT STAFF



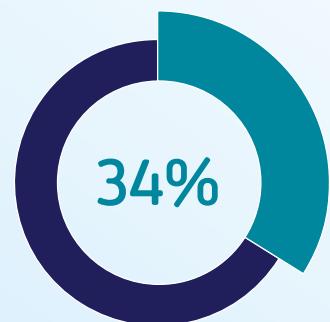
of permanent staff have joined in the past three months



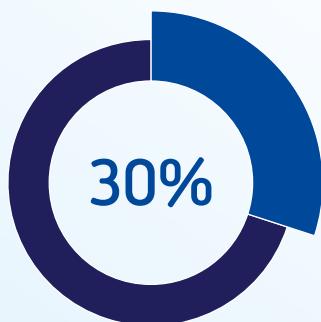
of permanent staff have joined in the past 6 months



of permanent staff have joined in the past 12 months



average annual turnover – or churn – for UK workers



average annual turnover – for wider logistics sector



KEY INSIGHTS AND COMPARISON WITH WIDER WORKFORCE:

Companies in the Cold Chain Federation survey had a very similar vacancy rate to the wider job market.

The annual churn rate for staff in the cold chain is lower than for the wider logistics sector and total UK workforce.

PEOPLE IN THE UK COLD CHAIN / DIFFICULTY OF RECRUITING NEW STAFF

AVERAGE DIFFICULTY SCORE BY JOB ROLE

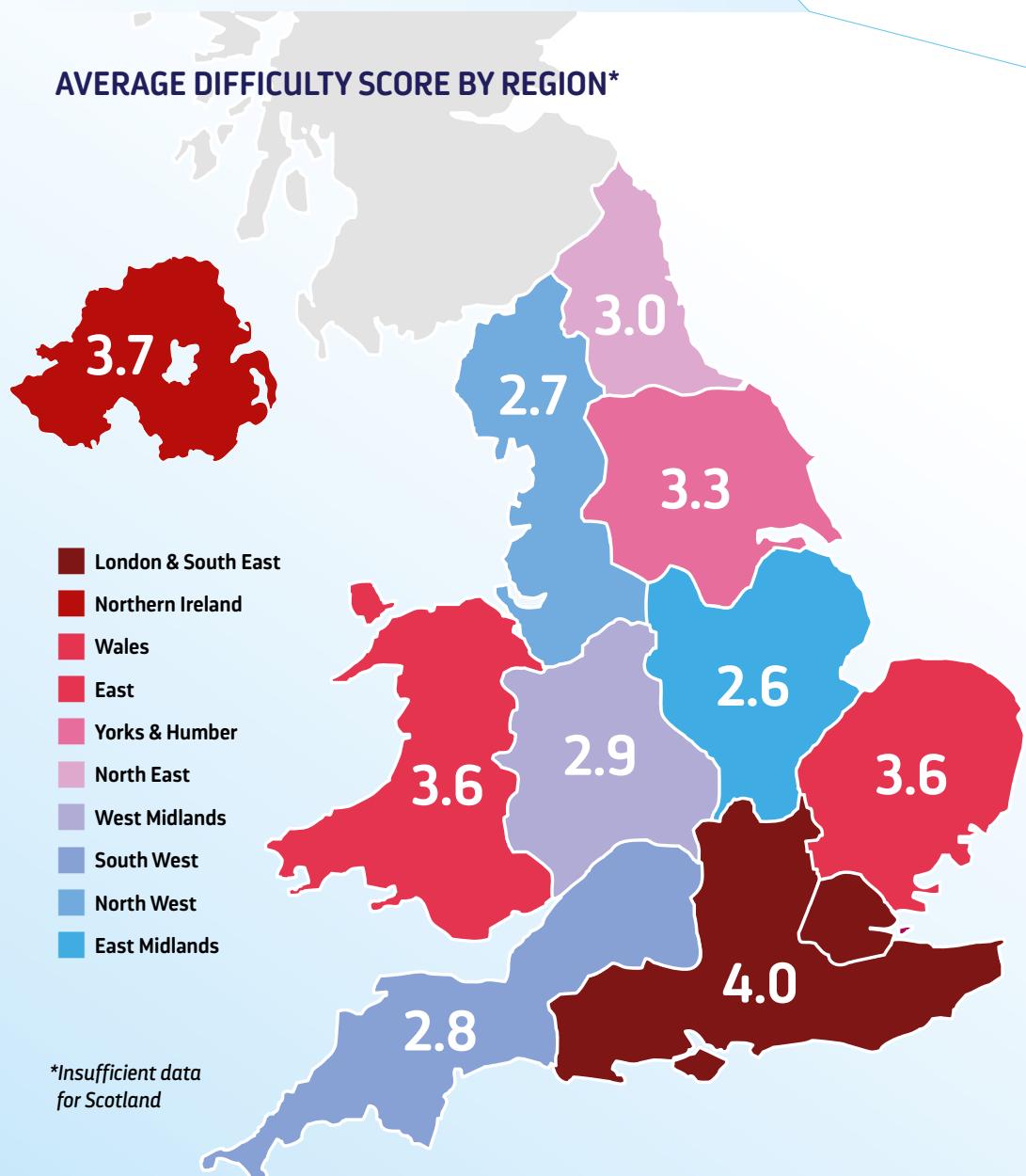
Respondents were asked: How difficult is it to recruit to the following job profiles?
1 = Very Easy, 2 = Easy, 3 = Difficult, 4 = Very Difficult, 5 = Virtually Impossible

				
Refrigeration engineers	Other specialist staff	Directors and managers	Skilled warehouse staff	Warehouse supervisors
4.8	3.9	3.4	3.1	3.1
				
Other office-based staff	HGV drivers	Van drivers	Unskilled warehouse staff	Ancillary staff
3.0	3.0	2.3	2.3	2.1

KEY INSIGHTS:

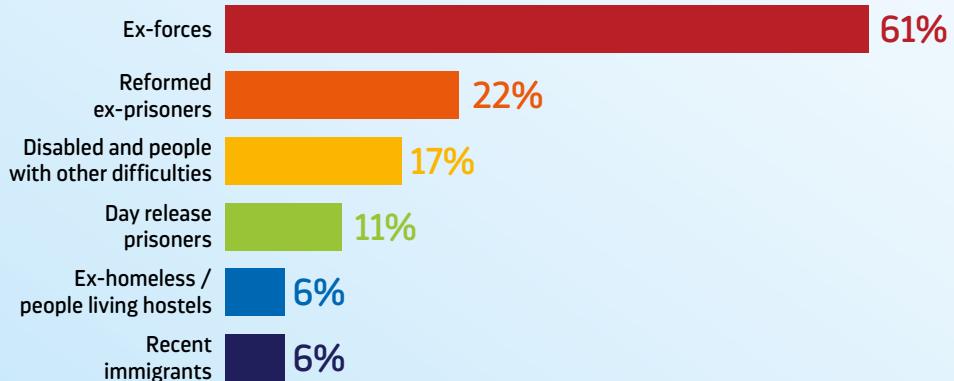
- Refrigeration engineers and specialist staff are the hardest to recruit.
- 7 out of 10 job categories were 'difficult to recruit' or worse, including HGV drivers, supervisors and directors/managers.
- Unskilled warehouse staff were reported to be less of a challenge to recruit.

AVERAGE DIFFICULTY SCORE BY REGION*



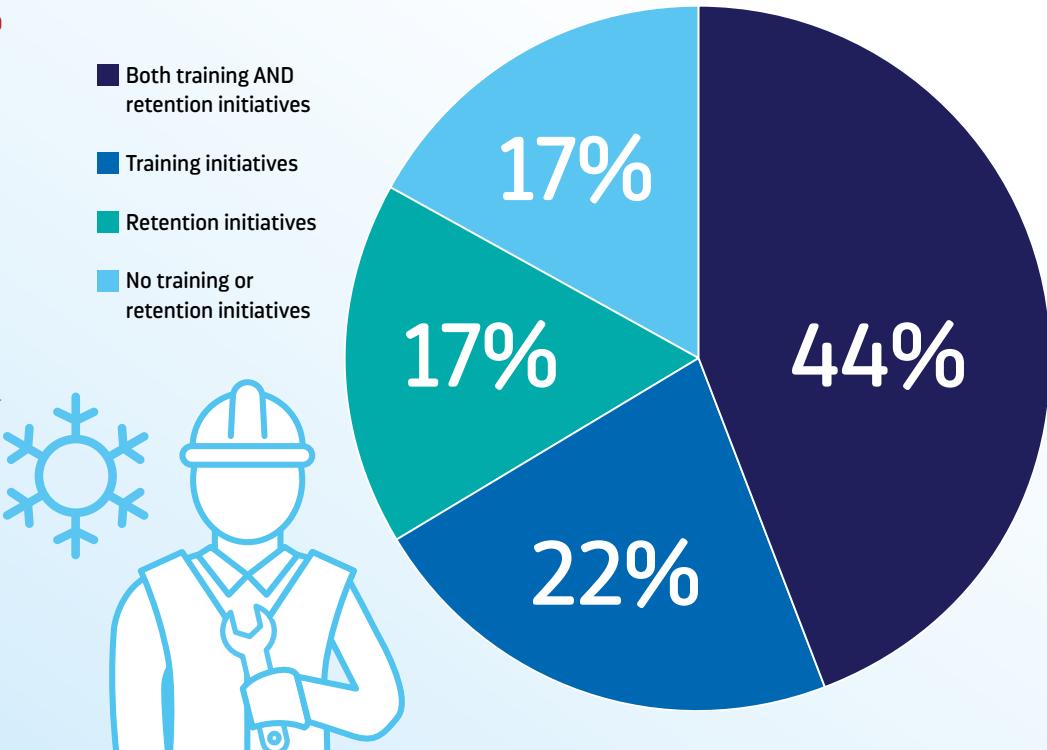
PEOPLE IN THE UK COLD CHAIN / RECRUITMENT INITIATIVES

COMPANIES REPORTING INITIATIVES FOR RECRUITMENT



COMPANIES REPORTING INITIATIVES FOR TRAINING AND STAFF RETENTION

- Both training AND retention initiatives
- Training initiatives
- Retention initiatives
- No training or retention initiatives



KEY INSIGHTS:

- Over 60% of survey companies were actively seeking to employ ex-Forces personnel – this was the initiative most employed by respondents.
- One third of CCF companies who participated in the survey had initiatives to employ reformed ex-prisoners or day release prisoners.
- 1 in 6 companies in the survey had initiatives to recruit more people with disabilities.
- Nearly 45% of respondents had initiatives to broaden the demographics of their workforces, with young people being the group where the most initiatives were occurring.
- More than 4 in 5 CCF companies surveyed had training or retention initiatives in place.
- Nearly 45% had initiatives in both areas.

PEOPLE IN THE UK COLD CHAIN / INDUSTRIAL REFRIGERATION ENGINEERS

Our *People in the Cold Chain* survey looked at diversity and recruitment practice across cold chain operators, however the cold chain industry relies on many other industries to support it to function. Across the next two pages we look at one of the most critical, refrigeration engineers, and how CCF members are helping to secure the next generation.

According to the Institute of Refrigeration:

- Engineering roles make up **19%** of UK jobs (around 6.3 million).
- **25%** of job adverts are engineering related.
- The UK needs approximately **1 million** more engineers by 2030, including **59,000** new ones per year.



Photos: © Star Refrigeration

BUILDING THE NEXT GENERATION OF COOLING AND HEATING ENGINEERS



STAR
REFRIGERATION

Star Refrigeration, with a team of over 130 field engineers, is committed to developing the next generation of refrigeration engineers for the cold chain. 'Developing Young People' is a core value within Star's Investors in People Platinum accreditation framework, reflecting the company's focus on tackling skills shortages, renewing an ageing workforce and preparing employees with the knowledge to drive low-carbon technologies and digital innovation to safeguard the future of the cold chain. Star's Programmes also recognise the need to widen the talent pool by engaging women, schools and underrepresented groups.

- **25%** of Star's current management team began their careers as engineering apprentices or trainees.
- **95%** of apprentices complete their three year training and nearly all of them have been offered permanent positions.
- **15 years** is the average period of employment for Star staff as they aim to retain the best in the business.



PEOPLE IN THE UK COLD CHAIN / TRANSPORT REFRIGERATION ENGINEERS

Major recruitment challenges experienced by the transport refrigeration sector include an aging workforce, a limited pool of qualified candidates, high competition for talent, and regional disparities. As many experienced engineers approach retirement, the available talent pool shrinks, and the highly specialised nature of transport refrigeration engineering further limits the number of suitable candidates.

To address the recruitment challenges in the transport refrigeration sector, Thermo King UK is implementing several targeted strategies for developing a skilled workforce to secure the future of the transport refrigeration sector.

THERMO KING UK APPRENTICES PROGRAMME



As part of Thermo King's commitment to developing future talent, they launched the first dedicated UK Transport Refrigeration Apprenticeship. The City of Liverpool Business College serves as a delivery partner, with the first cohort commencing the new three-year programme in 2025.



Photo: © Thermo King UK

THERMO KING UK LEARNING EXPERIENCE

Supporting both internal development and upskilling efforts, Thermo King's Centre of Excellence offers over 20 industry-leading courses spanning basic refrigeration principles to advanced multi-temperature and electric unit systems. Recognised as the gold standard in the sector, it is expected to deliver more than 10,000 engineering training hours annually.

CAREER PATHS FOR SERVICE ENGINEERS AT THERMO KING UK

To support ongoing retention and career advancement, Thermo King provide multiple entry routes including apprentice, trainee, service-only engineer, fully qualified engineer (Thermo King or Frigoblock), and tail lift engineer. Opportunities for career growth include progression to lead engineer or technical service manager roles, as well as alternative paths in sales and technical training.



PEOPLE IN THE UK COLD CHAIN / THANK YOU TO OUR HARDWORKING COLLEAGUES



COLD CHAIN REPORT 2026 / PART 3: ECONOMIC IMPACT OF THE UK COLD CHAIN

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COLD CHAIN: THE KEY TO UNLOCKING UK ECONOMIC GROWTH

The cold chain is undoubtedly of vital importance to the UK's economy. From the employment we provide, the tax we pay and the value we add from our services, we will be a major enabler of future UK economic growth. However, until now we have lacked the evidence to demonstrate exactly what the scale of that impact is. In early 2024 the Cold Chain Federation set out on a mission to undertake a comprehensive assessment of the economic benefit of the cold chain to the UK with the help of leading consultancy Oxford Economics.

With a contribution of £14bn to UK GDP, £3.7bn tax paid and the provision of 184,000 jobs, our latest research lays bare the positive impact of businesses in the cold chain. It also goes further, detailing how cold chain businesses drive local economies and make possible the wider value derived from the products we keep safe and secure.

The results are impossible to ignore – and that is precisely the point. As the Cold Chain Federation steps up our political engagement on the issues that matter to our members, we can now talk in the language of politicians and policy makers, clearly demonstrating why the industry is of critical importance and should be supported to enable a stronger UK economy. It is a hugely pivotal moment for the cold chain industry.

We are delighted to present *The Economic Impact of the UK Cold Chain*.

ECONOMIC IMPACT OF THE UK COLD CHAIN / EXECUTIVE SUMMARY



The cold chain is crucial for the UK economy and society, ensuring the safe transportation of perishable goods, including food, pharmaceuticals, and horticultural products all the way from producers to consumers. By maintaining quality, safety, and preventing waste, the cold chain supports industries and citizens' daily lives.

Oxford Economics was commissioned by the Cold Chain Federation to quantify the economic impact of the cold chain in terms of its contributions to UK GDP, jobs, and tax revenues. The study also explores how the sector supports other key industries and international trade.

In 2023, there were approximately **34 million cubic meters** of cold chain storage and **104,000 refrigerated vehicles** operating across the UK.¹

Through these operations, the cold chain is estimated to have supported **£14 billion in gross value added, 184,000 jobs, and £3.7 billion in government tax revenues**.

The cold chain's core impact benefits all parts of the UK economy, with East Midlands, East of England, North West, and Yorkshire and the Humber seeing the biggest contributions—reflecting the sector's widespread network of storage and transport hubs.

The cold chain is also a critical enabler of UK production and international trade. In 2023, **UK manufacturers earned £53 billion in sales from chilled or frozen food, beverages, and pharmaceutical products**. Additionally, the value of **UK exports and imports for frozen and chilled goods reached £12 billion and £32 billion**, respectively.

¹ National storage estimates include the cold storage capacity from third-party logistics (3PL) and vertically integrated companies that are part of the Climate Change Agreements. Storage of other major pharmaceuticals 3PLs are included in the analysis using data from Companies House. National refrigerated vehicles data are based on CCF research.

ECONOMIC IMPACT OF THE UK COLD CHAIN / CORE ECONOMIC IMPACT OF THE COLD CHAIN IN 2023²

OVERALL:



²Totals may not sum due to rounding.

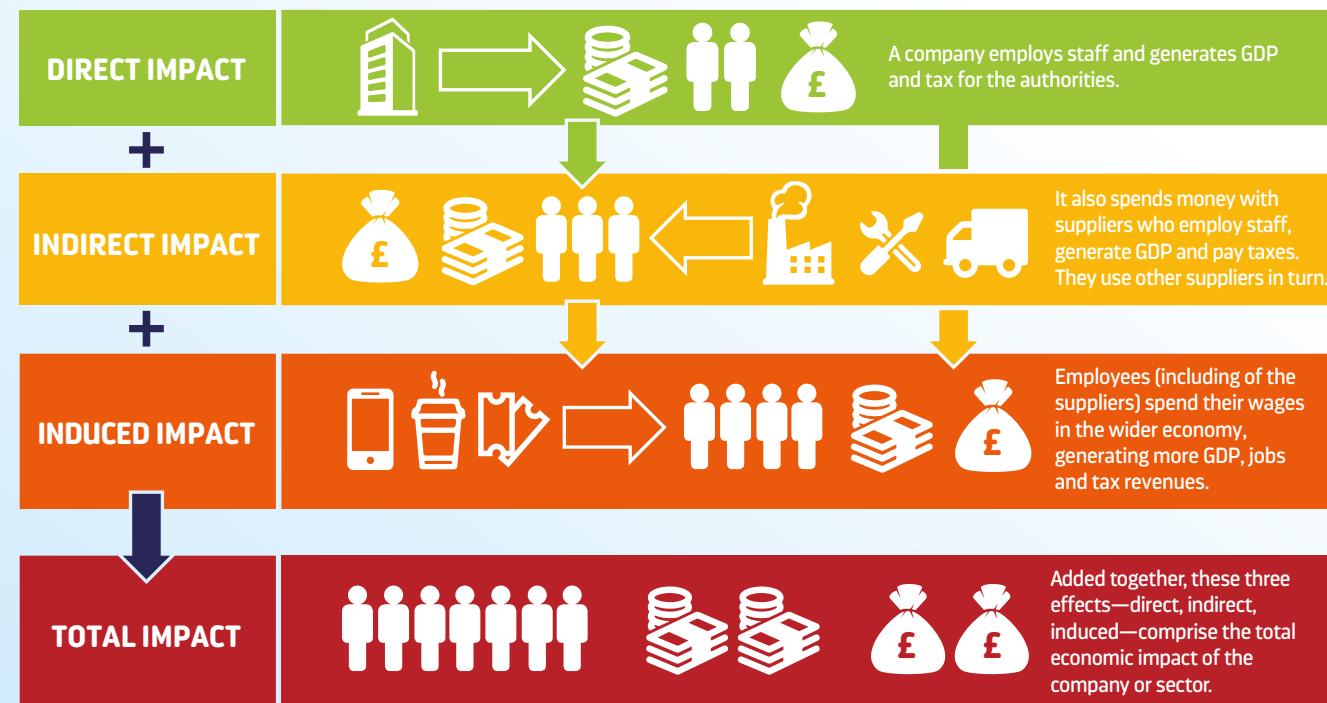
ECONOMIC IMPACT OF THE UK COLD CHAIN / THE COLD CHAIN'S CORE ECONOMIC IMPACT

Oxford Economics used a standard economic impact framework to assess the cold chain's economic impact in the UK.

Oxford Economics quantified the cold chain's total economic footprint across three channels of impact:

- **Direct impacts:** economic activity generated by the cold chain's UK operations.
- **Indirect impacts:** encompassing the activity stimulated by the cold chain's supply chain spending with UK-based suppliers.
- **Induced impacts:** capturing the impact the sector and its suppliers support through paying staff wages, who in turn spend these in the consumer economy.

TOTAL ECONOMIC IMPACT OF THE COLD CHAIN, BY CHANNEL OF IMPACT



THE UK COLD CHAIN ECONOMIC IMPACT ALONG THESE WAS ASSESSED USING THE FOLLOWING METRICS:

Gross value added

This is the contribution of an industry to the UK's gross domestic product (GDP). It is also equivalent to the sum of the sector's total compensation of employees and profits.

Employment

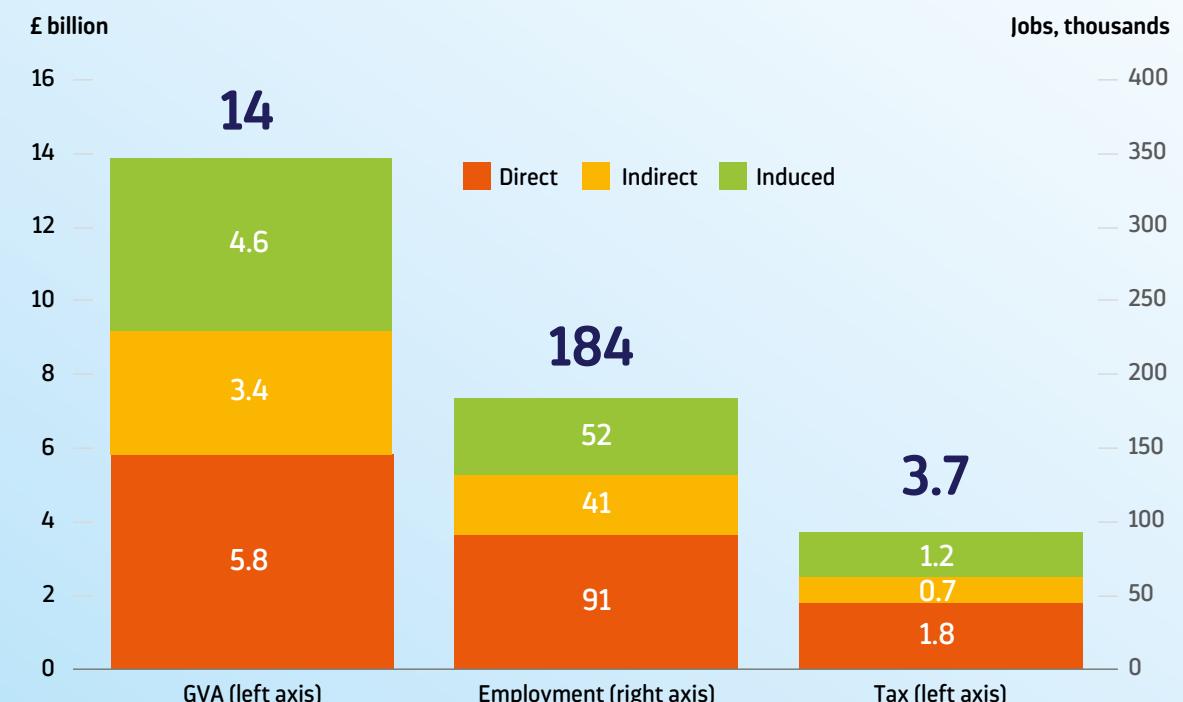
This is measured on a headcount basis for comparison with official employment data by the Office for National Statistics.

Tax

This is the total tax revenue paid to the UK government and includes corporate income tax, labour taxes, taxes on products and taxes on production.

ECONOMIC IMPACT OF THE UK COLD CHAIN / CORE ECONOMIC IMPACT OF THE COLD CHAIN

TOTAL ECONOMIC IMPACT OF THE COLD CHAIN, BY CHANNEL OF IMPACT



Source: Oxford Economics Note: Totals may not sum due to rounding.

COMBINING ALL THREE CHANNELS OF IMPACT, THE COLD CHAIN SUPPORTED:³

£14 billion
in gross value added,
equivalent to 0.5% of UK GDP

184,000 jobs
or one in every 200 UK jobs

£3.7 billion
in tax revenues

³ Totals may not sum due to rounding.

Through operating its network of refrigerated vehicles and storage facilities, the cold chain directly contributed £5.8 billion to UK GDP and employed 91,000 employees.

Via the cold chain's spending with third-party suppliers, the industry also made an estimated indirect contribution of £3.4 billion to UK GDP and supported 41,000 jobs.

Wage-financed consumption by those employed in the cold chain and in its supply chains stimulated an estimated induced contribution of £4.6 billion to UK GDP and supported 52,000 jobs.

ECONOMIC IMPACT OF THE UK COLD CHAIN / DIRECT ECONOMIC IMPACT OF THE COLD CHAIN

There are approximately **34 million cubic meters of cold chain storage** and **104,000 temperature-controlled vehicles** operating across the UK.⁴

Cold stores are mainly concentrated in the East Midlands (19%), East of England (16%), and Yorkshire and The Humber (15%).

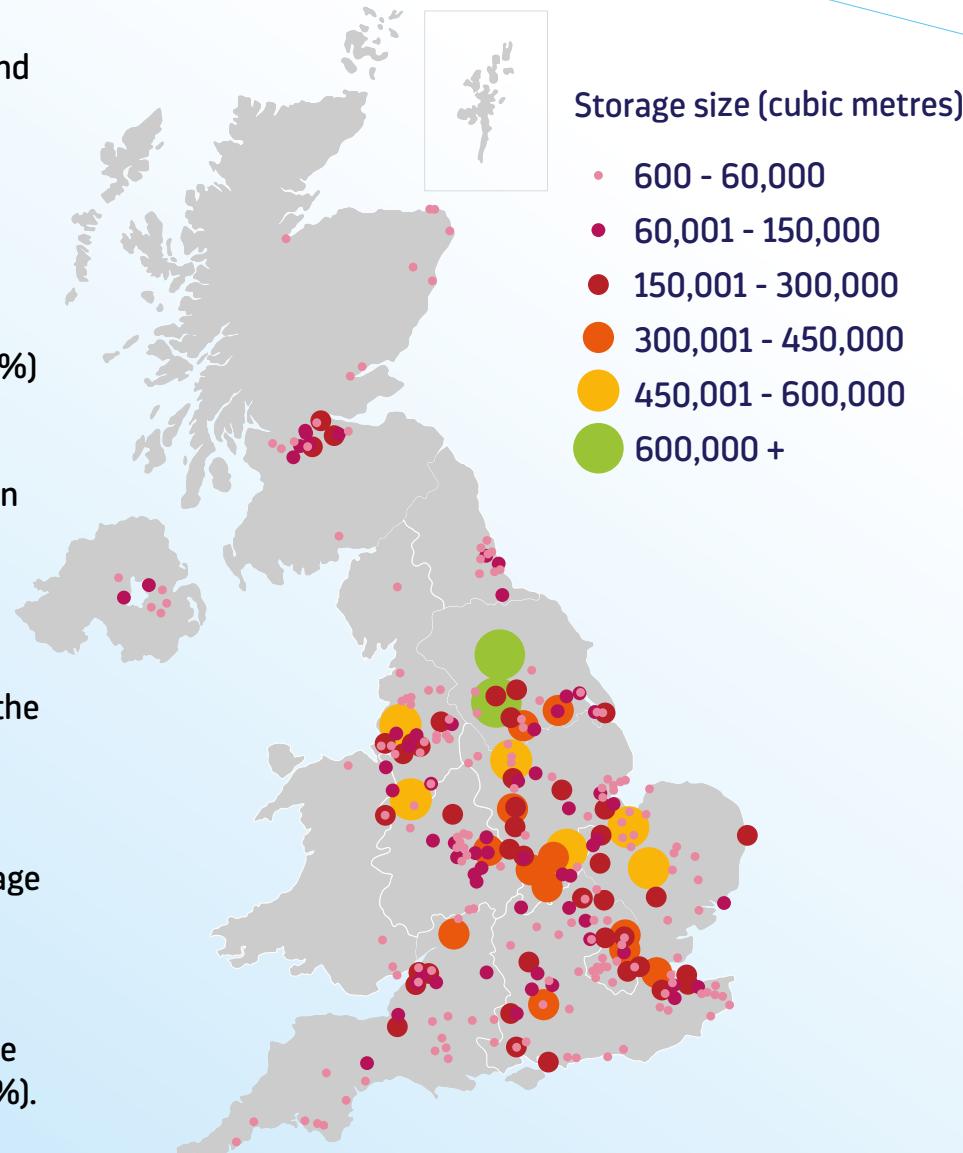
The largest concentrations of refrigerated vehicles are in the East of England (13%) and East Midlands (12%), as well as in the North West (12%) and South West (12%).

The regional distribution of the cold chain broadly aligns with trends seen in the overall transport and storage sector in recent years, where the sector is increasingly concentrated in the middle of England—an area widely known as the “**golden logistics triangle**”.⁵

Through these operations, the cold chain makes direct contributions to the UK economy in terms of GDP, employment, and tax revenues.

In 2023, the cold chain directly contributed **£5.8 billion to UK GDP** and **91,000 jobs**. This represents **6% and 5%** of the transportation and storage sector’s overall GDP and employment, respectively.

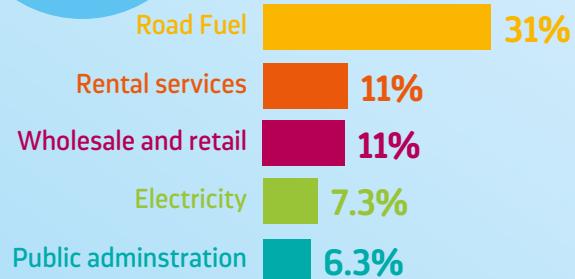
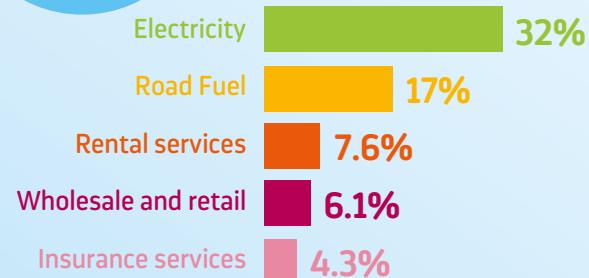
The regional distribution of the cold chain’s direct GDP contributions is concentrated in the North West (14%) and East of England (14%), while the direct jobs are highest in the East of England (14%) and East Midlands (13%).



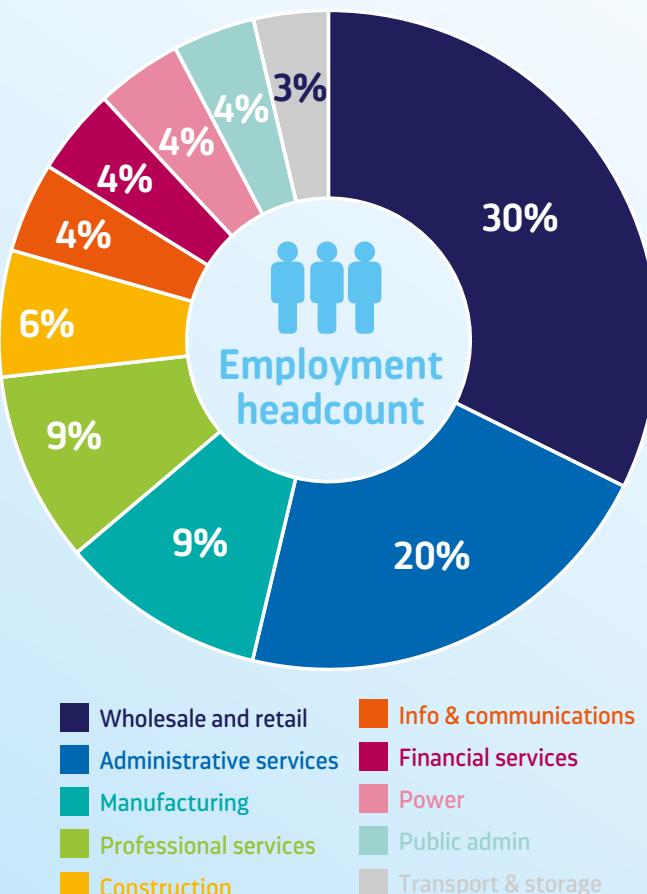
⁴ National storage estimates include the cold storage capacity from third-party logistics (3PL) and vertically integrated companies that are part of the Climate Change Agreements. Storage of other major pharmaceuticals 3PLs are included in the analysis using data from Companies House. National refrigerated vehicles data are based on CCF research.

⁵ Office for National Statistics, “The rise of the UK warehouse and the ‘golden logistics triangle’”, accessed July 2024.

ECONOMIC IMPACT OF THE UK COLD CHAIN / INDIRECT ECONOMIC IMPACT OF THE COLD CHAIN



INDIRECT EMPLOYMENT SUPPORTED BY SECTOR



Source: Oxford Economics

⁶ Excludes inter-company and inter-industry spending.

The cold chain spent **£5.7 billion** with UK-based suppliers.⁶

The largest expense for operating cold chain storage was electricity, while for temperature-controlled transportation it was road fuels—highlighting the energy-intensive nature of the sector.

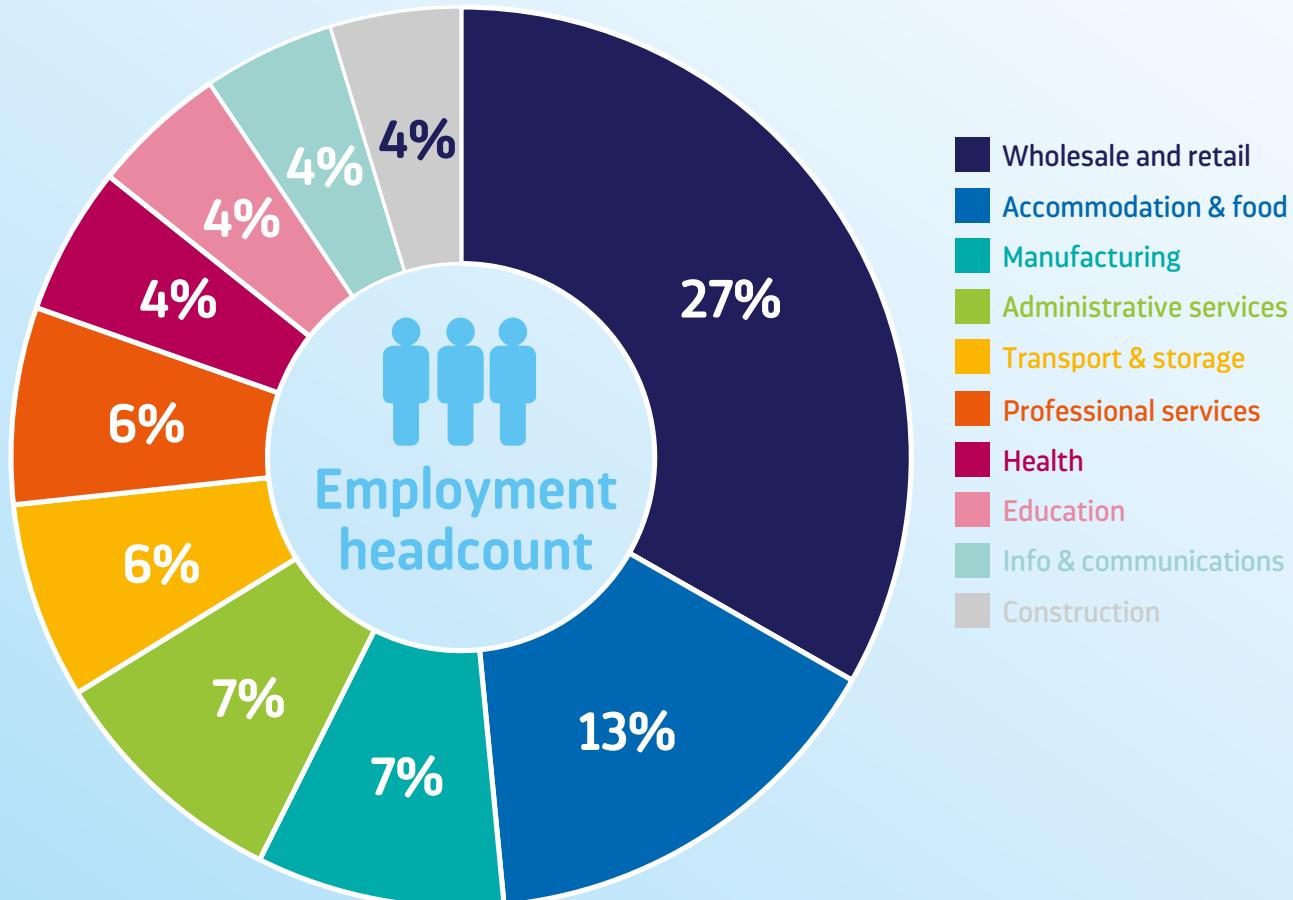
By buying goods and services from third-party suppliers, the cold chain stimulates further economic activity across the UK. Through its supply chain spending, the cold chain is estimated to have indirectly supported **£3.4 billion** gross value added and **41,000 jobs**.

The largest number of jobs supported by the cold chain's indirect channel of impact were in the retail & wholesale, administrative services, and manufacturing industries.

Similarly, the industries that received the most support in terms of GVA were retail & wholesale (17%), administrative services (15%), and financial services (12%).

ECONOMIC IMPACT OF THE UK COLD CHAIN / INDUCED ECONOMIC IMPACT OF THE COLD CHAIN

INDUCED EMPLOYMENT SUPPORTED
BY SECTOR, 2023



Source: Oxford Economics

The cold chain paid **£4.1 billion** in wages to its UK-based employees in 2023.

Through these wage payments—and supporting employment in its supply chain—the cold chain stimulates further economic activity across the UK consumer economy in sectors such as real estate, retail trade, food & beverages, finance, and retail. These consumer-facing sectors subsequently stimulate further economic activity through their own supply chain spending.

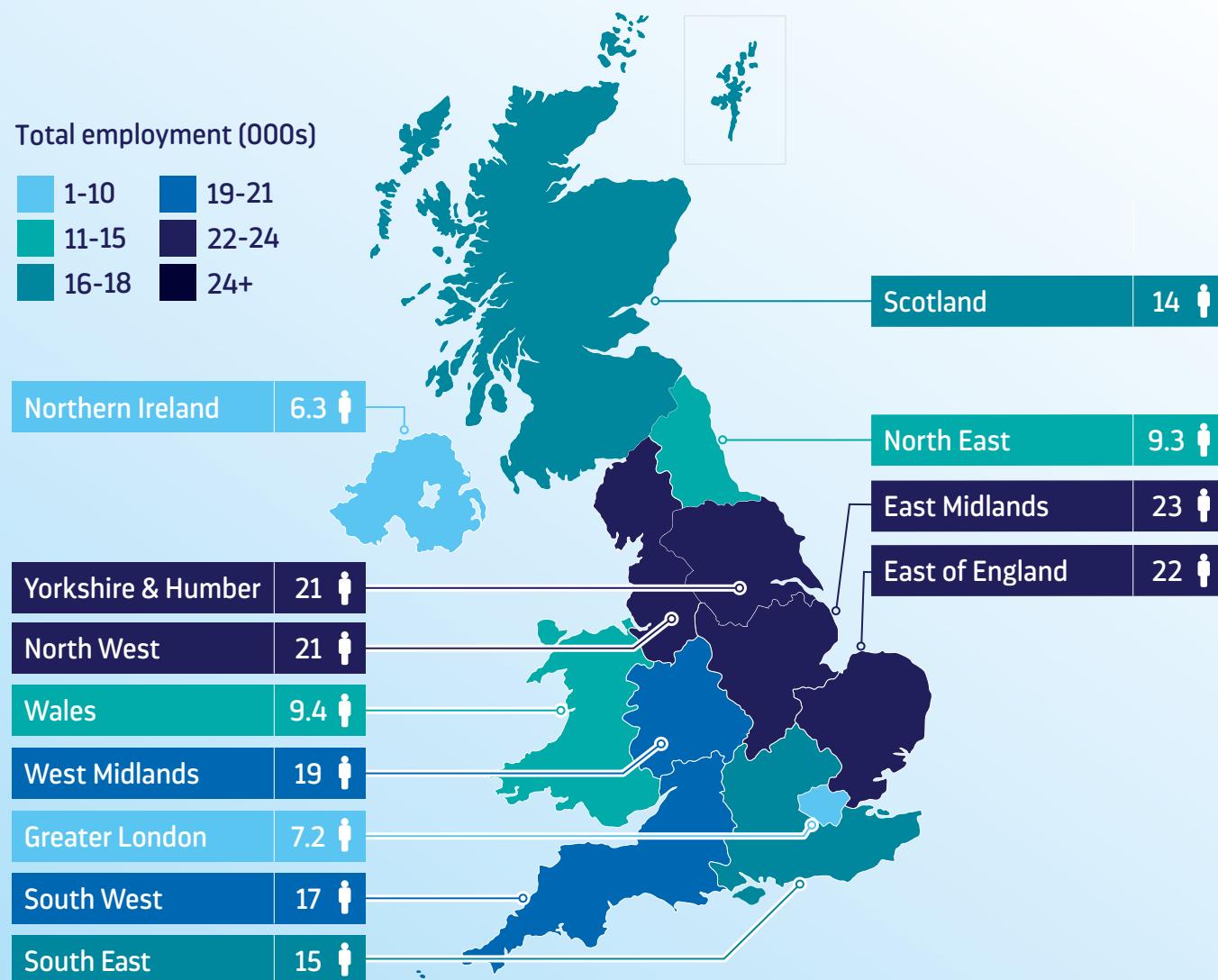
Through the wage-funded consumption it supports, we estimate the cold chain supported a further **£4.6 billion** gross value added and **52,000 jobs** via the induced channel.

Due to the consumer-facing nature of the induced channel of impact, the largest number of jobs supported were in industries such as retail & wholesale and accommodation and food.

Similarly, the industries that received the most support in terms of GVA were real estate (26%), retail and wholesale (15%), and financial services (9%).

ECONOMIC IMPACT OF THE UK COLD CHAIN /

THE COLD CHAIN BENEFITS ALL NATIONS AND REGIONS IN THE UK



Due to the geographically widespread nature of the sector, the cold chain supports economic activity across all regions of the UK.

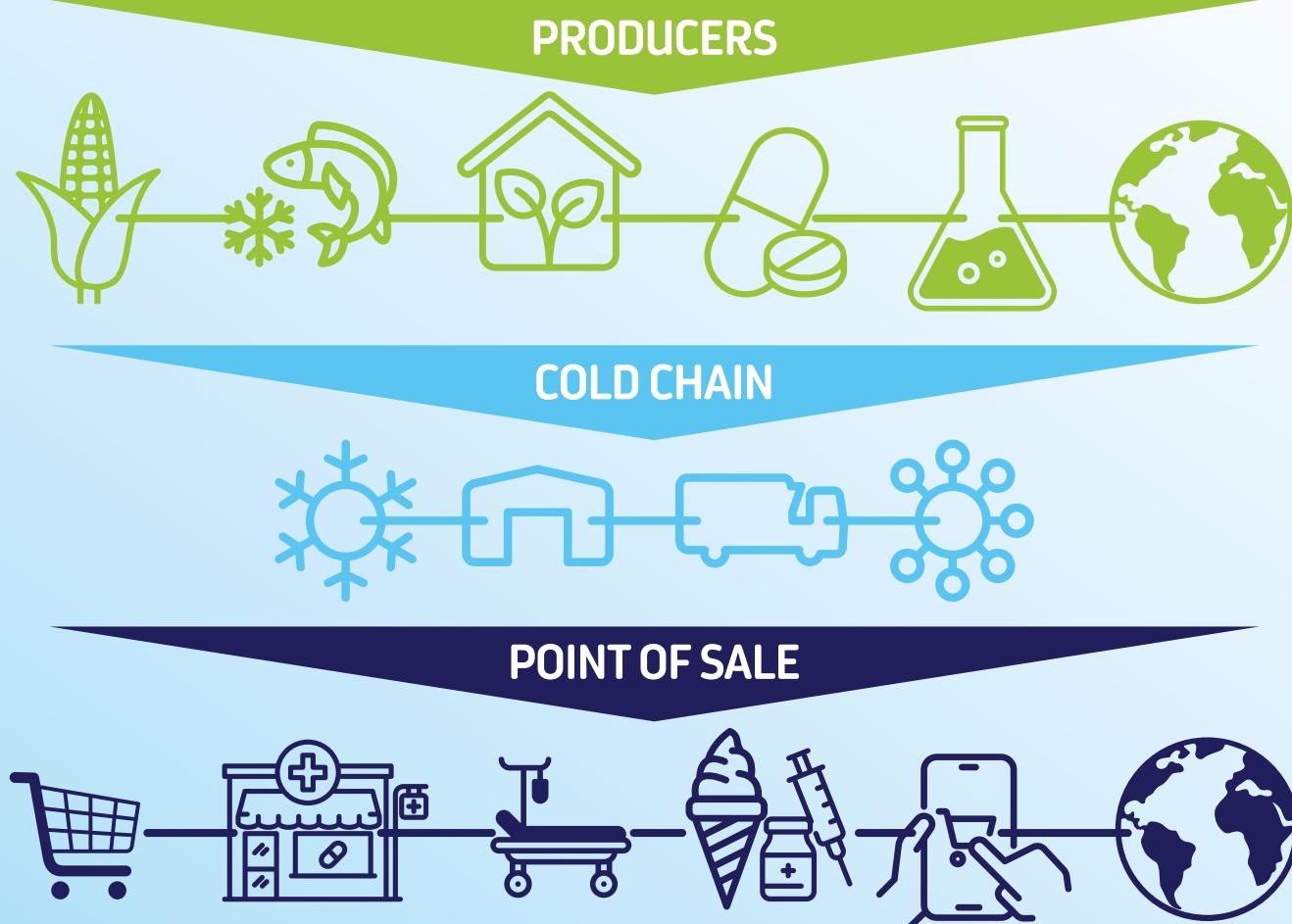
Of the overall jobs supported across the country by the cold chain, most were concentrated in the **East Midlands** (23,000), **East of England** (22,000), **North West** (21,000) and **Yorkshire and the Humber** (21,000).

Similarly, of the cold chain's overall GDP contributions across the UK, these were most concentrated in the **North West**, **East of England**, and **East Midlands**, each accounting for 11%.

In terms of local economic activity, this was highest in the East Midlands, where the cold chain accounted for 0.6% of local GDP, followed by the North East, Northern Ireland, and Yorkshire and the Humber, each at 0.5%.

The extensive reach of the cold chain's operations therefore supports economic activity and jobs across all parts of the UK—particularly outside London.

ECONOMIC IMPACT OF THE UK COLD CHAIN / WIDER ECONOMIC ACTIVITY SUPPORTED BY THE COLD CHAIN



In addition to its core economic footprint, the cold chain also supports economic activity in other sectors throughout the UK economy by enabling domestic and international businesses to safely transport and store products such as food, medicines, and agricultural products from factories, to distribution centres, to final consumers.

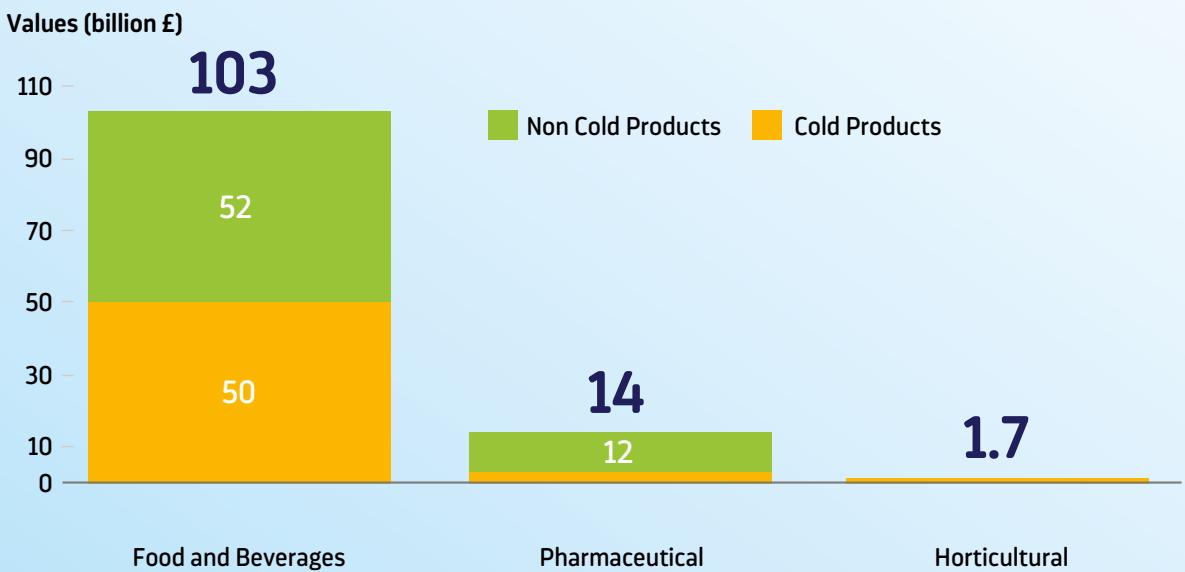
While the supply chain is complex, the impact of cold chain can broadly be segmented between:

- **Producers and manufacturers** such as farmers, food manufacturers, pharmaceutical companies, and overseas producers, who have cold storage and transportation facilities on-site and near their locations.
- **The cold chain** that maintains a network of cold stores, regional distribution centres, and refrigerated vehicles to ensure the safe transportation and storage of products.
- **Point of sale** activities such as retailers, pharmacies, hospitals, bars & restaurants, and overseas customers who sell products to final consumers.

The cold chain is therefore critical to the operations of many industries across the supply chain to ensure the safe storage and transportation of perishable products from upstream production industries to downstream consumer-facing industries across the UK.

ECONOMIC IMPACT OF THE UK COLD CHAIN / THE COLD CHAIN IS CRITICAL TO MANY UK MANUFACTURING INDUSTRIES

COLD PRODUCTS PRODUCED IN THE UK



Source: Oxford Economics, ONS ProdCom (2022) and Defra (2023)

⁷ Based on Oxford Economics analysis of 2022 ONS PRODCOM data (latest data available).

⁸ Defra (2023).

The cold chain is crucial for UK manufacturers. In 2022, UK manufacturers produced and sold £430 billion worth of products, of which **£53 billion were chilled and frozen goods** in the food, beverage, and pharmaceutical industries.⁷

Many food items are highly perishable and therefore require chilling or freezing throughout the value chain from production to the point of sale. **Approximately 49% of the food and beverages produced and sold by UK manufacturers, valued at £50 billion, consists of chilled or frozen products.**

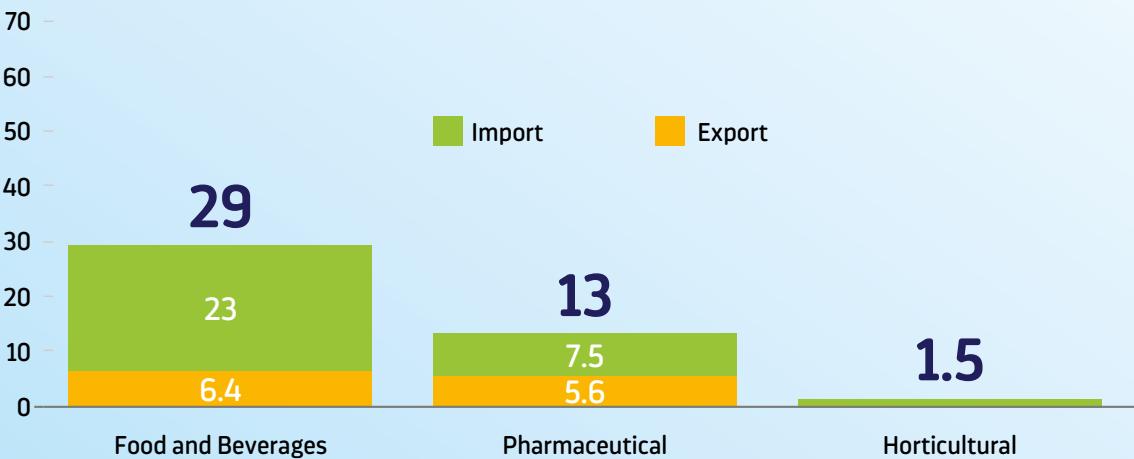
The manufacture of pharmaceutical products often contain sensitive biological substances that lose their efficacy if not stored within recommended temperature ranges. Thus, secure and safe handling under the cold chain is vital. **Around one-fifth (£2.7 billion) of pharmaceutical products produced and sold by UK manufacturers necessitate cold chain logistics.**

Beyond manufacturing, the cold chain is also essential for horticultural producers. Based on discussions with industry experts, all horticultural products are understood to require temperature-controlled storage and transportation, suggesting that the cold chain supports the production of **£1.7 billion ornamental plants grown in the UK in 2023**, including flowers and pot plants.⁸

These findings highlight the importance of the cold chain not only to UK industries, but also UK food security and human health.

ECONOMIC IMPACT OF THE UK COLD CHAIN / THE COLD CHAIN IS CRITICAL TO THE INTERNATIONAL TRADE OF PERISHABLE PRODUCTS

COLD PRODUCTS TRADED, 2023⁹



For the UK and international producers to safely transport chilled and frozen products to and from the UK, the cold chain performs a vital function.

In 2023, the value of **UK exports and imports of frozen and chilled products reached £12 billion (3%) and £32 billion (5%)**, respectively. This translates to 3 million tonnes of cold exports (2%) and 10 million tonnes of cold imports (4%).

While the majority of internationally traded goods do not require the cold chain—cars for example—the cold chain is essential for the export and import of many **food, pharmaceuticals, and horticultural products**.

A large share of the UK's international trade in food & beverages relies on the cold chain. In 2023, a **quarter of UK food & beverages exports were chilled or frozen** (£6.4 billion); while 36% of imports (£23 billion) relied on the cold chain.

The cold chain also facilitates the UK's international trade in pharmaceuticals. In 2023, a **quarter of UK pharmaceutical exports required temperature-controlled logistics** (£5.6 billion); while 34% of imports needed to be chilled or frozen (£7.5 billion).

The international trade in horticultural products also relies on the cold chain. In 2023, **£50 million of horticultural products were exported from the UK**, and £1.4 billion imported. Discussions with industry experts suggest that all horticultural products require temperature-controlled storage and transportation.

In addition to supporting UK international trade and food & health security, the cold chain also supports the international shipping industry as **most cold products are transported by sea**. The only exception are pharmaceutical products, where most of UK trade with non-EU countries relies on air transport.

Source: Oxford Economics analysis of HMRC Overseas Trade Statistics

⁹ Based on Oxford Economics analysis of HMRC Overseas Trade data.

THE ECONOMIC IMPACT OF THE UK COLD CHAIN /

CASE STUDY: FROZEN FOOD INDUSTRY

The frozen food industry generated around £7 billion worth of revenue in 2021 in the UK.¹⁰ The cold chain ensures the safe storage and transportation of frozen food throughout the supply chain, **and plays a critical role in every step of the chain:**

- Storing and transporting meat and agricultural produce between farmers, processors, and manufacturers;
- Handling fresh and chilled products as they move from packaging;
- Labelling companies to distribution centres; and
- Safely delivering food products to retailers and consumers.

Birds Eye Limited, owned by Nomad Foods, is the UK's number one branded frozen food company comprised of the Birds Eye, Goodfella's, Aunt Bessie's and Green Cuisine brands. Birds Eye launched 75 years ago, providing high quality frozen food for generations with its iconic portfolio of fish, vegetable, chicken and pizza products. The company strives to serve the nation with better food, promoting the nutritional benefits and convenience of frozen food as well as the key role it plays in helping to reduce food waste.¹¹

“At all stages, temperature control for a frozen business is critical. At every stage, quality standards and technical legislation has to be followed.”



¹⁰ UK frozen food sales in 2021 - International Institute of Refrigeration, 2021

¹¹ Nomad Foods, accessed July 2024.

THE ECONOMIC IMPACT OF THE UK COLD CHAIN / CASE STUDY: FROZEN FOOD INDUSTRY

Birds Eye has strategic partnerships with third party logistics companies (3PLs) whom it relies upon for cold storage and transportation across both the UK and into Europe. The 3PLs also have cold stores located close to Birds Eye's factories, ensuring **minimal transportation distance between where its products are produced and where they are stored**. Once orders are received, products are then **transported from cold stores onwards to regional distribution centres and retailer depots** across the UK and overseas, before eventually reaching consumers via **supermarket shelves or home deliveries**.

A significant part of the cold chain is automated. 3PL companies have automated anchor systems that move pallets from Birds Eye's factories onto refrigerated trailers. These pallets are then automatically offloaded from the trailers at the 3PL cold store, before automatically being moved onto a conveyor belt, scanned, and craned into their storage unit in the cold store.

Birds Eye's products are temperature controlled throughout the production process, from raw materials, manufacturing, and distribution to customers. Furthermore, its factories have efficient 'just-in-time' operations, where products usually start being transported to a cold store within an hour of being produced.

The cold chain is therefore clearly critical to Birds Eye's operations, without which it could not operate in its current form.



“Storage and transport are both as important as each other to our operations. That said, in terms of length of stay, the critical period ultimately is the cold storage.”

“We have a constant flow from factory to cold store. Products remain in cold store warehouse until orders come in, which proves the critical nature of the cold chain to our supply chain.”



COLD CHAIN REPORT 2026 / ABOUT THE COLD CHAIN FEDERATION

The Cold Chain Federation is the voice of the temperature-controlled supply chain in the UK. Our around 300 members are made up of businesses who operate, maintain or procure frozen and chilled storage and/or refrigerated transport, including shipping and road freight. The sectors we support include food, pharmaceuticals, horticulture and other specialist perishable products.

The cold chain is critical infrastructure, and our mission is to educate and influence the government and industry about the importance of the cold chain and provide unique events, advice and guidance aimed at supporting our members to adapt and thrive in a rapidly changing world.



REFERENCES

All of the statistics and research presented in the Cold Chain Report have been carefully referenced for transparency. For a full breakdown of references for each section, please visit:

<https://www.coldchainfederation.org.uk/cold-chain-report-2026/>





THE COLD CHAIN FEDERATION / GET IN TOUCH



We are the voice of the UK cold chain. Our around 300 members are made up of businesses who operate, maintain or procure frozen and chilled storage and/or refrigerated transport, including shipping and road freight, across England, Wales, Scotland and Northern Ireland. They operate within the UK and internationally.

The organisation can trace its history back to original formation in 1911. Formerly FSDF (Food Storage and Distribution Federation), we became Cold Chain Federation in 2019. Find out more www.coldchainfederation.org.uk

COLD CHAIN REPORT



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