



# IOR

INDUSTRY SKILLS ALLIANCE

## THE LAUNCH INDUSTRY SKILLS ALLIANCE

April 2026

ONE SECTOR. ONE VOICE. ONE FUTURE

# The Programme

9.30am - 10.00am	Arrival, Registration & Networking	ALL
10.00am	Welcome to Bitzer UK	James Graham MBA, BSc (Hons) MInstR Bitzer UK Managing Director
10.05 am	Why is the IOR establishing the Industry Skills Alliance	Lisa-Jayne Cook FInstR IOR President
10.15 am	What is the Industry Skills Alliance?	Andrew Bowden FInstR, FCMI, FloL, CMgr, MSc & Mark Harris MInstR Industry Skills Alliance Co-Chairs
10.30 am	Update on apprenticeships, skills landscape & QA Session	Tyron Wain NOCN Business Manager
11.00am	Update from the IOR	Miriam Rodway IOR CEO
11.10am	Sponsorship Annoucement STEM Lego Initiatives	Sam Baker Danfoss Technical Sales Engineer
11.15am	Refreshments & Networking	ALL
11.30am	Task and Finish Groups	ALL
12.45pm	Closing Remarks & Next Steps	Industry Skills Alliance Co-Chairs
13.00pm	Lunch, Networking and Bitzer Tour	ALL

# Welcome From Bitzer

James Graham MBA, BSc (Hons) MInstR  
Managing Director



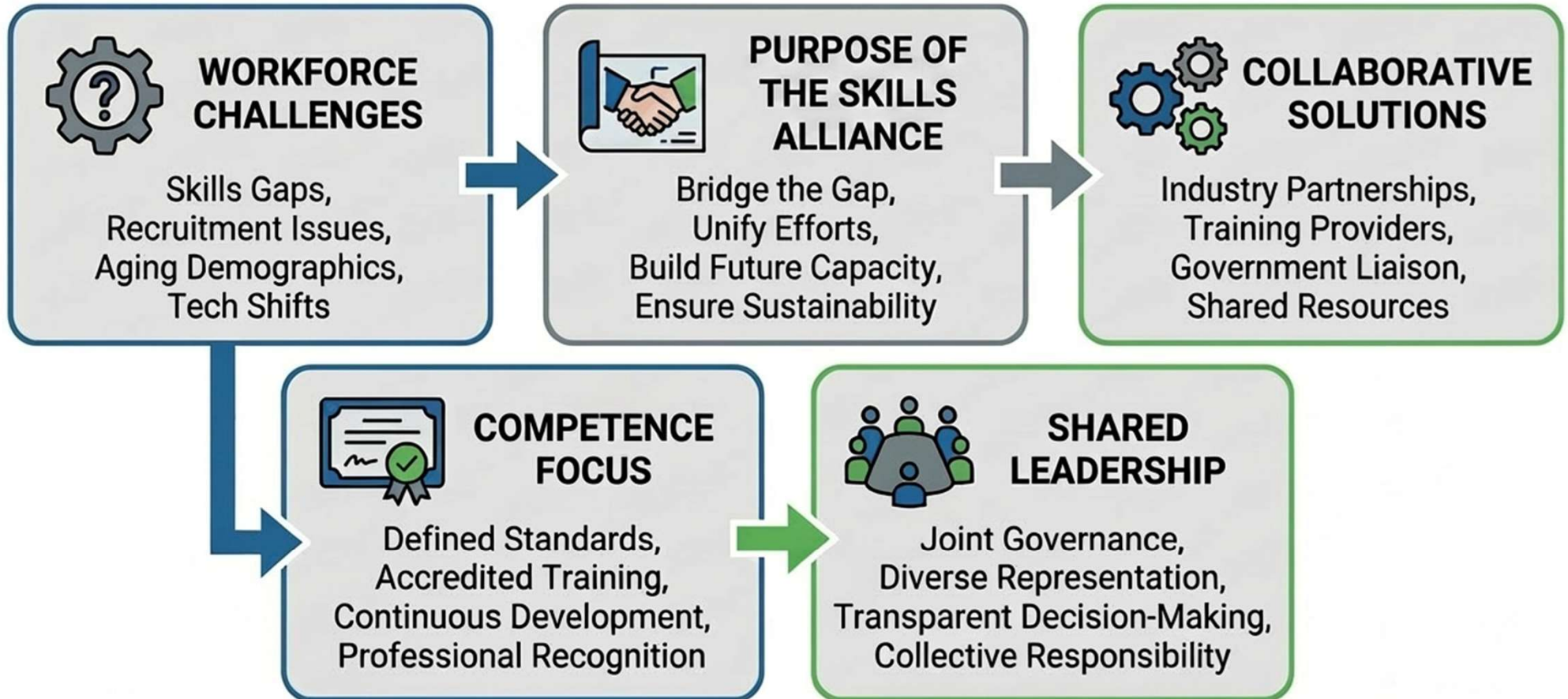
# Why is the IOR establishing the Industry Skills Alliance

Lisa-Jayne Cook FInstR  
IOR President



WWW.IOR.ORG.UK | ONE SECTOR. ONE VOICE. ONE FUTURE

# Industry Skills Alliance - UK RACHP Sector



# What is the Industry Skills Alliance

Andrew Bowden FInstR, FCMI, FloL, CMgr, MSc  
Mark Harris MInstR  
Co-Chairs



# SKILLS ALLIANCE PURPOSE

The Skills Alliance is a strategic, **employer-led** forum established to:



**Be the recognised industry voice on skills and talent**

Champion the sector and influence the skills agenda.



**Strengthen employer influence across the sector**

Ensure employer insight shapes policy, standards and investment.



**Align education, training, and apprenticeships to industry needs**

Drive the design and delivery of relevant, high-quality pathways.



**Grow and future-proof the workforce**

Attract, develop and retain the talent the sector needs to thrive.



**Identify collaboration opportunities for employers, providers, and stakeholders.**

Build partnerships that deliver impact and shared success.



**Working together to shape the skills, talent and opportunities that power a strong, innovative and sustainable sector.**

# OUR PRIORITY AREAS

WORKING TOGETHER TO BUILD THE FUTURE WORKFORCE

1

Strengthen apprenticeship and T Level pathways



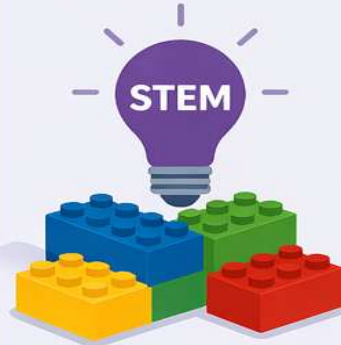
2

Influence the qualification design to meet current and future industry needs



3

Expand STEM engagement and early career exposure (e.g., LEGO project)



4

Increase the number of young people entering and progressing in the profession



5

Grow employer and student membership of the Institute of Refrigeration (IOR)



Collaborating today to inspire tomorrow's talent, strengthen our industry and build a sustainable future for refrigeration.



# STRATEGIC ADVISORY ALLIANCE

## — STRUCTURE, ENGAGEMENT & MEMBER ROLE —



### 1. GOVERNANCE & STRUCTURE

- ✓ Operates as a strategic advisory forum
- ✓ Supported by thematic working groups focused on priority areas
- ✓ Quarterly Alliance Meetings to:
  - Set strategic direction
  - Review progress and impact
  - Align priorities across members



### 2. DELIVERY MECHANISM

-  Working Groups / Task & Finish Projects
-  Focused on specific sector challenges
-  Time-bound, outcome-driven initiatives
-  Designed to accelerate practical delivery



### 3. MEMBER ENGAGEMENT OPPORTUNITIES

Members actively contribute through:

-  Attend Alliance meetings
-  Join working groups or short-term projects
-  Provide sector insight, workforce data, and practical expertise
-  Give feedback that shapes:
  - Qualifications
  - Training provision
  - Engagement initiatives



### 4. MEMBER ROLE & IMPACT

-  **Members act as ambassadors** for the Alliance and the sector
-  **Share best practice and innovation** to drive continuous improvement
-  **Collaborate across the ecosystem** to shape skills and workforce strategy
-  **Influence outcomes** that strengthen capability, productivity and sector growth



### 5. HOW WE WORK TOGETHER

-  Open, trusted relationships
-  Inclusive representation across the sector
-  Evidence-informed decisions
-  Shared commitment to action and impact



Collaborating to shape future skills, strengthen workforce capability, and drive sector impact.

# Update on apprenticeships and the skills landscape

Tyron Wain  
NOCN Business Manager



# Who we are



- NOCN Group is an international charity which delivers future-fit skills solutions with social impact for Educational Institutes, training providers, employers and individuals.
- As a truly independent, charitable organisation, we seek to influence policy and champion lifelong, vocational learning. Our aim is to enable people to reach their potential and organisations to thrive for improved productivity, sustainability, social mobility, and inclusivity. Our industry and subject matter experts provide a high quality, robust and responsive service, adapting to the ever-evolving needs of our customers and stakeholders.
- With a subsidiary in India named NOCN India Skills Foundation, we also operate in around 30 countries in Africa, ASEAN, Europe, the Gulf, South Asia and other international territories.

# Our Sectors

NOCN Group specialises in the advancement of skills in the five key areas where we believe they are needed most:



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Preparation for  
Life and Work



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Construction  
and the Built  
Environment



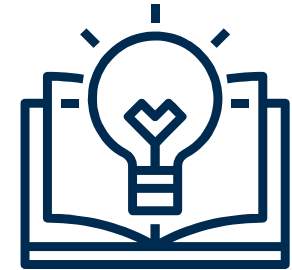
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Engineering,  
Manufacturing  
and the Green  
Economy



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Health and Social  
Care



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Education and  
Management

# Over this session we will be looking at:

- **Apprenticeship & Sector Updates**
- **Career Roadmaps**
- **Industry Collaborations**
- **Building future-fit skills solutions**

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Website:  
[nocn.org.uk](http://nocn.org.uk)

Address:  
Acero, 1 Concourse Way, Sheffield S1 2BJ // NOCN Innovation Way King's Lynn PE30 5BY



# Apprenticeship & Sector Updates

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Website:  
[nocn.org.uk](http://nocn.org.uk)

Address:  
Acero, 1 Concourse Way, Sheffield S1 2BJ // NOCN Innovation Way King's Lynn PE30 5BY



# Apprenticeship & Sector Updates



- **Free courses for jobs expansion** – (Skills England update: April 2026)
- Engineering & manufacturing sector expansion
- £47 million over 3 financial years, £16 million in first year – support new starts for 26/27 academic year
- **£1 billion on job incentives over next 3 years** (March 2026 update)
- Financial bonus for employers to hire young unemployed people
- £3,000 for hiring a 18-24 year old been on 6-months of universal credit
- From October, £2,000 for a SME to hire a 16-24 year old
- Hiring a young foundation apprentice is another £2,000
- Stackable incentives – possible £7,000 to support employer
- **Will it incentivise employers to take on new apprentices?**

# Apprenticeship & Sector Updates



- **Apprenticeship Units – first 10 confirmed to start from 28<sup>th</sup> April**
- Designed for existing staff who need to upskill in specific skills/areas
- Funded through the Skills & Growth Levy
- Employees must be aged 19+

Three key ones for IOR members include:

- [Electrical fitting and assembly – 70 hours](#)
- [Mechanical Fitting and assembly – 70 hours](#)
- [Welding \(mechanised\) – 90 hours](#)

**Apprenticeship unit funding rates and minimum delivery hours**

Apprenticeship unit name	Funding rate	Minimum delivery hours
Permanent modular building assembly	£3,200	140
Welding (mechanised)	£2,100	90
Mechanical fitting and assembly	£1,650	70
Electrical fitting and assembly	£1,650	70
Battery manufacturing	£1,650	70
Electric vehicle (EV) charging point installation and maintenance	£950	35
Solar PV installation and maintenance	£950	35
AI leadership - AI delivery and organisational transformation	£750	30
AI leadership - AI adoption, procurement and governance	£750	30
AI leadership - AI strategy and opportunity	£750	30

# Apprenticeship & Sector Updates



- **Foundation Apprenticeships**
- Building Service Engineering Foundation Apprenticeship has been out since 2025
- Can lead onto:
  - [Low carbon heating technician](#)
  - [Refrigeration air conditioning and heat pump engineering technician](#)
  - [Plumbing and domestic heating technician](#)



# Apprenticeship Stats



- Between 2017 and 2024, 25% reduction in number of engineering apprenticeship starts in England.
- Level 2 Engineering apprenticeships fell by 50% during the same period
- <https://feweek.co.uk/engineerings-entry-point-is-disappearing/>
- RACHP Level 3 – 13 providers in England who deliver (as of 19<sup>th</sup> April)
- Combine this with 1-in-8 16-24 year NEETs
- Skills Gap has been identified, but some apprenticeship cohorts remain empty
- How can we as an industry support new people into the sector?
- Where is the disconnect? Employer? Provider? Learner?



# Career Roadmaps

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Website:  
[nocn.org.uk](http://nocn.org.uk)



# Coming Soon: Career Roadmap



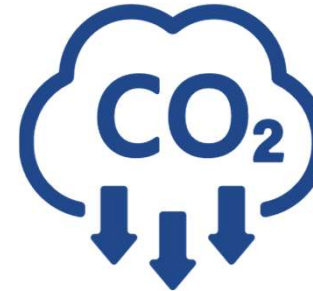
- Working with partners including the IOR, NOCN are developing a career roadmap for the sector.

## Designed to help showcase:

- Entry-level roles through to senior and specialist positions
  - Associated qualifications, apprenticeships and CPD routes
  - Clear progression routes to support recruitment, retention, and career development
  - Alignment with employer demand and future-fit skills needs
- 
- Resource will be available for employers, training providers and the industry to highlight:
  - Career progressions
  - Career diversification
  - Competency cards
  - Further careers beyond the more visual/popular options



# Low Carbon Heating Technologies



New Entrants to the industry

Traditional Plumbers Upskilling

Introductory Qualifications and Short Courses

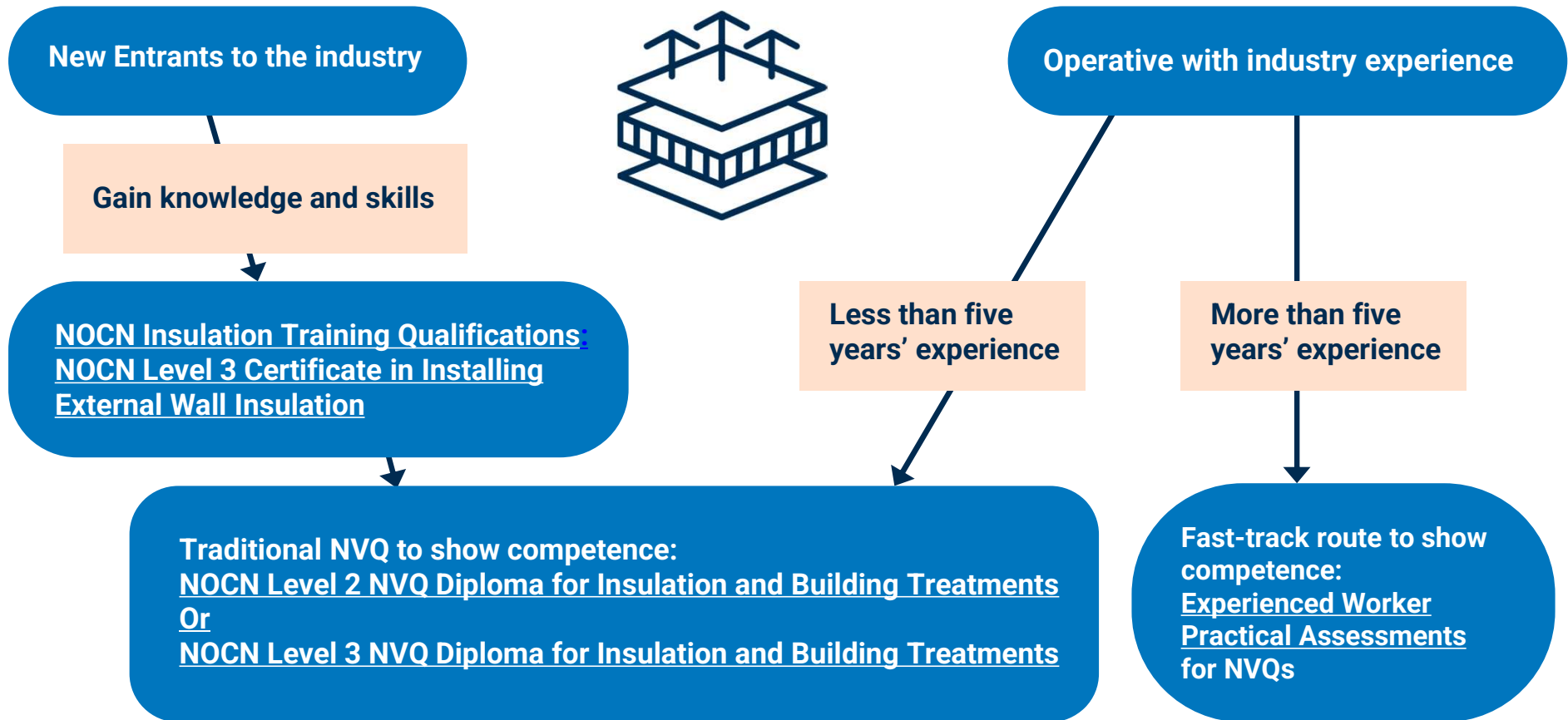
Level 2 Award/Certificate in Fundamental Principles of Renewable Technologies and Sustainable Energy

Air Source Heat Pump Installation Maintenance and System Design

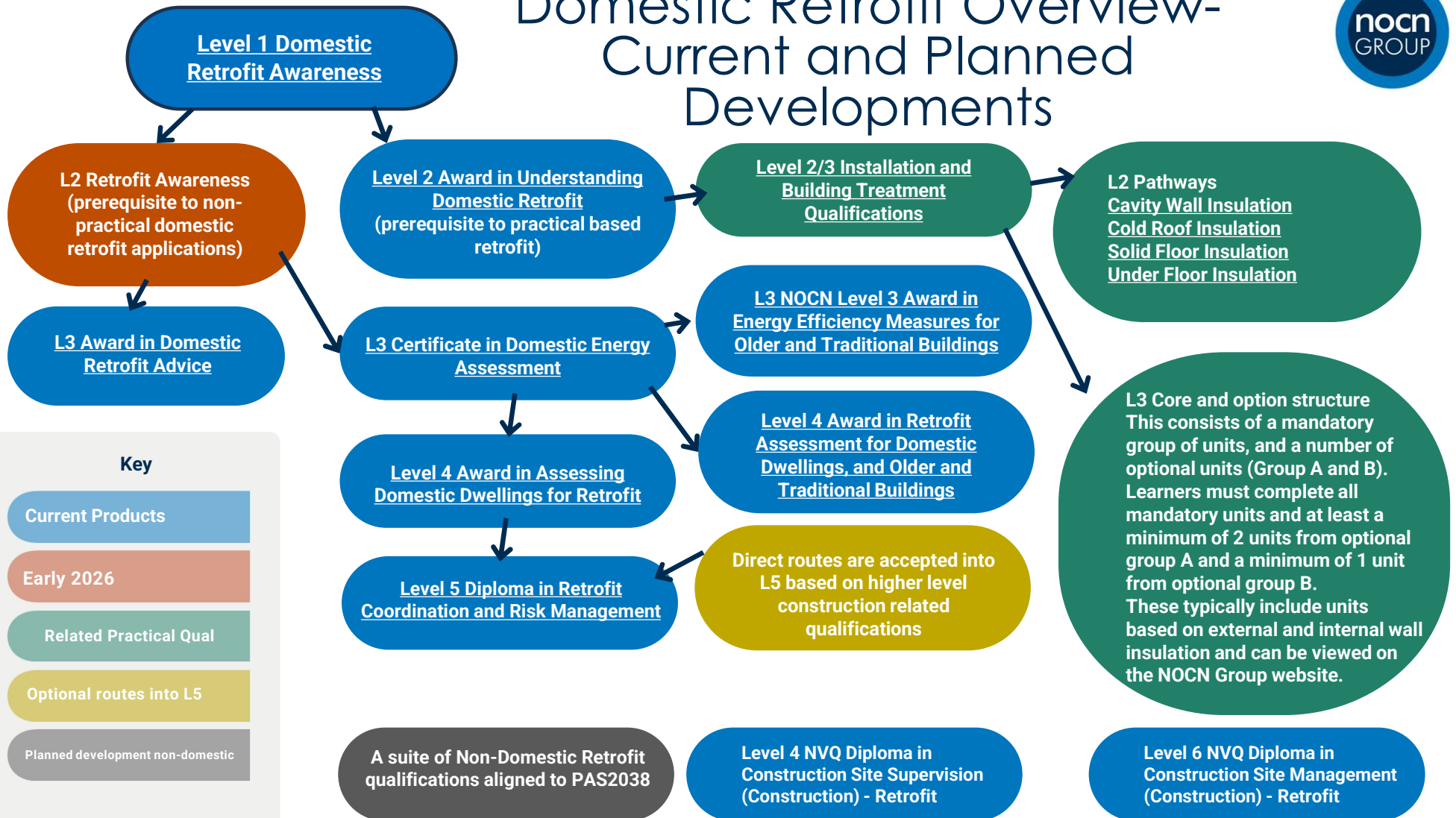
Low Carbon Heating Apprenticeships Standard Supported By NOCN Level 3 Diploma in Low Carbon Heating Technician

NOCN Level 3 Award in the Installation of Air Source Heat Pumps  
(Includes Commissioning, Servicing, Maintenance, and Decommissioning of Air Source Heat Pump Systems)  
*Coming Soon*  
Level 3 Award in the Design of Air Source Heat Pumps  
Level 3 Award and Certificate in the Installation and Design of Low Carbon Heating Systems

# Insulation



# Domestic Retrofit Overview- Current and Planned Developments



## Key

Current Products

Early 2026

Related Practical Qual

Optional routes into L5

Planned development non-domestic



# Solar Photovoltaic

## Core Trade Occupation

Solar PV installers need to have their CSCS card, and an understanding of electrical work and construction work to be able to transition to Solar PV. They will start with qualifications and experience as:

- Roofers: NOCN Level 2 NVQ Diploma in Roofing Occupations
- Low Carbon Heating Technicians – Level 3 Diploma in Low Carbon Heating Technicians and Low Carbon Heating Technician Apprenticeship
- General Builder: NOCN Level 2 Certificate in Construction Multi-skills

## Short Course

Solar PV for Electricians  
(*consultation*)

## Short Course

Introduction to Solar PV Systems

## Short Course

Solar PV for Roofers

Installation of Solar PV systems

NOCN Level 3 Award/Certificate for Solar PV Installer and Operator

Design and Site Assessment

Level 5 Certificate for Certified Solar Photovoltaic Practitioner

**nocn**  
GROUP

# Collaborations

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Website:  
[nocn.org.uk](http://nocn.org.uk)



# Partnership building

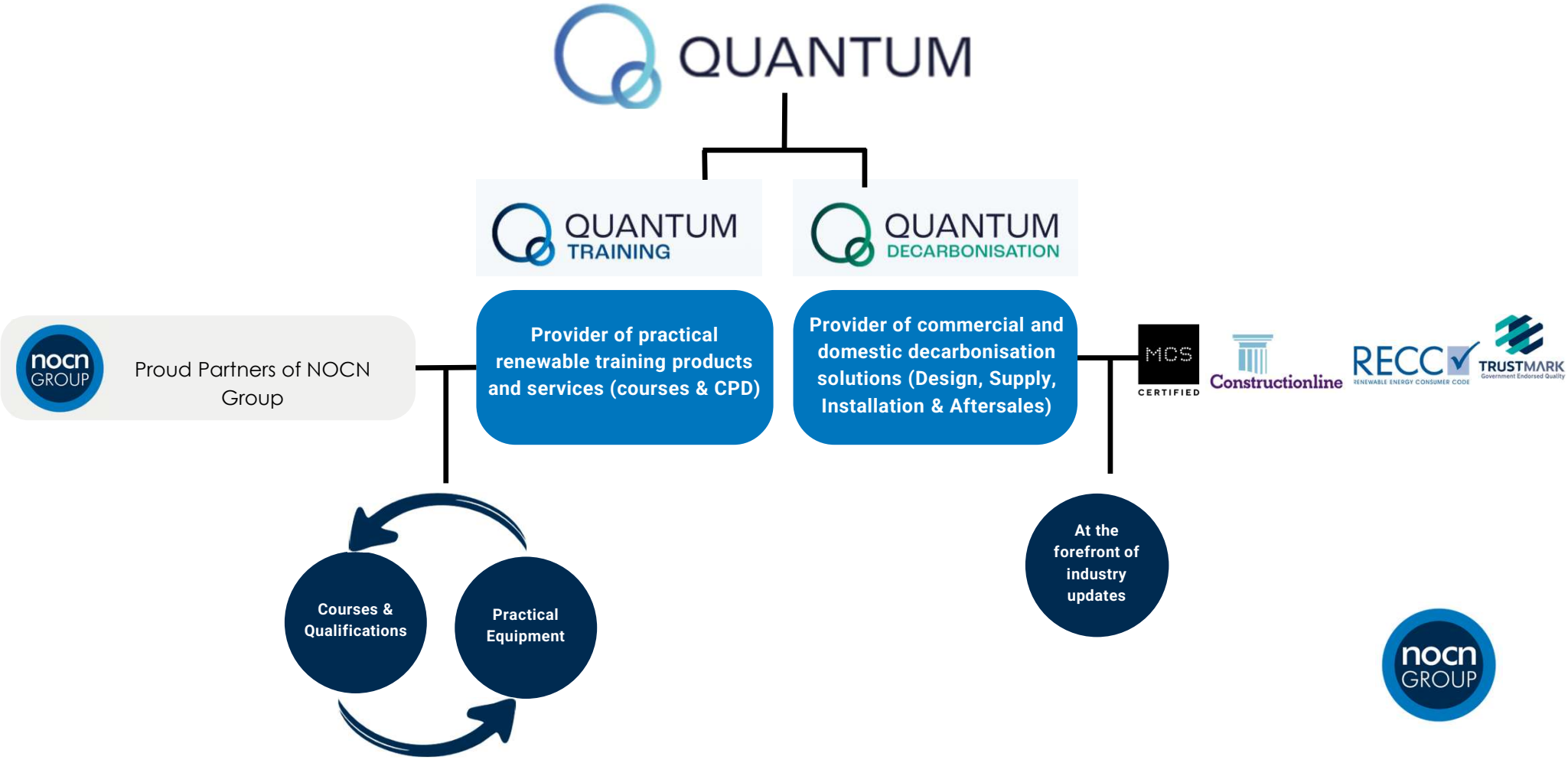


CERTIFIED



- Work with a number of charities, employers and industry bodies to create future-fit skills solutions, tackle the skills gap, showcase industry best practice
- Collaborate with educational partners to create the workforce of the future

# Quantum & NOCN Group's Strategic Partnership



# NOCN Courses – ‘Retrofit’

## Quantum Wall & Floor Insulation Bays



Qualification	Assured Courses	Units
<ul style="list-style-type: none"> <li><a href="#">L3 Diploma in Insulation and Building Treatments</a></li> <li><a href="#">L3 Certificate in Installing Internal Wall Insulation</a></li> <li><a href="#">L3 Certificate in Applying Surface Finish to Internal Wall Insulation</a></li> <li><a href="#">L5 Diploma in Retrofit Coordination and Risk Management</a></li> <li><a href="#">L3 Certificate in Installing Hybrid Wall Insulation</a></li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Awareness in Hybrid Wall Insulation</a></li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Installing Insulation to Suspended Floors in the Workplace</a></li> <li><a href="#">Understanding Domestic Retrofit</a></li> <li><a href="#">Applying Surface Finishes to External Wall Insulation in the Workplace</a></li> <li><a href="#">Installing External Wall Insulation in the Workplace</a></li> <li><a href="#">Install External Wall Insulation</a></li> <li><a href="#">Install Internal Wall Insulation</a></li> </ul>

## Quantum Cold & Warm Roof Insulation Bays



Qualification	Assured Courses	Units
<ul style="list-style-type: none"> <li><a href="#">L3 Certificate in Installing Insulation for Room in Roof</a></li> <li><a href="#">L2 Award in Understanding Domestic Retrofit</a> (also suitable for above facilities)</li> <li><a href="#">L2 Extended Technical Occupational Entry for Carpenters and Joiners (Diploma)</a></li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Solar PV Installation for Roofers</a></li> <li><a href="#">Working at Height and Harness Awareness</a></li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Domestic Retrofit Installation Techniques</a> (also suitable for above facilities)</li> <li><a href="#">Installing Insulation to Cold Roofs in the Workplace</a></li> <li><a href="#">Maintaining Non-Structural Carpentry Work</a></li> <li><a href="#">Undertaking Structural Carcassing Operations</a></li> </ul>

# NOCN Courses – ‘Heating Side’



Quantum Air Source Heat Pump Training



Quantum Ground Source Heat Pump Training



Quantum Solar Thermal Training Bays



Qualifications	Assured Courses	Units
<ul style="list-style-type: none"> <li><a href="#">Level 2 Award Fundamental Principles of Renewable Technologies and Sustainable Energy</a></li> <li><a href="#">Level 2 Certificate Fundamental Principles of Renewable Technologies and Sustainable Energy</a></li> <li><a href="#">Level 3 Diploma Low Carbon Heating Technician</a></li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Sustainable Energy and Renewable Technologies (SERT) – 36 teaching hours</a></li> <li><a href="#">Extended Sustainable Energy and Renewable Technologies – 150 teaching hours</a></li> <li><a href="#">Air Source Heat Pump Installation Maintenance and System Design</a></li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Air Source Heat Pump Design</a></li> </ul>



# Building future-fit skills solutions with industry

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Website:  
[nocn.org.uk](http://nocn.org.uk)



# NOCN Level 3 Diploma in Low Carbon Heating Technician

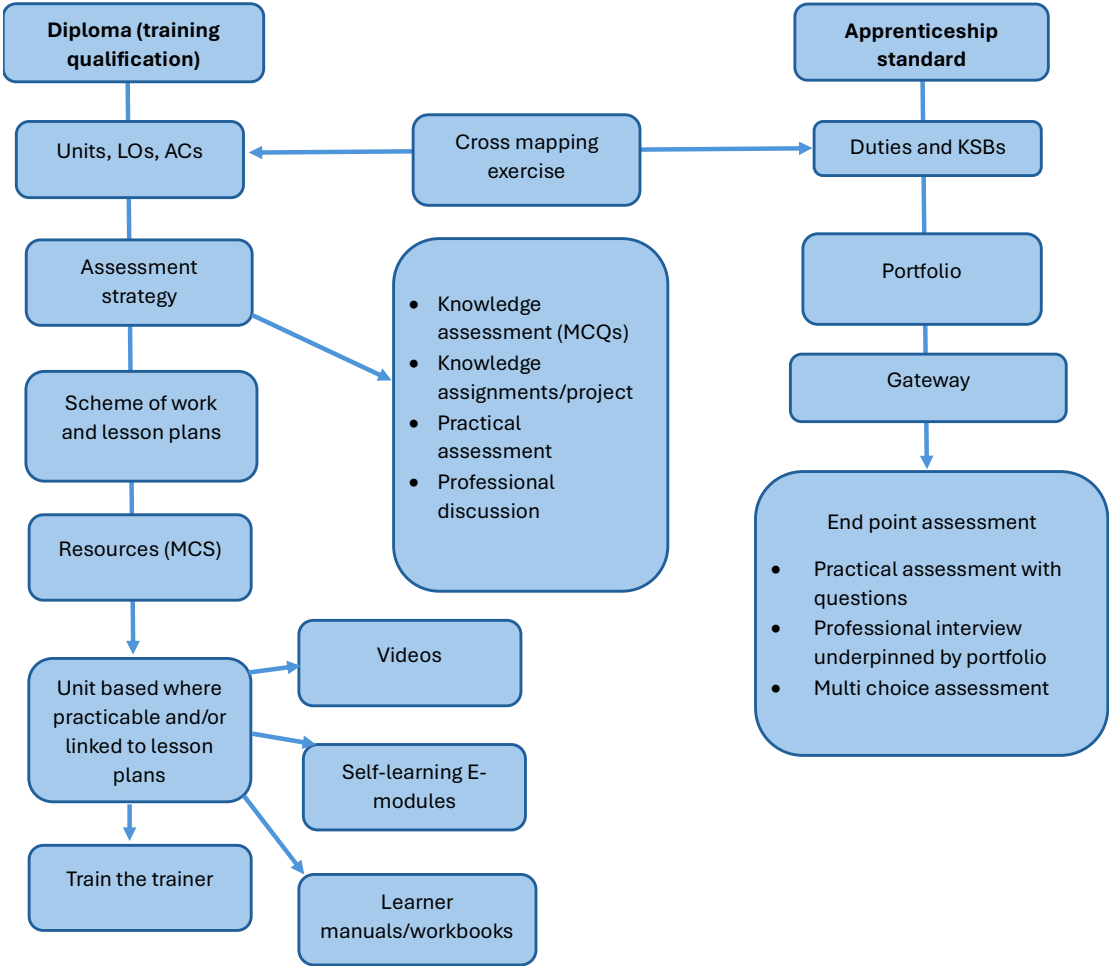
## Background to the development

- **Collaboration**
  - Working closely with MCS (Microgeneration Certification Scheme <https://mcs-certified.com/> )
  - Established a working group based on the LCHT Trailblazer and including FE and Industry.
- **Process**
  - Aligning diploma with apprenticeship
  - Cross mapping diploma content with apprenticeship KSBs
  - Developing an assessment strategy
  - Developing content and support material
  - Meeting the requirements of the IfATE/Skills England reforms.



# Background to the development

The development process-low carbon heating technician



# The product

- **Units**

- Unit 1. Health and safety in a low carbon heating and wider construction environment
- Unit 2. Environmental technology and sustainability.
- Unit 3. Common processes and techniques.
- Unit 4. Scientific and mechanical principles.
- Unit 5. Planning and supervision.
- Unit 6. Low carbon heating and hot water systems technology.
- Unit 7. Electrical work and controls for low carbon heating and hot water systems.
- Unit 8: Install, commission, service and maintain low carbon heating and hot water systems.

2. Understand the basic principles of sustainability.

**Delivery content:**

The aim of this learning outcome is to provide learners with the knowledge and skills to understand the basic principles of sustainability and sustainable energy, focusing on energy efficiency, the distinction between renewable and non-renewable energy sources, and lifecycle analysis. It delves into identifying these energy sources, exploring the fundamentals of energy efficiency within low carbon heating and hot water technologies, and considers material reuse and recycling benefits. Additionally, it covers the essentials of emissions and waste management and outlines principles for the efficient use of resources, aiming to foster a comprehensive grasp of environmental technology and sustainability at an introductory level.

The learner must:

- 2.1 Define the terms **sustainability** and **sustainable energy**.
- 2.2 Explain the **principles** of sustainable energy in the context of:
  - Energy efficiency
  - Renewable and non-renewable energy sources
  - Lifecycle analysis.
- 2.3 Identify the **sources** of renewable and non-renewable energy.
- 2.4 Explain the basic principles of energy efficiency in **low carbon heating and hot water technologies**.
- 2.5 Explain how materials are **reused and recycled**, and the **benefits**.
- 2.6 Outline the process for the **control and management** of emissions and

# The product

- **Range of assessment methodologies**
- Tailored for each unit
- MCQs-externally set and externally assessed
- Coursework-externally set and internally assessed
  - Assignments and assignment questions-based on ACs or groups of ACs
  - Projects-e.g., holistic knowledge approach typically based on 'system design' criteria
- Practical assessments-externally set and internally assessed
  - Based on specific areas of practical work for the practical based ACs
- Synoptic assessment for unit 8 practical content.

		B	C	D	E	F
		Coursework (Knowledge)	Multiple choice examination	Task based controlled assessments (Practical)	Observation	Professional discussion
1	<b>Unit 2. Environmental technology and sustainability.</b>					
2						
3	<b>LO1 Understand the basic principles of environmental technologies.</b>					
4	The learner must:					
5	1.1 Define the term, and scope of <b>environmental technologies</b> .		1			
6	1.2 Explain the relevance of <b>low carbon heating and hot water heating systems</b> to environment technologies.		2			
7	1.3 Explain the <b>basic principles</b> underpinning system design and integration.		2			
8	1.4 Identify the main <b>regulatory and policy frameworks</b> related to environmental technologies.		1			
9	1.5 State the basic <b>ethical and professional considerations</b> underlying environmental technologies.		1			
10	1.6 State the purpose of an <b>environmental impact assessment</b> .		1			
11	<b>LO2 Understand the basic principles of sustainability.</b>					
12	The learner must:					
13	2.1 Define the terms <b>sustainability</b> and <b>sustainable energy</b> .		1			
14	2.2 Explain the <b>principles</b> of sustainable energy in the context of:					
15	• Energy efficiency		1			
16	• Renewable and non-renewable energy sources		1			
17	• Lifecycle analysis.		1			
18	2.3 Identify the <b>sources</b> of renewable and non-renewable energy.		1			
19	2.4 Explain the basic principles of energy efficiency in <b>low carbon heating and hot water technologies</b> .		2			
20	2.5 Explain how materials are <b>reused and recycled</b> , and the <b>benefits</b> .		2			
21	2.6 Outline the process for the <b>control and management</b> of emissions and waste.		2			
22	2.7 Explain the basic principles for the <b>efficient use of resources</b> .		2			

# The product

## **Size**

- 800 GLH
- 970 TQT and 97 credits.

## **Entry requirements**

- Min age 16

## **Cost**

- £162

## **Apprenticeship?**

- Yes, will be a mandatory requirement when standard revision is released (expected 09/26)

## **Availability**

- Now
- Resources – Yes with more in development
- **Funding**
- Currently no, but post reforms, expected.

# Low Carbon Heating Technician V1.1

## Occupation Purpose:

Plan, select and size, install, commission, service and maintain (including fault finding, diagnosis and repair) for:

- Zero carbon central heating and hot water systems (Residential, industrial and commercial premises).
- Zero carbon heat sources may include but are not limited to e.g. Ground & Air Source Heat Pumps and Solar Thermal Collectors.
- Working on new build and existing properties
- Involve the installation, service, fault finding and repair of zero carbon heating & hot water appliances, storage vessels, pipework, heat emitters (and associated components/mechanical and electrical control systems).



# Key Qualifications



**Retrofit suite from L1 – L5** Fully updated to align with PAS2035

**NOCN Level 1 Award in Domestic Retrofit Awareness – 24/02/26**

**NOCN Level 2 Award in Understanding Domestic Retrofit**

**NOCN Level 3 Award in Domestic Retrofit Advice**

**NOCN Level 4 Award in Assessing Domestic Dwellings for Retrofit**

**NOCN Level 4 Award in Retrofit Assessment for Domestic Dwellings, and Older and Traditional Buildings**

**NOCN Level 4 NVQ Diploma in Construction Site Supervision (Construction) - Retrofit**

**NOCN Level 5 Diploma in Retrofit Coordination and Risk Management**

**NOCN Level 6 NVQ Diploma in Construction Site Management (Construction) - Retrofit**

# Additional Resources



Qualification	Notes
<b><u>NOCN Level 2 Award in Understanding Domestic Retrofit</u></b>	Revision workbooks for learners and PowerPoints for tutors
<b><u>NOCN Level 3 Award in Domestic Retrofit Advice</u></b>	Revision workbooks for learners
<b>NOCN Level 5 Diploma in Retrofit Coordination and Risk Management</b>	PowerPoints to support tutors are in development
<b>NOCN Level 3 Certificate in Hydrogen</b>	Full set of PowerPoints to support tutors
<b>NOCN Level 3 Certificate for Solar PV Installer and Operator</b>	PowerPoints to support delivery are in development
<b><u>NOCN Level 3 Diploma in Low Carbon Heating Technicians</u></b>	PowerPoints, Tutor workbook and Learner workbook to cover year one are ready. Year 2 and year 3 will be developed
<b><u>NOCN Level 2 Certificate in Fundamental Principles of Renewable Technologies and Sustainable Energy</u></b>	Tutor and Learner workbook and full set of PowerPoints available
<b>NOCN Level 2 Certificate in Welding</b>	e-Learning Course to teach knowledge of chosen process e.g. MAG/TIG/MMA and PowerPoint to teach Health and Safety

# New Qualifications



[NOCN Level 2 Diploma in Plumbing](#)

[NOCN Level 2 Diploma in Electrical Studies](#)

[NOCN End Point Assessment in Building Services Engineering Foundation Apprenticeship](#)

[NOCN Level 1 Award in Retrofit Awareness](#)

# New Courses (see all Assured courses [here](#))

[Awareness of Renewable Technologies](#)

[Understanding Air Source Heat Pump Installation Maintenance](#)

[Employability Foundation Courses](#)

[Sustainable Energy and Renewable Technologies & Extended Sustainable Energy and Renewable Technologies](#) (also available as [Qualifications](#))

# Future Qualifications



## Qualification

**NOCN Level 3 Certificate in Non-Domestic Energy Assessment**

**NOCN Level 3 Certificate in Non-Domestic Retrofit Advice**

**NOCN Level 5 Certificate in Non-Domestic Retrofit Lead Professional**

**NOCN Level 4 or 5 Award for Assessing Damp and Mould in Domestic Dwellings**

**NOCN Level 3 Award in Unvented Hot Water Systems and Safety**

**NOCN Level 3 Award in Working with F Gasses**

**NOCN Level 2 Diploma in Supporting Engineering Construction Installation (Pipefitting, Mechanical Fitting and Plating)**

**NOCN Level 3 Diploma in Supporting Engineering Construction Installation (Pipefitting, Mechanical Fitting and Plating)**

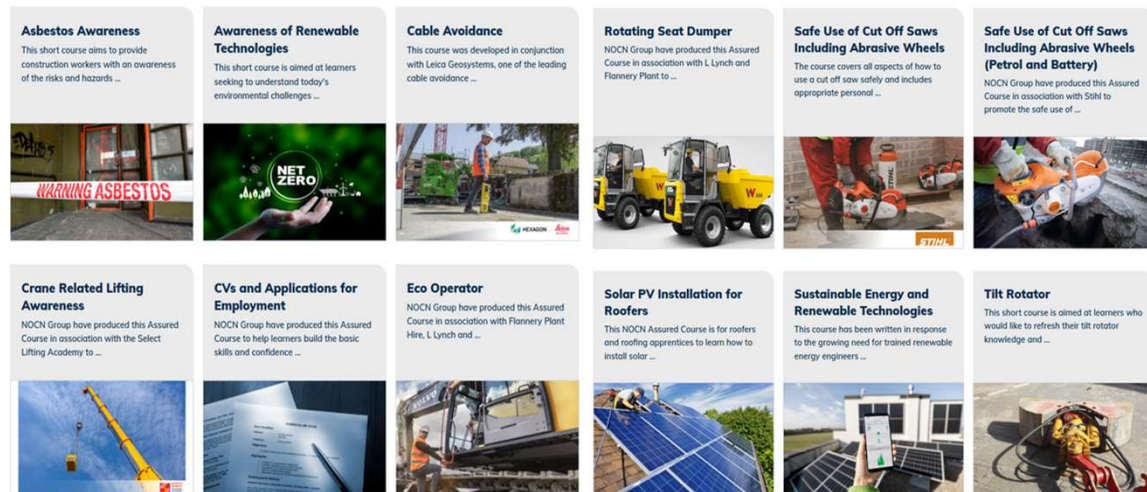
# Assured Courses



We provide a variety of industry assured bolt-on courses that can be integrated into existing programmes, giving centres the flexibility to tailor provision to learner and employer needs.

Examples include: ([Click here](#) to view courses)

- Awareness in Hybrid Wall Insulation;
- Awareness of Renewable Technologies;
- Asbestos awareness;
- Solar PV;
- Sustainable Energy and Renewable Technologies;
- Extended Sustainable Energy and Renewable Technologies;



We are always happy to collaborate with centres and employers to develop any resources, training, or support required to meet industry needs.

# Thank you. Q&A Session

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Website:  
[nocn.org.uk](http://nocn.org.uk)

Address:  
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## Update from the IOR

Miriam Rodway  
IOR CEO



**RACHP** Institute of Refrigeration  
**IOR.org.uk** **CFI**  
**RACHP Engineering Technicians Section**  
**Good Practice Guide 144**

## Insulating Copper Refrigerant Pipework in VRVs and VRFs

This bulletin is intended to provide awareness to RACHP technicians that proper insulation of refrigerant pipework is critical to refrigeration and air conditioning systems to maintain efficiency, prevent energy losses, and avoid system failures due to corrosion or thermal inefficiencies.

In GPG 12 Insulation installation guidelines for refrigeration and air conditioning pipework, we talk about the importance of the correct installation of insulation. In GPG 125 we talk about what pipework should and should not be insulated in DX Refrigeration.

Both GPG 12 & 125 are available FOC from the IOR and should be read in conjunction with GPG 144.

**ONLINE EVENT**

## Unscrambling The Refrigerant Clutter For The Future

**Speakers**  
**Daniel Colbourne Finstr**  
**Asbjørn Leth Vonsild**

5 March 2026  
 16.00-17.00

**IOR.org.uk**  
 REFRIGERATION AIR CONDITIONING HEAT PUMPS

Institute of Refrigeration  
 Kelvin House, 76 Mill Lane  
 Garsholton SM5 2JR

Education Guidance Note 17

Industry support for training providers and apprentices

This Guidance Note outlines the resources available from the Institute of Refrigeration (IOR), its members and the wider industry that can help organisations providing training to improve their links with industry, encourage training and provide resources for their students. The guidance is for the use of anyone involved in training in the IOR sector in the UK including vocational colleges, universities, training companies, industry bodies or employers. It is of benefit to the whole industry to encourage professional development of those undergoing training, and to ensure that there is adequate good quality training that makes the best use of resources available. Below is a list of suggested resources, initiatives and contacts provided as a starting point for those who want some ideas on how they can work more closely with industry. Individual training organisations will want to explore their own networks and opportunities for contacting employers and manufacturers in addition to these suggestions. Manufacturers are usually very keen to work with colleges and students and generous in providing equipment, technical talks or visits so we encourage you to reach out to them and start building your own contacts.

**Guidance for Owners and Operators of Refrigerated Cold Storage Facilities**

Transport Industrial Commercial Refrigeration  
 Meeting Business Needs 1st 2024



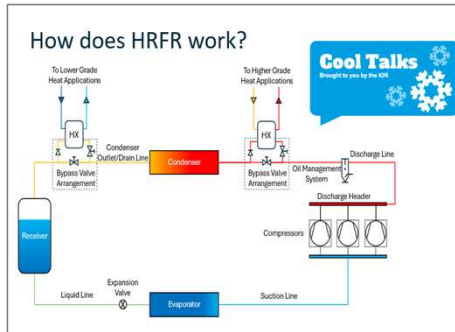
**IOR.org.uk**  
 REFRIGERATION AIR CONDITIONING HEAT PUMPS

**IOR masterclass**

## Welcome to this IOR Masterclass

An Introduction to Ammonia Refrigeration  
**Clive Thornley MInstR**

**CPD MEMBER**  
 The CPD Certification Service



### GB F Gas consultation - IOR response

17 Dec 2025

The IOR is preparing feedback on the EU F Gas regulation consultation, responses are due 17<sup>th</sup> December. Are you an installer, manufacturer, end user or does your business offer service and maintenance for RACHP equipment? You need to respond to the DEFRA GB HFC phase down consultation because it is likely to have a major effect on your future business:

- It means that the options for servicing of most existing equipment will be restricted in future – for example 46% of cold stores still operating on HFCs (according to the CCF Cold Chain Report 2026) – as retrofit solutions are not and will not be available.
- It will affect your customers' need to plan for investment in new equipment using different refrigerants in future, particularly for existing equipment that could be considered prematurely obsolete as a result.
- For manufacturers it will affect your future product lines to adapt for different refrigerants.
- As employers it means you will need to increase your investment in training to ensure your staff can work safely – even though it is not currently mandatory.

The outcomes will be used to shape future legislation for our sector. Take part in this consultation to make the views of the RACHP industry heard.

The consultation is available at <https://consult.defra.gov.uk/floorinated-gases-and-ozone-depleting-substances-policy/learn?g=regulation-in-great-britain/> and will close on 17 December 2025.



### ROADMAP INTO TEACHING

**Support for new teachers**  
 The IOR can put you in touch with other teachers to support you on your teaching journey. Email [info@ior.org.uk](mailto:info@ior.org.uk) to find out more.

**Could you teach part time?**  
 Part-time positions are available allowing you to combine your current job with teaching.

**Where to start?**  
 Your first step is to contact your local college about current vacancies. The IOR guidance note on getting on teaching has a step-by-step guide on how to get started.

**Need help getting qualifications?**  
 Teaching or technical qualifications aren't always required to get started. And you can earn while you train.

**IOR.org.uk**





Miriam Rodway  
[Miriam@ior.org.uk](mailto:Miriam@ior.org.uk)



 **IOR.org.uk**  
REFRIGERATION AIR CONDITIONING HEAT PUMPS

# Sponsorship Announcement STEM Lego Initiatives

Sam Baker  
Technical Sales Engineer



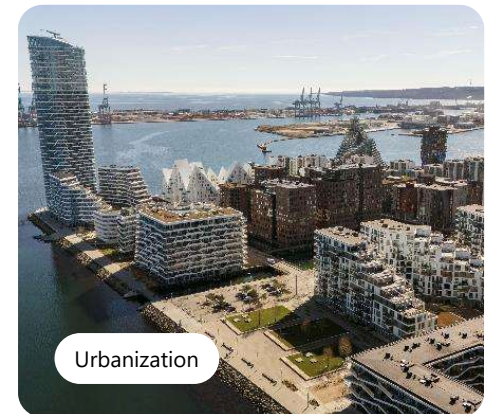
## Our Purpose

# We engineer a better future

We engineer solutions that increase machine productivity, reduce emissions, lower energy consumption, and enable electrification.

We are a family-owned company dedicated to creating long-term value for all our stakeholders.

# Global megatrends create significant opportunities for Danfoss



# Danfoss solutions are everywhere



Danfoss IOR Lego STEM Initiative 2026

Classified as Business

# Danfoss in brief



We engineer solutions that increase machine productivity, reduce emissions, lower energy consumption, and enable electrification.

## Business segments



### Danfoss Power Solutions

Full solutions across mobile and industrial hydraulics, fluid conveyance and data centers applications, electrification, and software.



### Danfoss Climate Solutions

Energy-efficient heating and cooling solutions for industrial applications, buildings, infrastructure, data centers and the cold chain.



### Danfoss Power Electronics and Drives

Power semiconductor modules, variable speed drives, and power conversion solutions engineered to enable electrification, and enhance energy efficiency and productivity across industries.

## Worldwide sales

Americas  
36%

Europe  
40%

Asia Pacific  
24%

## Global sales

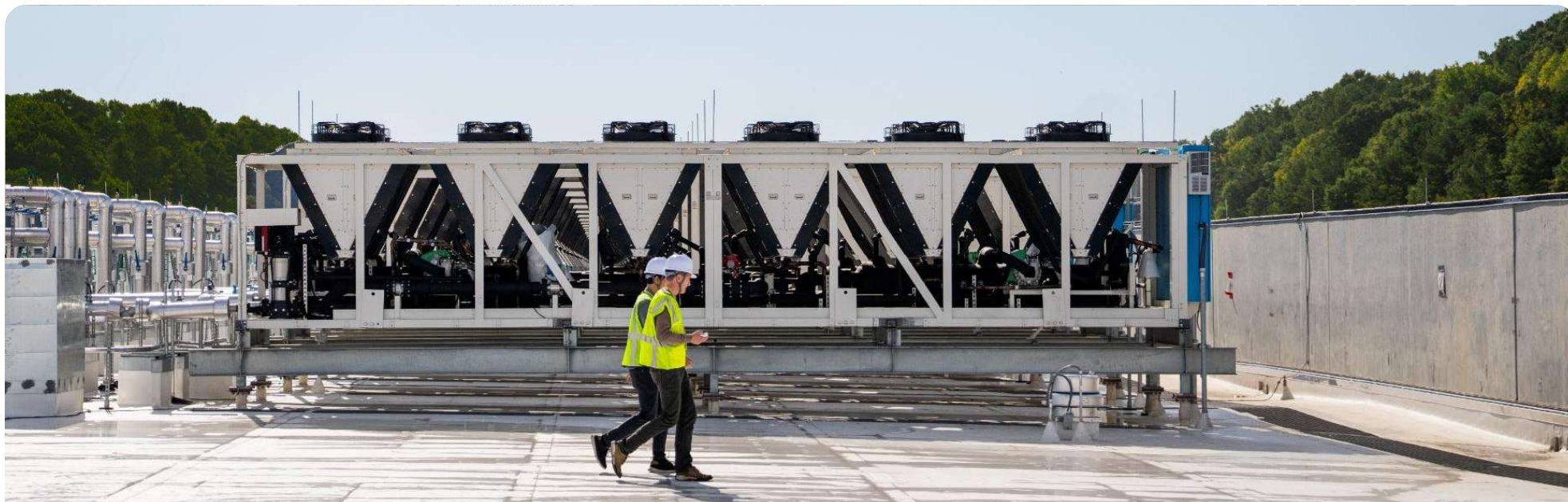
EUR 9.4b

## Employees worldwide

39,353

As per annual report 2025

# Danfoss Climate Solutions



# Focus on energy efficiency and sector integration for cost-effective decarbonization of buildings and industry



Buildings



Food retail



Industrial refrigeration

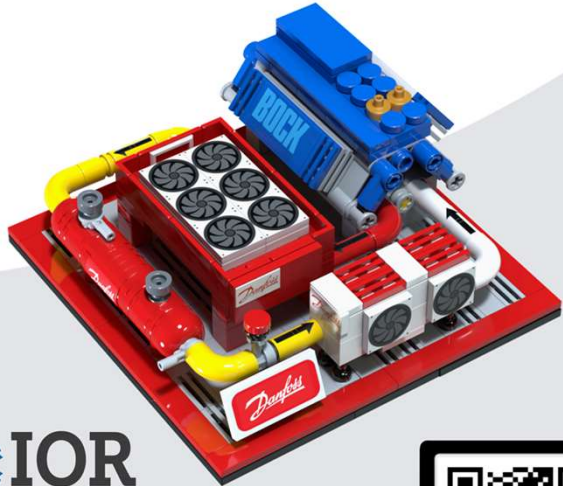


District energy



**BOCK**<sup>®</sup>

Refrigeration Plant Building Kit



Custom designed using genuine LEGO<sup>®</sup> parts

**UK  
CA**

CHOKING  
HAZARD  
Small Parts



Not suitable for children under 3 years



Instructions

Sponsorship 2026

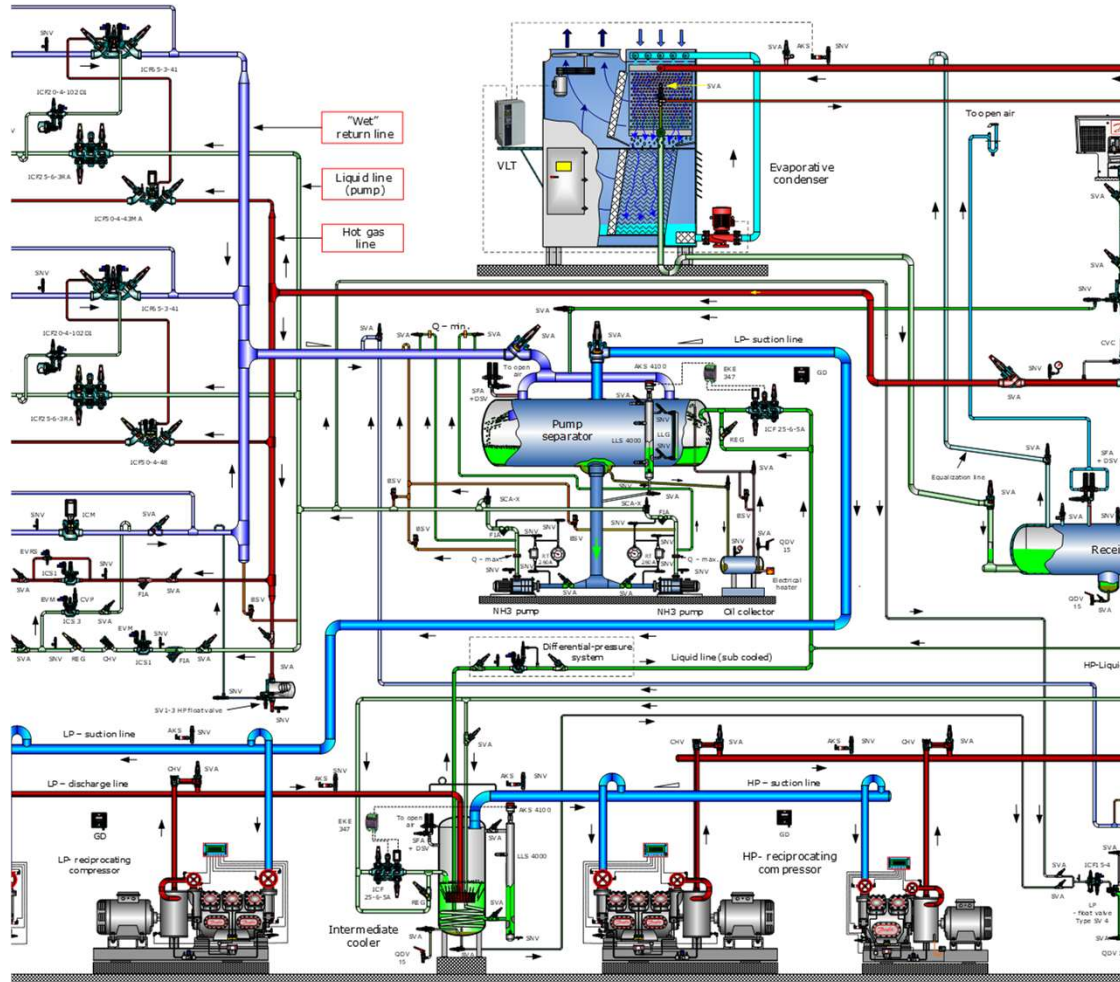
Danfoss is proud to sponsor the IOR STEM LEGO<sup>®</sup> initiative 2026



# Why we wanted to sponsor

Why we wanted to sponsor:

- Hands on learning & engagement
- Values alignment
- Stronger links to schools, colleges etc
- Engage future talent in the industry
- STEM inspiration
- + Many more



# Careers at Danfoss



## Start your sustainable career in our **Postgraduate Program**

[What drives you? Meet our people at Danfoss, Jonas Banse](#)

[What drives you? Meet our people at Danfoss, Pernille Bjørnkov](#)



# What is the Danfoss Postgraduate Program?



## **Bridge Academic and Industry**

Help graduates apply their academic knowledge in real-world projects within Danfoss.



## **Develop Passionate Professionals**

Empower individuals who share Danfoss' commitment to innovation, sustainability, and excellence.



## **Foster Global Collaboration**

Provide exposure to diverse teams and international projects to build a strong global mindset.

# Danfoss supports educational initiatives in many ways...

## Relevant links

<b>Postgraduate Program</b>	<a href="#">Danfoss Postgraduate Program   Danfoss</a>
<b>Danfoss Learning</b>	<a href="#">Danfoss Learning   Danfoss</a>
<b>Product animations</b>	<a href="#">Product animations   Refrigeration and air conditioning   Danfoss</a>
<b>Training programs</b>	<a href="#">Advanced Industrial Refrigeration Training Series   Danfoss</a>
<b>Cooling Support Hub</b>	<a href="#">Get technical support for installing Danfoss cooling solutions   Danfoss</a>





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Custom designed using genuine LEGO® parts



CHOKING HAZARD Small Parts



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Instructions



# IOR

INDUSTRY SKILLS ALLIANCE

## Refreshment Break & Networking

ONE SECTOR. ONE VOICE. ONE FUTURE

# Skills Alliance Working Groups

## GROUP 1: Students & Young Talent



- **Purpose:** Cultivate next-gen professionals, foster engagement.
- **Priorities:** Outreach, mentorship, career pathways.



**3 MONTHS:**  
Outreach campaign & student forum launch

**6 MONTHS:**  
Mentorship pilot & university partnerships

**12 MONTHS:**  
Talent showcase & scholarship program

## GROUP 2: Bids, Tenders & Funding



- **Purpose:** Secure resources, analyze opportunities, write proposals.
- **Priorities:** Grant identification, bid management, collaborative funding.



**3 MONTHS:**  
Identify key funding bodies & initial bid

**6 MONTHS:**  
Submit two major tenders & refine strategy

**12 MONTHS:**  
Secure multi-year funding & sustainability plan

## GROUP 3: Courses, CPD & Professional Qualifications



- **Purpose:** Enhance skills, develop curriculum, set standards.
- **Priorities:** Curriculum review, digital CPD, industry qualifications.



**3 MONTHS:**  
Curriculum mapping & CPD workshop design

**6 MONTHS:**  
Launch online CPD modules & pilot qualification

**12 MONTHS:**  
Rollout full professional qualification & accreditation

# Closing Comments and Next Steps

## Become a STEM Ambassador



Inspire the next generation by sharing your knowledge and passion for refrigeration and cooling technologies.

## Promote Student Membership



Encourage students and apprentices to join the Institute of Refrigeration.

## Offer Industry Placements



Provide valuable work experience opportunities for students and new entrants.

## Join & Engage with the LinkedIn Page



Share insights, updates, and best practices with industry peers.

## Share with the Wider Industry



Talk about the Alliance within your organisation and networks.



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**THANK YOU**  
**Lunch, Networking & Tour**

**Next Event**  
**Thursday 2<sup>nd</sup> July**

**Please can we get a group photo**