Scottish Enterprise

Sustainability business insights

Developing a company low carbon strategy

Introduction

Many experts view climate change as the defining issue of our time. Impacts like shifting weather patterns have the potential to threaten food production and livelihoods worldwide, alongside risks of rising sea levels and flooding. The Paris Agreement of 2015 saw 196 of the world's governments commit to preventing dangerous levels of climate change by limiting global warming to well below 2C. Assessments suggest that, without concerted efforts of governments, citizens and businesses, climate change will likely exceed 2C. This could have a significant effect on people and ecosystems across the globe.

These commitments have signalled an acceleration in the transition to a low carbon economy within Scotland. Companies from multinationals such as Unilever and BP, to our leading sustainable SMEs, know about the important role they play in reducing their own operating, product and supply chain emissions, as well as understanding the vibrant economic opportunities, available in the low carbon transition. The transition to a low-carbon economy is underway and accelerating globally transforming sectors and markets.

This insight guide will provide an overview of common features of an organisation's low carbon strategy: how to start measuring your impacts; setting targets; embedding low carbon; and making change happen. It is tailored towards SMEs without internal expertise in low carbon, to help them begin their net zero journey. The document has not been written as a replacement for expert support, particularly for complex operations, products or carbon reporting for investor or legal requirements.

What is net zero?

Net zero is used as a target in companies to show that activites within their value chain result in no net impact on the climate from greenhouse gases. This can include the removal of any remaining greenhouse gas emisssions with carbon offsetting. Another term used is carbon neutral. Companies can verify carbon neutrality through third party audit to BSI PAS 2060.

What is low carbon ?

Low carbon is shorthand for the reduction of carbon dioxide and other greenhouse gases (GHGS) such as methane, nitrogen dioxide and CFCS. By converting company activities and materials into 'carbon dioxide equivalents' (CO_2E), you can easily compare the greenhouse gas impact using one figure. If we lower the carbon dioxide equivalents of an activity we've lowered its global warming impact.

Why adopt a low carbon strategy?

Companies across Scotland are aiming to reduce carbon emissions and, in many cases, become a net zero operation. There are many benefits in developing a low carbon strategy, above and beyond 'doing your bit'. By minimizing the carbon footprint of your business, you can cut energy costs; increase sales and find new markets; support customers low carbon goals; improve employee morale and reduce overheads through efficiency savings.

Your low carbon strategy

So how do you start to build a robust and practical low carbon strategy? How can you embed good practice and ensure all operations understand and reduce their carbon impacts? Although each strategy is unique, the following provide guidance of common considerations.

Leadership, policy, people and systems

Many organisations start with **leadership and commitment**. Are the board and directors fully onboard? Without strong leadership and responsibility for low carbon at a senior level it is difficult to truly embed low carbon in the company. Perhaps consider a low carbon sponsor at this level to oversee long-term success. **A low carbon policy** will provide a succinct overview of the company's overarching commitments. Make sure this is aligned to overall company strategy. Ensure there is a clear plan for embedding low carbon within the company, for example, how will you harness the motivation and ideas of staff? Consider the development of a **low carbon team** from different sections and levels of the organisation to drive the sustainability strategy forward. Perhaps your company has an **ISO 14001** system in place already which can be used as a structure to fully integrate low carbon thinking?

Understand the risk, opportunities, interest and collaboration potential of your **stakeholders** including customers, investors, sector, staff, local communities and supply chains. Consider how your company will adapt to new markets and the impact of climate change itself. Join other like-minded groups and companies on your low carbon journey.

Assessing impacts

Assessing your carbon impact will require clear and transparent calculations of your carbon footprint. It must be underpinned by robust systems for data collection, monitoring and reporting. Without this, your ability to credibly report your emissions, achieve targets and manage the increasing demands for transparency will be severely challenged.

Careful consideration and definition of the **scope and boundaries** of activities, products and services within the carbon assessment is required. For example, are you considering all company sites and operations? Will you consider indirect emissions (Scope 3) as well as your direct emissions (see the calculating carbon emissions panel on page 4)?

Be clear why you have made your choices, do not 'cherry pick', and always following the five key principles of the Greenhouse Gas Protocol of **relevance, completeness, consistency, transparency** and **accuracy**. A clear written description of methodology used should be used.

Decide on a baseline – normally a defined 12-month period is used as a historic point of comparison – and use this to track carbon reductions and assess progress against targets.

This carbon assessment will help you understand the scale of your impact helping you to prioritise actions accordingly.

Calculating carbon emissions

Emissions are broken down into three categories by the **Greenhouse Gas Protocol**. All companies should include their direct (Scope 1) and indirect energy (Scope 2) emissions, however depending on the standards followed some companies choose not to include all Scope 3 emissions (clearly state what you are including in your strategy). If you sign up to the **Science Based Target initiative** (SBTi), PAS 2060 or GHG Protocol, all significant Scope 3 are included in calculations.

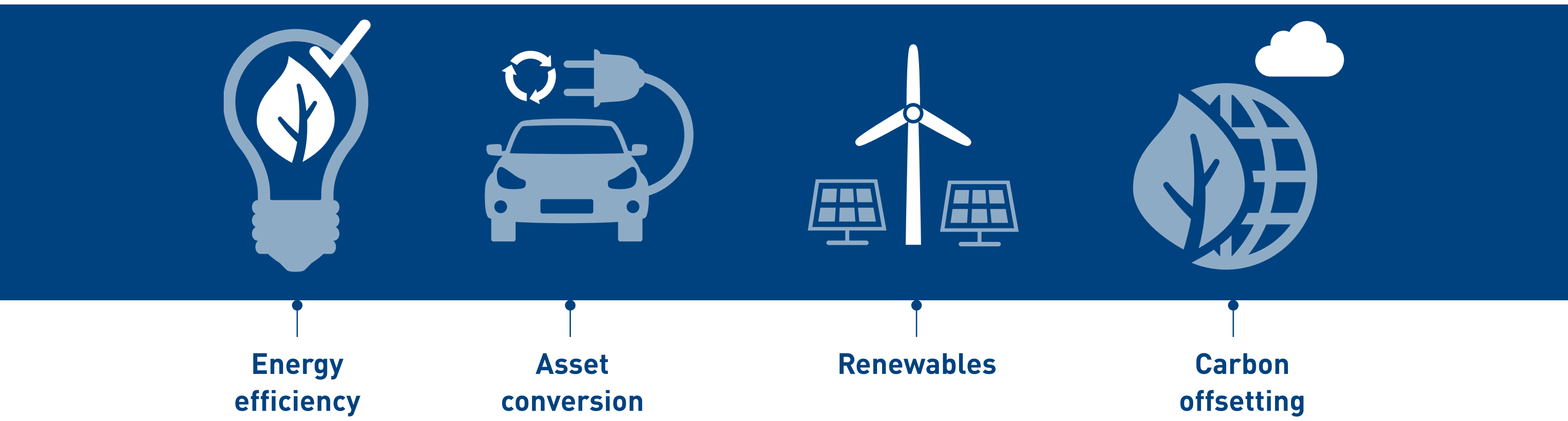
Scope 1 – All direct emissions from the activities of an organisation or under their control. Including fuel combustion on site such as gas boilers, fleet vehicles and air-con leaks.

Scope 2 – Indirect emissions from electricity purchased and used by the organisation. Emissions are created during the production of the energy and eventually used by the organisation.

Scope 3 – All other indirect emissions from activities of the organisation, occurring from sources that they do not own or control. These are usually the greatest share of the carbon footprint, covering emissions associated with supply chain impacts, business travel, procurement, product use and final disposal.

A key source of activity and material carbon conversion factors can be found on the **UK BEIS website**. The carbon footprint of materials can be found on the free App **IDEMAT**.

Path to net zero



A road map/implementation plan leading to your target is essential. Key considerations are investment requirements, expected technology advances, in-house innovation and design, and projected business growth. Consider intermediary targets for long-term goals.

Even if you cannot quantify your emissions accurately yet or decide on a realistic target, these can still be an important part of your low carbon strategy and should have actions associated with them. Examples include 'embodied' carbon of products (e.g. the carbon impact from raw materials, production, use and disposal) or investment impacts.

Remember collaboration and innovation with stakeholders will be key to supporting long term success in achieving net zero.

What is carbon offsetting?

Carbon offsetting is the practice of putting funds towards organisations which help the environment by lowering or reducing carbon emissions – an example would be reforestation projects. Once you've offset that, and it results in net zero carbon dioxide emissions in the atmosphere, it's referred to as carbon neutral or net zero. Use a verified scheme (for example, Gold Standard schemes) where possible, with additional environmental and social benefits.

Verification and reporting

Before voluntary reporting your carbon footprint, targets or net zero/carbon credentials, many companies consider external verification from third parties. For example, auditing bodies and consultancies can provide third party assurance for your reports, or certification to the Carbon Neutrality standard PAS 2060. Of course, this can be completed inhouse, however third part verification can add credibility and provide you with recommendations on improving your reporting, data and calculations methodology. The following list provides some common standards, pledges and initiatives to consider.

- The harmonised Greenhouse Gas Protocol and PAS 2050/ ISO 14064
- Standard for Carbon Neutrality, BSI PAS 2060
- Carbon Trust Product Footprint label
- UK Green Business Council Net Zero Carbon Buildings
- Carbon Disclosure Project
- The Climate Pledge
- UN Race to Zero

If you are interested in finding out more about the topic of this guide or any other aspect of making your business more sustainable please contact the Scottish Enterprise Sustainability team by emailing sustainability.specialists@scotent.co.uk.