

Webinars for Cold Chain Professionals



LAUNCH EVENT:

THE COLD STORE OF 2050

STARTING AT 10:00AM

Webinars for Cold Chain Professionals




LAUNCH EVENT:



THE COLD STORE OF 2050

File View Help



Audio

Sound Check  ?

Computer audio
 Phone call
 No audio

Microphone Array (Conexant SmartA... ▾

Speakers (Conexant SmartAudio HD) ▾


Talking: **Shane Brennan**

Questions

[Enter a question for staff]

Send

CCF - COVID 19 - INTELLIGENCE EXCHANGE
Webinar ID: 308-161-843

 **GoToWebinar**

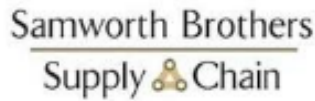




**COLD CHAIN
FEDERATION**

- 190 COMPANIES REPRESENTED
- 450+ FACILITIES
- >30 MILLION M³ STORAGE
- >30,000 REFRIGERATED TRAILERS
- c.20,000 EMPLOYEES

Leading the UK's
Temperature Controlled
Logistics Industry



OUR NET ZERO PROJECT



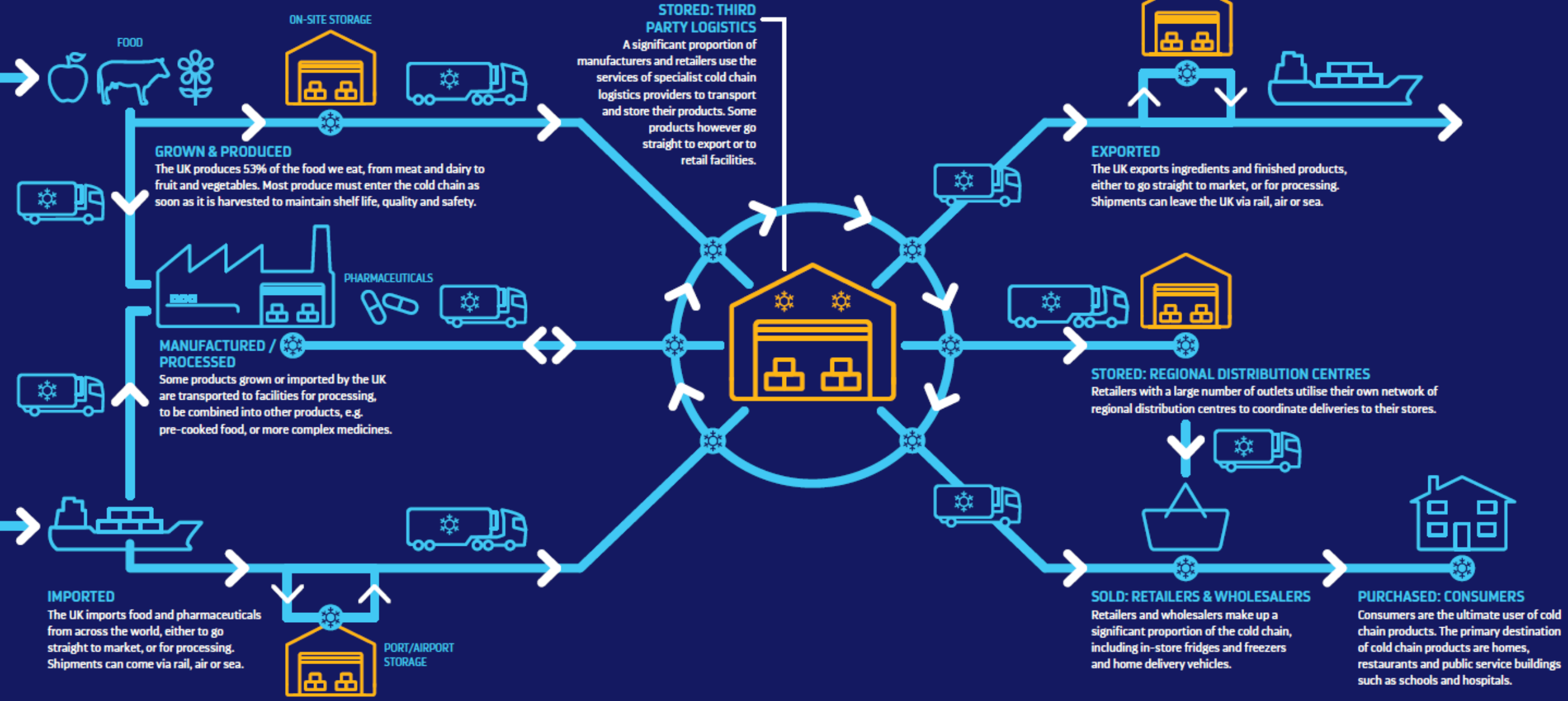
Cold Chain Federation's commitment to support our members to adapt to a low carbon future:

- **Part One:** Shaping the Cold Chain of the Future: The Road to Net Zero (published)
- **Part Two:** Defining a Net Zero Cold Chain (published)
- **Part Three:** The Journey Towards emission free temperature-controlled distribution on road vehicles (published)
- **PART FOUR: THE COLD STORE OF 2050**
- **Part Five:** The Cold Chain Ecosystem (2022/23): the connecting elements which will make up the cold chain of the future. eg. blockchain, advanced temperature monitoring etc.

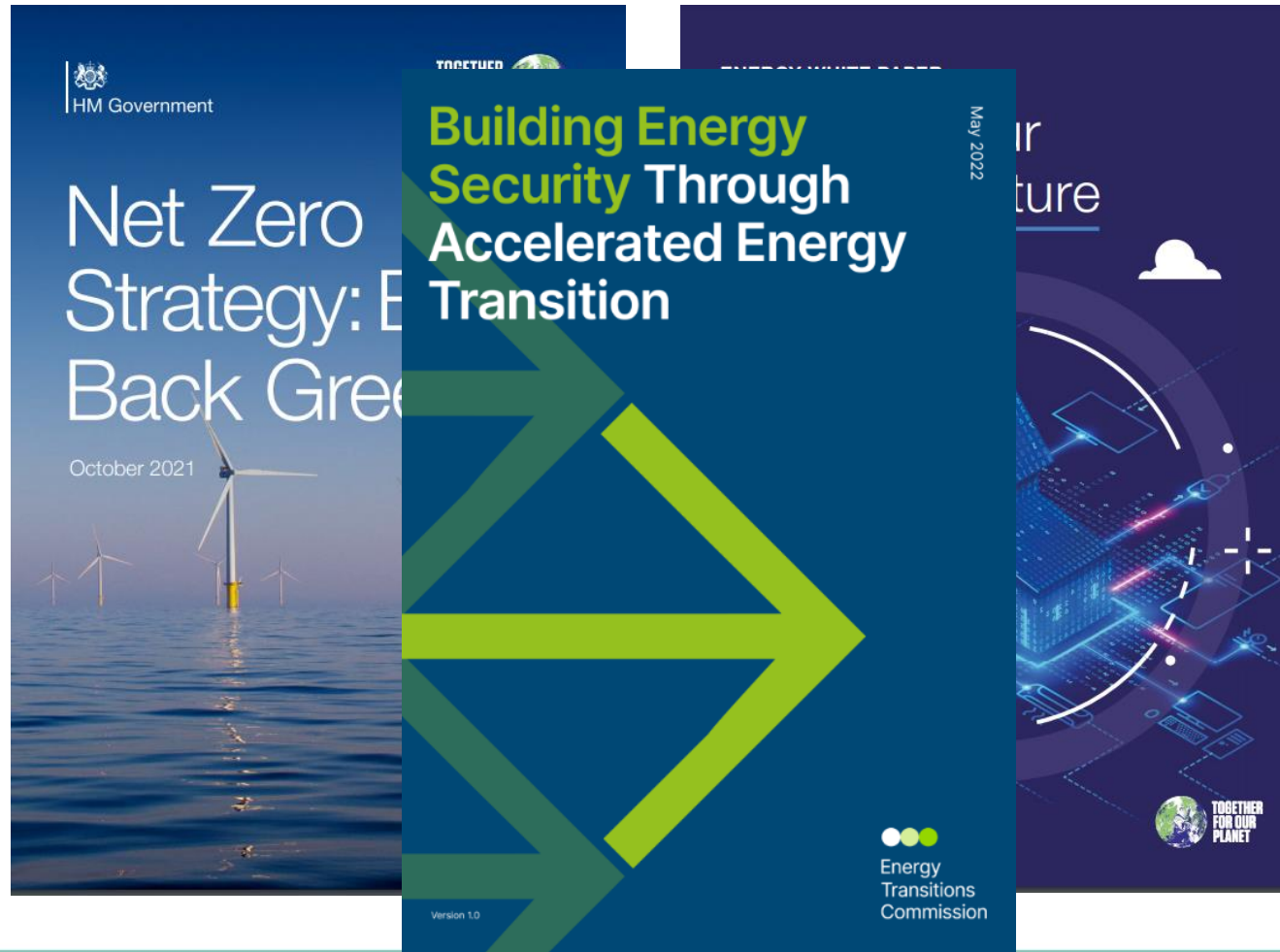
<https://www.coldchainfederation.org.uk/cold-chain-net-zero-project/>



COLD STORES ARE CRITICAL AT EVERY STAGE OF THE COLD CHAIN /



POLICY CONTEXT

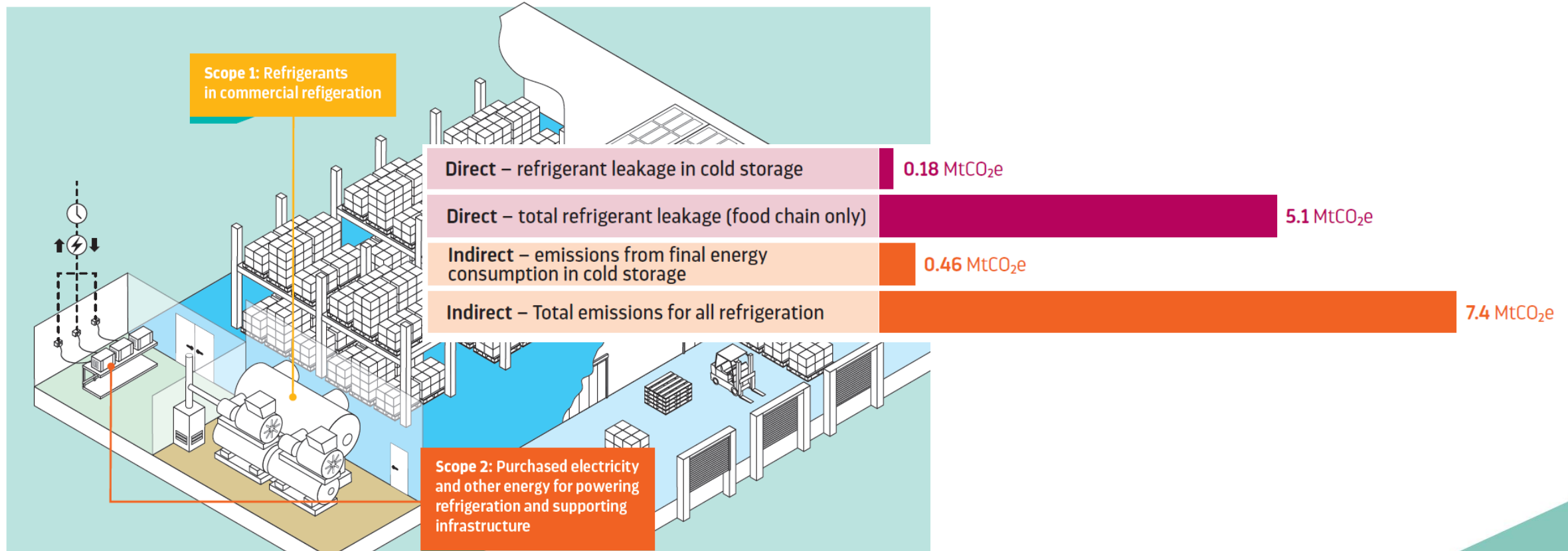


EMISSIONS FROM COLD STORAGE

Scope 1: Direct emissions from owned or controlled sources.

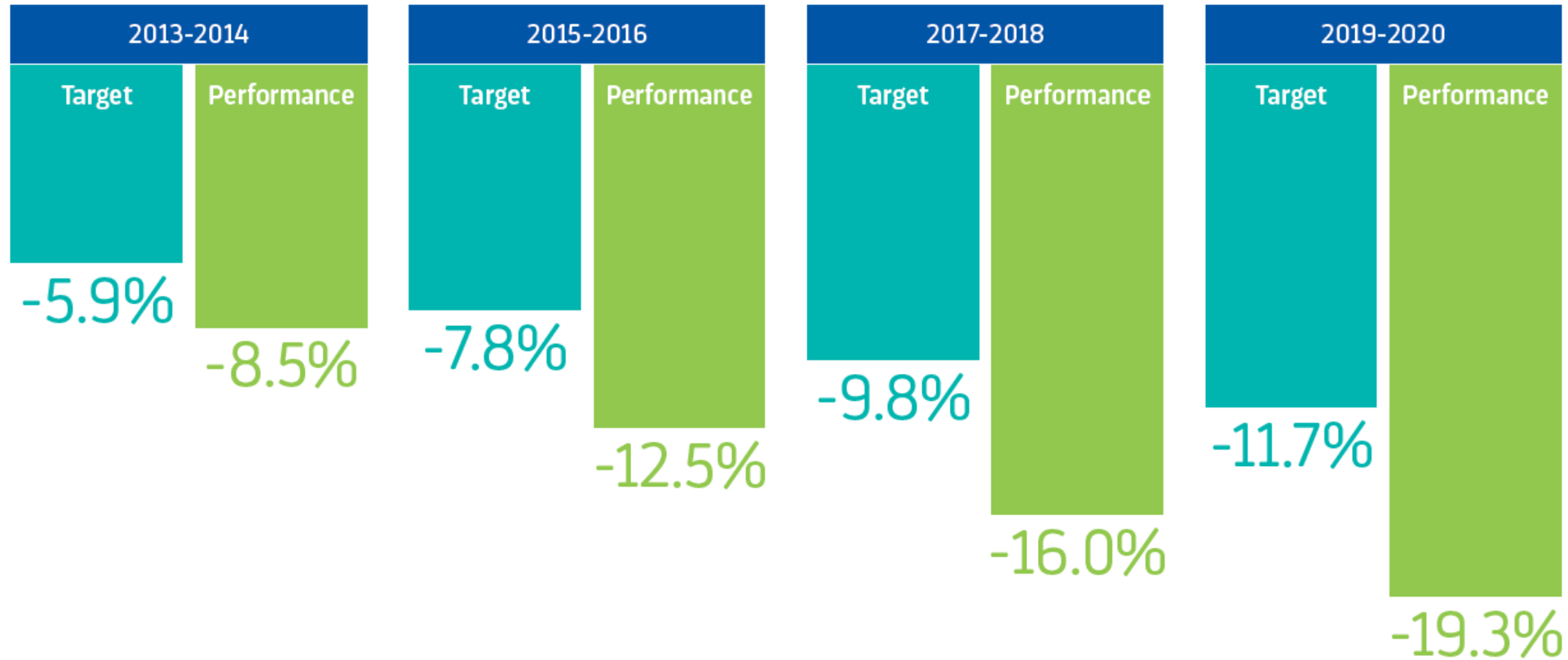
³ For emissions definitions see: <https://chapterzero.org.uk/scope-emissions-explained/>

Scope 2: Indirect emissions from the generation of electricity, heating or cooling consumed.



MAXIMISING ENERGY EFFICIENCY

PROGRESS....



The Government set our industry a target for energy efficiency improvement by 2020 of:

12%

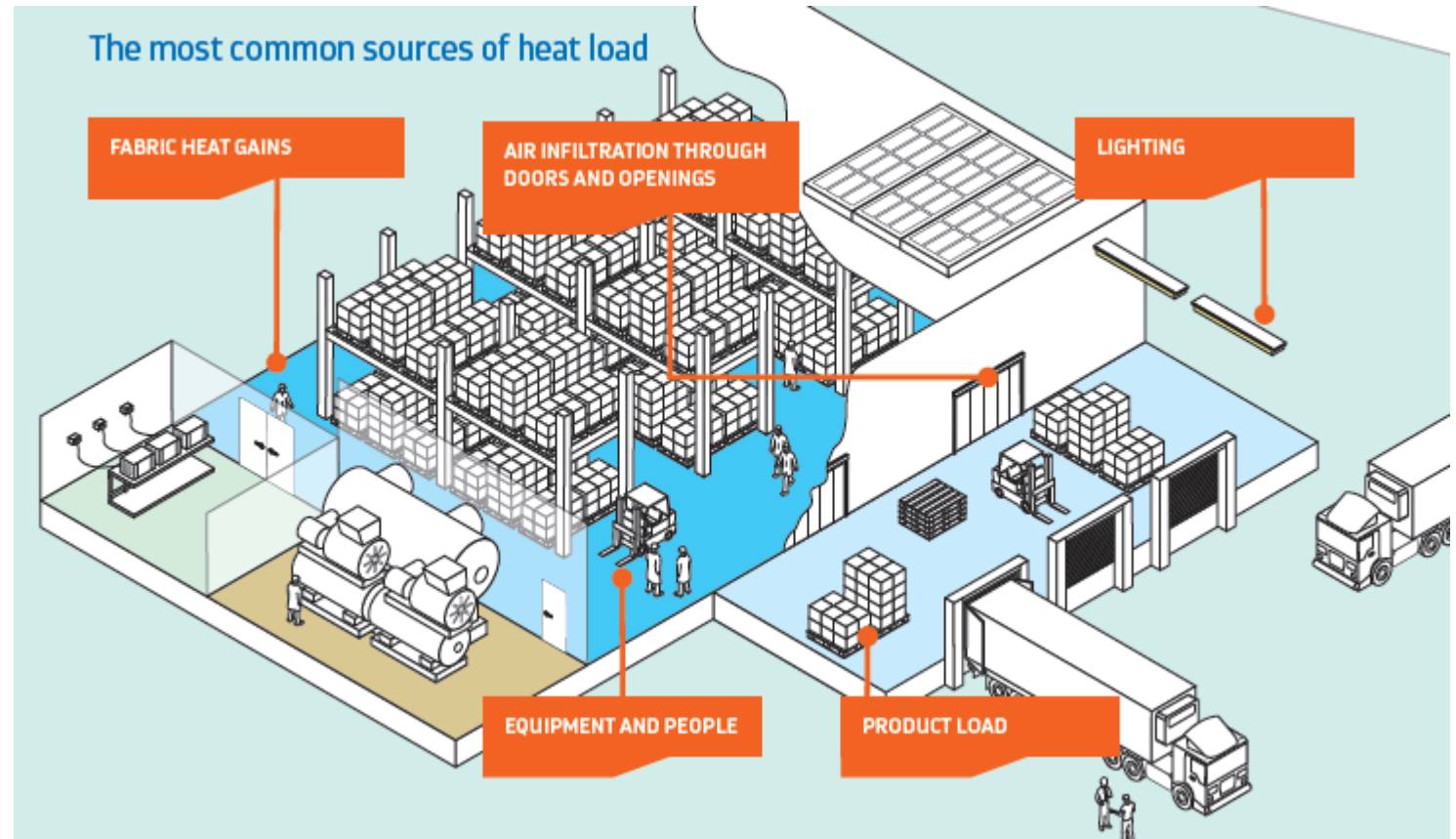
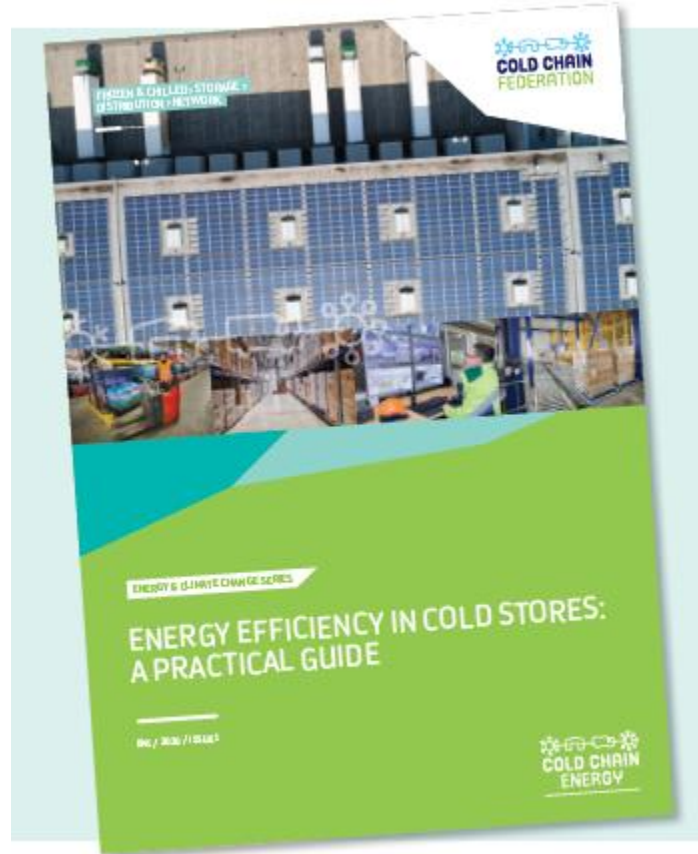
By 2020 our industry achieved an energy efficiency improvement of over:

19%

This was across circa **400** UK cold stores.



BUT MORE REQUIRED.....



NEW TECHNOLOGIES COMING TO THE FORE

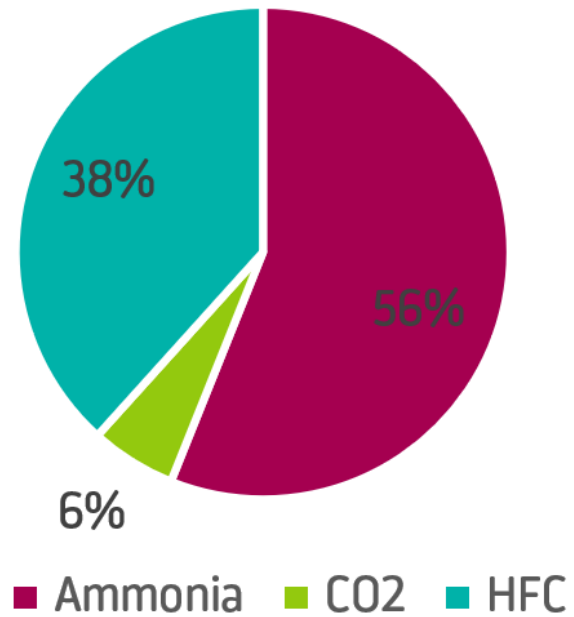
TEMPERATURE
MONITORING

AUTOMATION &
ROBOTICS

DATA & OPTIMISATION

REFRIGERANTS

Primary refrigerant in UK cold stores



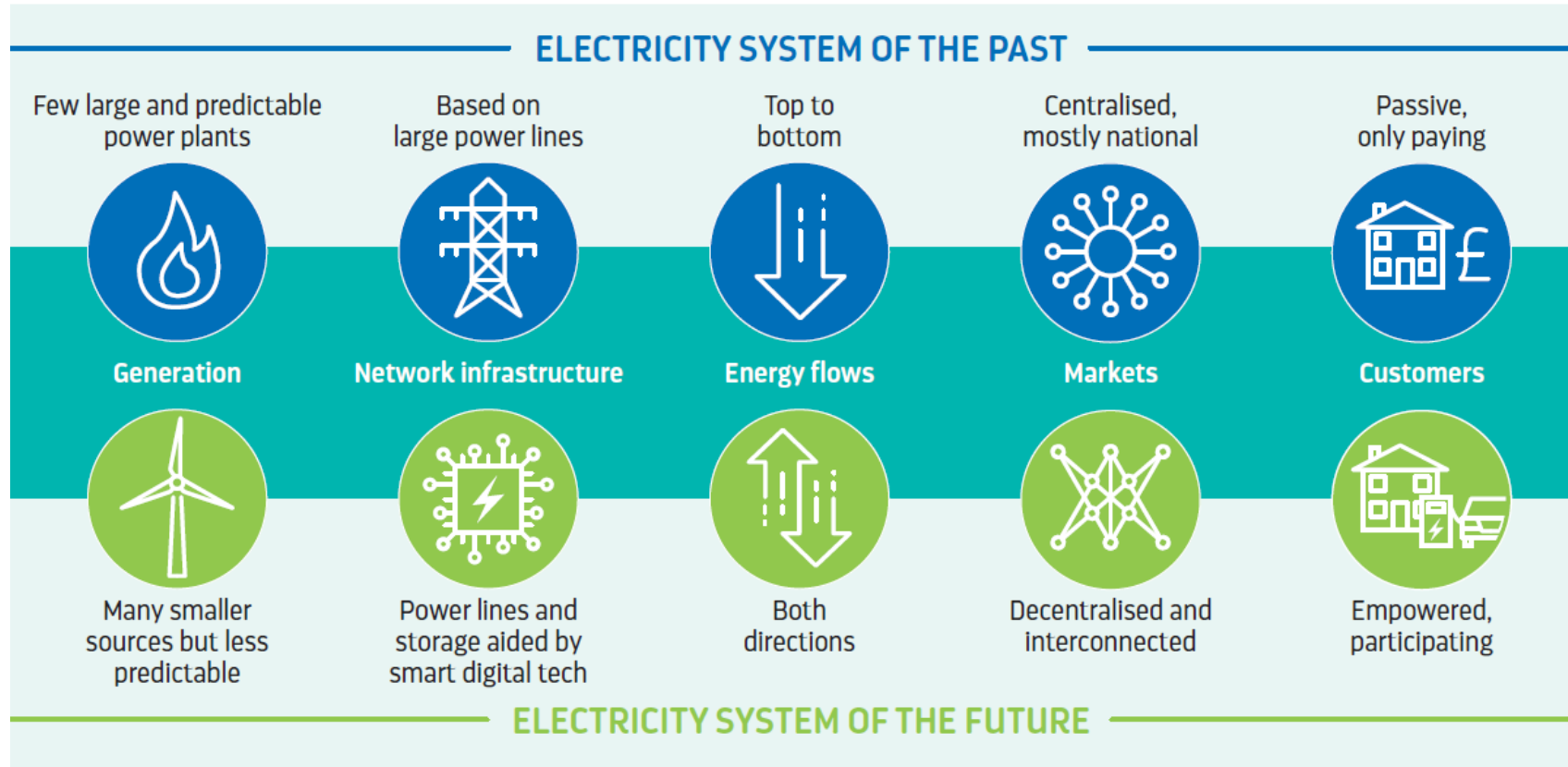
F-gas revision promises steeper phase down

13 MAR 2022



ENERGY TRANSFORMATION

UK ENERGY TRANSFORMATION



THE POTENTIAL OF COLD STORES

RENEWABLES & ONSITE
PRODUCTION

CENTRALISED COOLING

DEMAND SIDE RESPONSE

ENERGY STORAGE

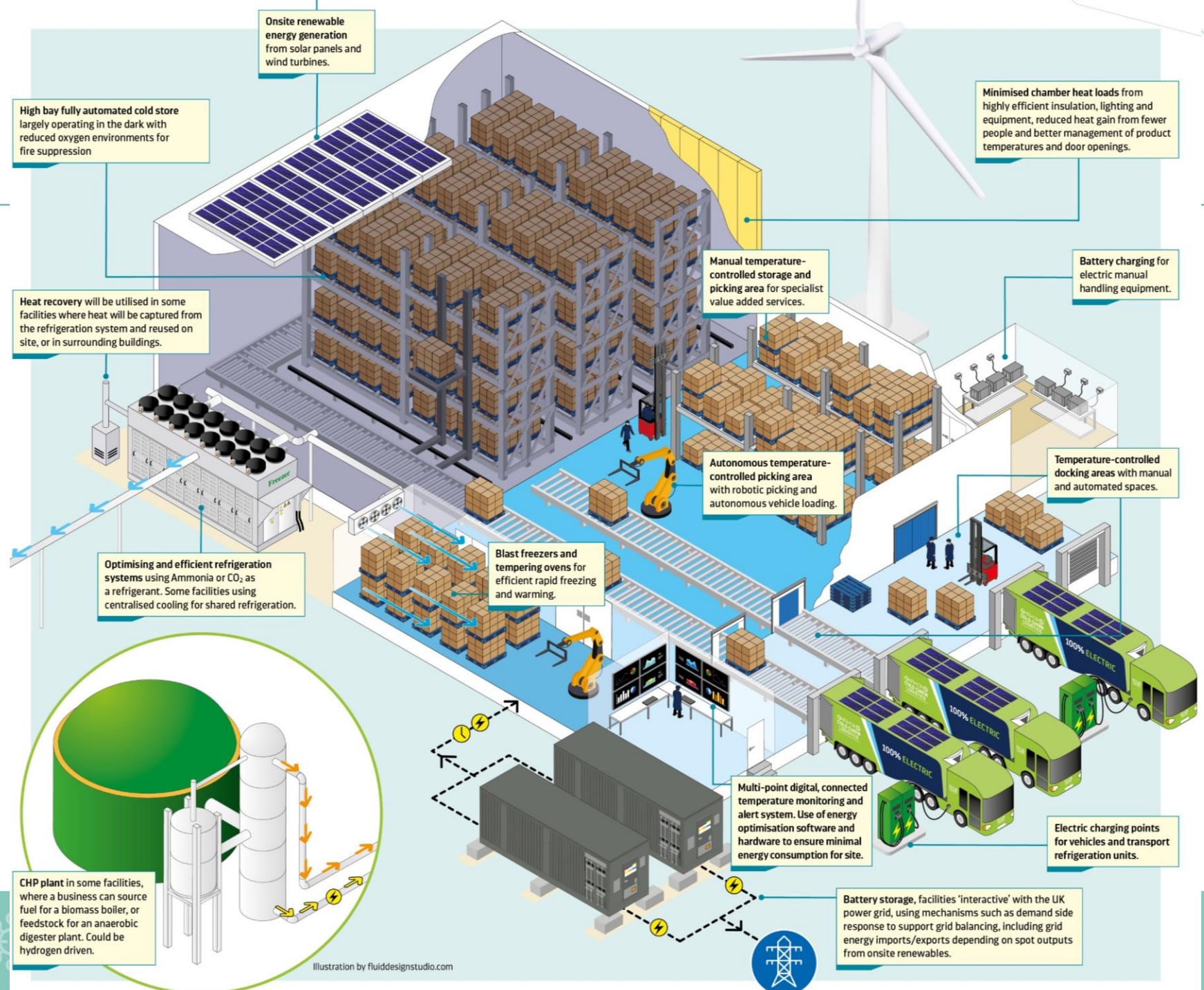


Illustration by fluiddesignstudio.com

THE COLD STORE OF 2050

1. Significantly improving energy efficiency, reducing demand for grid generated electricity or on own site generation and reducing associated emissions.
2. Recirculation of waste heat, either from refrigeration or CHP to provide further power with on site or in district heating or cooling systems with neighbouring buildings.
3. Harnessing the potential for cold stores to drive energy transformation in the UK through energy production and active participation in UK energy balancing through demand management mechanisms and battery storage.
4. Transitioning away from high GWP refrigerants zero emission alternatives, such as CO₂ or ammonia alternatives.
5. The extent of remaining emissions from cold stores will be dependent on the decarbonisation of the UK National Grid or offsetting.



BUT...BARRIERS TO THE VISION

- What are we aiming for?
- How will we pay?
- Planning
- Grid connections
- Business attitudes



THE OPPORTUNITY FOR BUSINESSES

- Taking control of costs in a era of energy volatility
- Demonstrating a commitment to sustainability
- Acting ahead of expected Government policy on energy efficiency and carbon reduction.
- Taking advantage of a changing energy system



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

**PART FOUR – THE COLD STORE OF 2050:
MAXIMISING EFFICIENCY TO REDUCE
EMISSIONS AND DRIVE UK ENERGY
TRANSFORMATION**



NEXT STEPS FOR THE CCF...

- Lead on the development of guidance, achievement recognition and reporting mechanisms to track and drive progress in cold store energy efficiency.
- Be the impartial platform for sharing and promoting best practice and case studies for technology.
- Lead discussions with Government on behalf of our industry to overcome the barriers to cold storage businesses achieving the potential outlined in this report.



INTRODUCING THE PANEL.....

COMING UP....



**LESSONS FROM CRISIS – MANAGING ENERGY TODAY AND IN
THE FUTURE OF THE COLD CHAIN**

WEDNESDAY 15TH JUNE @ 10AM



COLD CHAIN LIVE!

8TH AND 9TH SEPTEMBER

BIRMINGHAM INTERNATIONAL CONFERENCE CENTRE

<https://www.coldchainfederation.org.uk/events/>

