



WEBINAR: CARBON NEUTRAL AND NET ZERO – HOW TO GET STARTED

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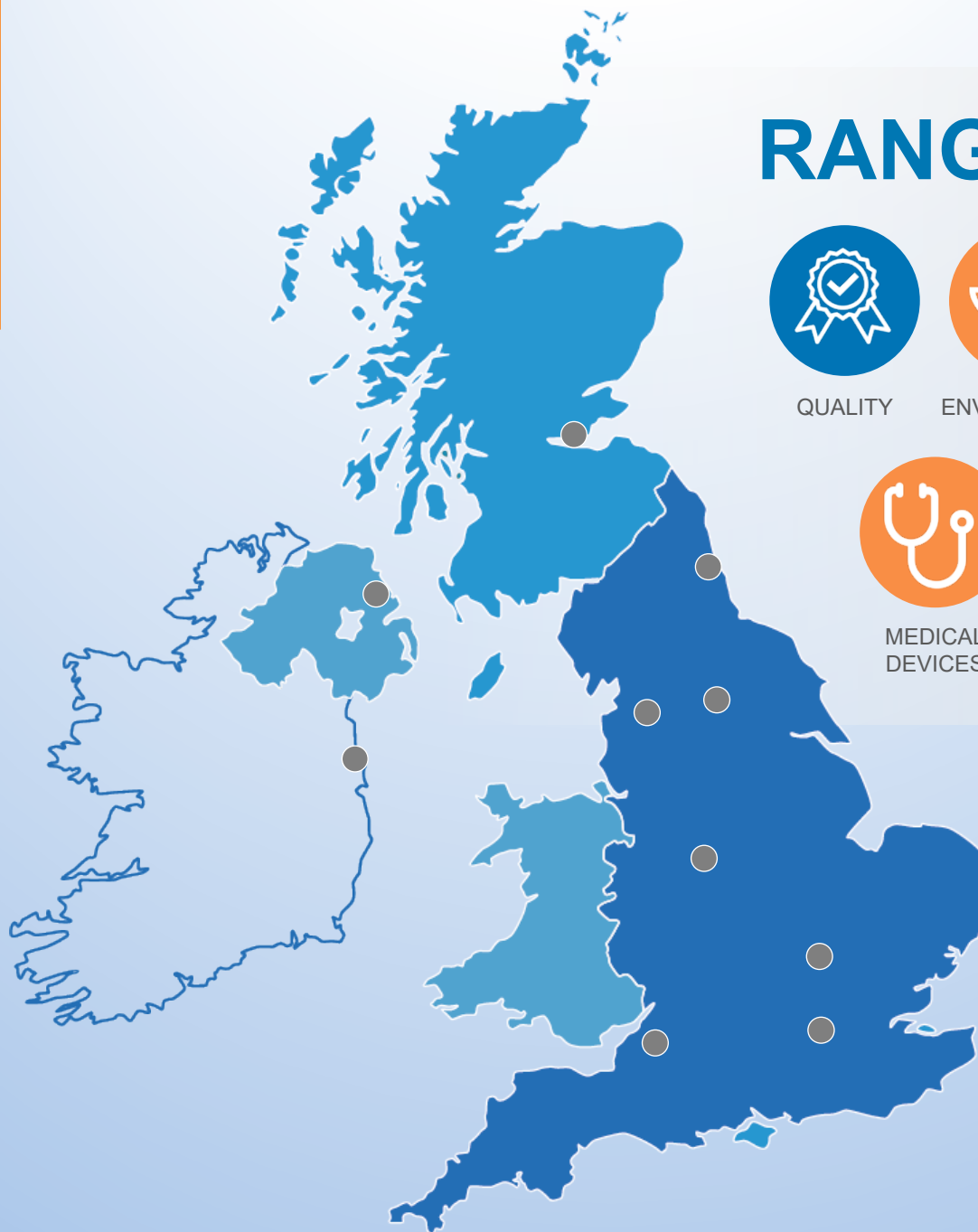
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KEY INFO

- **45 minute webinar**
- **Questions in the chat box**
- **Q&A at the end**
- **Recording of webinar circulated shortly**

YOUR PRESENTER



- Delivers solutions for clients who want to increase their profitability by improving safety performance, achieving ISO certification or demonstrating regulatory compliance.
- Works across all sectors from Manufacturing to Care Homes.
- Specialises in providing high-quality improvement programmes for SME's helping them achieve certification and improve inspection ratings.
- Over 30 years experience in highly-regulated manufacturing and service industries.
- A chartered Chemical Engineer (CEng FICHE) for over 30 years.
- A member of IOSH, IIRSM, and OSHCR.
- A Recognised Safety Practitioner (RSP).
- ESOS Lead Assessor



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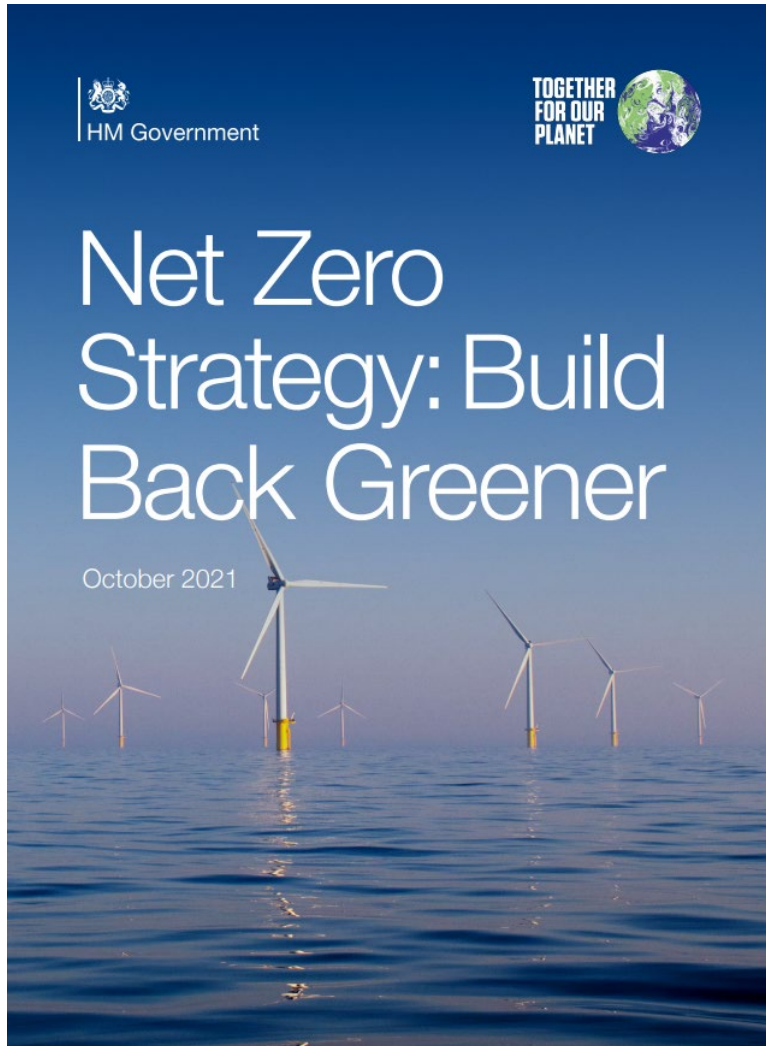
WHAT WILL YOU LEARN?

- What the terms 'carbon neutral' and net zero' really mean
 - What the UK government is expecting businesses to do
 - How to get started on the 'carbon neutral' and 'net zero' journey
-

WHAT THE TERMS 'CARBON NEUTRAL' AND NET ZERO' REALLY MEAN

	CARBON NEUTRAL	NET ZERO
Definition	Carbon-neutral means purchasing carbon reduction credits equivalent to emissions released, without the need for emissions reductions to have taken place.	Net zero means reducing emissions in line with latest climate science, and balancing remaining residual emissions through carbon removal credits.
Boundary	Carbon-neutral can refer to a specific product or service, or the whole organisation.	Net zero must encompass the whole organisation.
Level of ambition	Carbon-neutral allows for emissions to be created with no specified level of reduction required.	Net zero requires all available technologies to be used to reduce baseline emissions. Only truly 'hard-to-decarbonise' emissions may be compensated with offsets.
Existing standard and certification	Carbon-neutral has an existing standard. PAS 2060 is the only recognised international standard for carbon-neutrality. Certification of this exists via bodies such as the Carbon Trust and NQA .	Net zero standards and criteria are currently being developed by the Science-Based Targets initiative (SBTi)
Time frame	Carbon-neutral is a short term goal, that can be achieved now.	Net zero is a long term goal, which involves setting specific targets to work towards.
Types of offsets	Carbon-neutral involves offsetting using carbon reduction projects which reduce the amount of CO2 released into the atmosphere.	Net zero involves offsetting using carbon removal projects which actually take CO2 out of the atmosphere.
Emissions Scope 1	Yes	Yes
Emissions Scope 2	Yes	Yes
Emissions Scope 3	No	Yes

WHAT THE UK GOVERNMENT IS EXPECTING BUSINESSES TO DO



- **Point 1:** Advancing Offshore Wind
- **Point 2:** Driving the Growth of Low Carbon Hydrogen
- **Point 3:** Delivering New and Advanced Nuclear Power
- **Point 4:** Accelerating the Shift to Zero Emission Vehicles
- **Point 5:** Green Public Transport, Cycling and Walking
- **Point 6:** Jet Zero and Green Ships
- **Point 7:** Greener Buildings
- **Point 8:** Investing in Carbon Capture, Usage and Storage
- **Point 9:** Protecting Our Natural Environment
- **Point 10:** Green Finance and Innovation

SECR: STREAMLINED ENERGY & CARBON REPORTING FRAMEWORK FOR UK BUSINESS

Three groups of businesses are affected by SECR (implemented on 1/4/19).

1. Quoted companies of any size that are already obliged to report under mandatory greenhouse gas reporting regulations.
2. Unquoted companies incorporated in the UK that meet the definition of 'large' under the Companies Act 2006 will have new reporting obligations. This applies to registered and unregistered companies.
3. 'Large' Limited Liability Partnerships (LLPs) will be required to prepare and file a 'Energy and Carbon Report'.

Unquoted companies or LLPs are defined as 'large' if they meet at least two of the following three criteria in a reporting year:

- A turnover of £36 million or more;
 - A balance sheet of £18 million or more; or
 - 250 employees or more.
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SECR: STREAMLINED ENERGY & CARBON REPORTING FRAMEWORK FOR UK BUSINESS

- SMEs will need to embrace carbon reduction measures if governments are to deliver on their net zero targets.
 - SMEs account for roughly 90% of global businesses and more than half of employment.
 - SME's play a crucial role in economic growth, innovation and job creation.
 - If the UK's net zero target by 2050 is to be achieved, it will be crucial that SMEs reduce their carbon emissions.
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HOW TO GET STARTED ON YOUR JOURNEY



THE GREENHOUSE GAS PROTOCOL CLASSIFIES EMISSIONS SOURCES INTO THREE 'SCOPES'

Scope 1 - Direct

- Fuel combustion
- Company vehicles
- Process emissions
- Fugitive emissions

Scope 2 – Indirect

- Purchased electricity, heat and steam

Scope 3 – Through the value chain

- Purchased goods and services
- Capital goods
- Fuel and energy-related activities
- Upstream transportation and distribution
- Waste generated in operations
- Business travel
- Employee commuting
- Upstream leased assets
- Downstream transportation and distribution
- Purchasing of sold products
- Use of sold products
- End-of-life treatment of sold products
- Downstream leased assets
- Franchises
- Investments

THE GREENHOUSE GAS PROTOCOL CLASSIFIES EMISSIONS SOURCES INTO THREE “SCOPES”

The Greenhouse Gas (GHG) Protocol is a widely used standard that sets out how to account for Greenhouse Gas emissions.

Under the GHG Protocol, all organisational footprints must include Scope 1 and 2 emissions.

There is more flexibility when choosing which Scope 3 emissions to measure and report, and you can tailor these to reflect your environmental and commercial goals.

The best approach depends on what you intend to use the footprint for, the data available to calculate it, what you want to monitor and which sources you can influence.

Organisations commonly include waste generated in operations and employee business travel from Scope 3



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GREENHOUSE GASES - SUMMARY

A key step in beginning a low carbon transition is understanding your carbon footprint, otherwise known as greenhouse gas (GHG) accounting.

The primary GHGs include:

- Carbon dioxide (CO₂) which arises from burning fossil fuels.
 - Methane (CH₄) which arises from cattle and other ruminants, decomposing organic waste, manure, leaking natural gas, land transformation and rice.
 - Nitrous oxide (N₂O) which arises from agriculture through fertilizers and crops.
 - Fluorinated gases (HFCs, PFCs, SF₆) which arise primarily from refrigerant leakages and other industrial processes.
 - Nitrogen trifluoride (NF₃) which is primarily produced in manufacturing
-

CALCULATING YOUR CARBON FOOTPRINT

Calculating your organisational carbon footprint is the first step towards reducing it.

It also means you can report the figure or gain independent certification for marketing or corporate responsibility purposes, or to meet the requirements of climate change legislation.

There are two primary reasons to calculate your organisational carbon footprint:

- Manage your GHG emissions and make reductions over time.
- Report your footprint accurately to a third party. In the UK all quoted companies are required to report their annual greenhouse gas (GHG) emissions in their directors' report.

Quoted companies are those that are:

- UK incorporated and whose equity share capital is officially listed on the main market of the London Stock Exchange;
 - Or is officially listed in a European Economic Area;
 - Or is admitted to dealing on either the New York Stock Exchange or NASDAQ
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THE JOURNEY FOR SMES

- ✓ Make a commitment
- ✓ Calculate your baseline emissions
- ✓ Switch to a green tariff
- ✓ Make a plan to reduce





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THE DRIVERS FOR SME'S AND CARBON REDUCTION

There are various challenges facing SMEs across specific sectors and geographies, but there are also some common obstacles.

SMEs may not have the in-house sustainability expertise, time or resources to tackle their carbon footprint, and may find it difficult to measure and reduce value-chain emission reductions in line with limiting warming to 1.5°C.

Therefore, the focus for SMEs should be to understand their emissions, set interim science-based targets and then focus on implementing the most straight forward carbon reduction opportunities before tackling longer-term, more complex initiatives.

Here are some other drivers for action on carbon reduction:

- Cutting costs and increasing profits
 - Larger companies expecting their suppliers to take action
 - Customer expectation
 - Opening new markets
 - Enhancing reputation
-

THE DRIVERS FOR SME'S AND CARBON REDUCTION

The first step in the journey to net zero begins by making a commitment to reduce emissions.

This can be done through organisations such as the Science Based Targets initiative (SBTi) or the SME Climate Hub.

However, a commitment can also be made independently.

The next step is to calculate your baseline emissions, beginning with calculating emissions arising from your own operations (Scope 1 and 2) and then onto the wider value chain (Scope 3).

A simple carbon reduction opportunity with a high impact is to move to a green electricity tariff that is backed with Renewable Energy Guarantee of Origin (REGO) certificates.

THE DRIVERS FOR SME'S AND CARBON REDUCTION

The associated emissions can be reported as zero and help contribute to achieving a science-based target.

However, energy efficiency also has a role to play to limit the increase in future electricity demand and drive cost efficiency.

Once you have a good understanding of your baseline emissions, creating a reduction plan or roadmap to a target year is key to achieving reductions.

A reduction plan should be built around a robust business case so that it can be adopted easily throughout the organisation.



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CARBON REDUCTION OPPORTUNITIES

Typical carbon reduction opportunities for SMEs by sector

Food manufacturing	Lighting, refrigeration, motor-driven processes and compressed air
General manufacturing / engineering	Lighting, industrial systems, motor-driven processes and space heating
Office-based	Lighting, heating and IT systems
Retail	Lighting, heating and refrigeration
Hospitality	Lighting, heating and catering equipment
Construction	Compressed air, mobile plant
Transportation	Install telematics in all fleet vehicles, invest in driver training, select the right technology, lessen your demand, embrace electrification

COMMON SME CARBON REDUCTION PLANS

- Introduce a cycle to work scheme – reduces transportation energy
 - Insulate your building – reduces heating energy
 - Switch to LED bulbs – reduces lighting energy
 - Adjust building heating and cooling thermostats and system timings – reduces heating energy
 - Install a Smart meter – raise awareness of energy usage
 - Electrify your vehicle fleet – reduces transportation energy
-

GLOSSARY OF TERMS

Carbon neutral – means purchasing carbon reduction credits equivalent to emissions released, without the need for emissions reductions to have taken place.

Net zero – means reducing emissions in line with latest climate science, and balancing remaining residual emissions through carbon removal credits.

GHG Protocol – GHG Protocol establishes comprehensive global standardized frameworks to measure and manage greenhouse gas (GHG) emissions from private and public sector operations, value chains and mitigation actions.

PAS 2060 – PAS 2060 is the internationally recognised specification for carbon neutrality and builds on the existing PAS 2050 environmental standard. It sets out requirements for quantification, reduction and offsetting of greenhouse gas (GHG) emissions for organisations, products and events.

SBTi - Science-based targets show companies how much and how quickly businesses need to reduce their GHG emissions to prevent the worst impacts of climate change, leading them on a clear path towards decarbonization.



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Q&A





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THANK YOU

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