Greenhouse Gas Reporting & Decarbonisation Service Summary

May 2023

EVERYONE NEEDS TO DECARBONISE

That's the clear implication of the UK Government's 2050 net zero target and the science underpinning the United Nations' Paris Accord.

From transport to energy, defence to agriculture, retail to finance, no sector is unaffected. The scale and speed of change requires a transformation to how these systems work.

There is already a compelling business case for embracing this change by adopting low carbon business models, technologies and practices. It is an opportunity to place yourself ahead of the curve. But if no action is taken it will soon turn into a business risk as new low-carbon policies start to bite and increasing legislative burden starts to exert pressure in every sector.

Companies will be required to disclose their carbon emissions, and large projects are increasingly subject to legal challenge linked to whether they satisfy the requirements of the Climate Change Act. Recent case law indicates that these challenges can be successful.

UNDERSTANDING YOUR GREENHOUSE GAS EMISSIONS

Calculating and reporting a carbon footprint is commonplace in some sectors but new to others. With new policy & legislation impacting many more organisations, Frazer-Nash are here to help.

Examples of some recent changes to the policy landscape influencing climate related disclosures include:

In March 2021, the UK published an Industrial Decarbonisation Strategy setting its ambition for the Industrial sector to accelerate innovation of low carbon technology, improve efficiency and adopt low-regret technology that supports decarbonisation.
https://www.gov.uk/government/publications/industrial-decarbonisation-strategy

In April 2022, the Companies (Strategic Report) (Climate-related Financial Disclosure) Regulations 2022 was introduced placing requirements on certain publicly quoted companies and large private companies to incorporate TCFD aligned climate disclosures in their annual reports.
https://www.gov.uk/government/publications/climate-related-financial-disclosures-for-companies-and-limited-liability-partnerships-llps

In July 2021, the European Union announced a number of climate change proposals to support its goal of becoming carbon neutral by 2050 (European Climate Law). Some of The key proposals include more ambitious targets, and expanding 'carbon border tariffs' which would require manufacturers from outside the EU to pay more for importing materials like steel and concrete.
https://ec.europa.eu/clima/eu-action/european-green-deal/european-climate-law_en

CARBON ACCOUNTING STANDARDS & GUIDANCE

To understand carbon accounting, the complexities, and the requirements, the first step is to recognise the accepted standards and approaches. There are four key sources of best practice guidance and standardisation, which are internationally recognised. These are:

- The Greenhouse gas (GHG) Protocol
- Publicly Available Specifications (PAS) prepared following guidelines set out by British Standards Institution (e.g. PAS 2080)
- International Standards Organisation (ISO) standards
- Guidance from the Science Based Targets Initiative (SBTi),

We have significant experience of interpreting these standards and their application to industries, sectors, products, and organisations.

All these standards focus on similar aspects of carbon accounting, and all rely on the capture, and interpretation, of **carbon emissions data from activities, processes and services**. This also covers the associated carbon emissions of all inputs, operations, and outputs, including the supply chain.

Carbon accounting and reporting traditionally aligns to greenhouse gas emissions prescribed by the GHG Protocol under the headings of Scope 1, 2 and 3 carbon emissions- these are summarised as:

You are responsible for these

Scope 1 - Direct emissions: from energy generation, vehicle exhausts;

Scope 2 - Indirect Emissions: from the generation of energy that you purchase (e.g. power station emissions);

You can influence these

Scope 3 - Indirect Emissions: All other emissions resulting from your activities (e.g. from your supply chain, business travel, waste disposal, your customers' use of your products);

SCOPE 3 COMPLEXITY

Whilst Scope 1 and 2 assessment can often be completed with a high degree of confidence using relatively mature datasets, Scope 3 requires a different approach. Scope 3 assessment encompasses a plethora of emissions sources, owned or controlled by others. Therefore, data is not usually well defined. We have experience of quantifying all 15 Scope 3 categories using a variety of tried and tested techniques including:

- Spend-based analysis using the latest spend-based factors (we use SimaPro software and the Exiobase database of environmentally extended input output analysis (EEIO) factors).
- Recognised methodologies for calculating commuting and home working emissions based on staff numbers.
- A range of estimation techniques to compensate for incomplete data on business travel, waste and water consumption.
- Bespoke calculations for the in-use emissions of sold products and services.

OUR GENERAL APPROACH

We often advise our clients to follow a phased approach to carbon baselining and decarbonisation. An example of this is our 3 Phase:10 step approach, which can be seen overleaf.

For more information about Frazer-Nash please visit our website.
www.fnc.co.uk

www.fncaustralia.com.au

Offices throughout the UK and Australia

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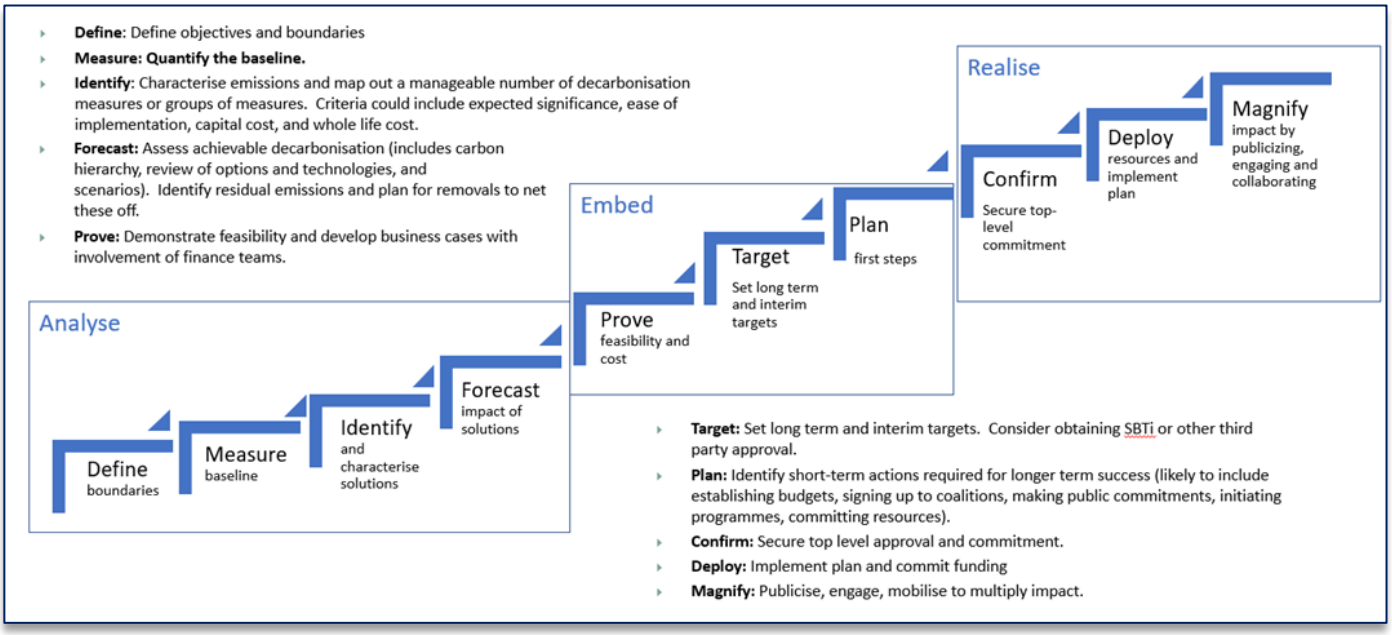
We recommend commencing with carbon baselining, to analyse and understand the key sources of carbon emissions today and in the future. This is followed by embedding carbon management (actions, ideas, and initiatives) within decision-making, long-term strategies, and plans. It is then possible to measure and realise planned carbon reductions. We recognise that decarbonisation strategies need to be bespoke and tailored to ensure alignment with business goals and to strengthen business and supply chain support. Mapping and modelling of initiatives prior to deployment ensures mitigation of risk and maximises the desired outcomes.

Our involvement in your decarbonisation journey will enable you to answer the following questions:

- How quickly can you eliminate your emissions?
- What are the options available for decarbonisation?
- Which ones provide the most cost-effective pathway?
- Which technologies you should invest in?
- How can you optimise your low-carbon journey to remain competitive, agile, and resilient?
- What are the key milestones and dependencies?

OUR SERVICES

- Carbon baselining for Scope 1, 2 and 3.
- Carbon assessment methodology development.
- Hot Spot identification and review of Scope 3 emissions categories (upstream and downstream).
- Developing cost/carbon project dashboards.
- Scenario modelling and target setting.
- Developing Net Zero strategy.
- Developing science-based targets.
- Technology roadmaps.
- Business case development.
- Techno-economic feasibility assessment.
- Third party assurance or verification.
- Technology strategy and feasibility studies, including renewable energy, low carbon fuels, and ultra-low emission vehicles.



OUR EXPERIENCE

We have provided decarbonisation support to clients in the UK government, private and non-governmental sectors.

This ranges from advice to inform national decarbonisation strategies through to carbon calculations for business and specific projects.

Our staff have significant hands-on, practical experience of carbon calculation and the challenges faced by business in decarbonising their activities.

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