

ESG Strategy Series

Defining and Achieving the Pathway to Net Zero

Net Zero is a state where we add no incremental greenhouse gases to the atmosphere.

At the Paris Agreement it was agreed that in order to avoid climate change we need to limit global temperature increase to 1.5 degrees centigrade above pre industrial levels (IPCC) (1). The global community has responded to this and are working towards a Net Zero economy by significantly reducing the amount of emissions we produce. Removing carbon from the atmosphere through the growth of carbon sinks, such as forestry, as well as new technologies, like heat and electricity from renewable sources, are the best way to reduce emissions and control temperature increases.

There is an increased interest and expectation for organisations to commit to and reach Net Zero. Consumer, investor, government and regulator awareness of Net Zero continues to grow, but what is Net Zero and how is it defined? There are a number of ways to define emissions and carbon reductions. The below provides an overview of some of the common terms.

Greenhouse gas emissions: Greenhouse gas emissions, commonly called ‘carbon emissions,’ are released during a number of activities, with the majority of emissions coming from the combustion of fossil fuels, including coal, oil and gas (2).

The carbon categories for emissions

Scope 1 - Direct Emissions: Emissions from greenhouse gas sources owned or controlled by the organisation (3).

Scope 2 - Energy Indirect Emissions: Emissions from the generation of imported electricity, heat or steam consumed by the organisation (4).

Scope 3 - Other Indirect Emissions: Emissions which are consequences of an organisation’s activities but arise from sources that are owned or controlled by other organisations (5).

Carbon Neutral: Carbon neutrality is where through a transparent process of calculating greenhouse gas emissions, reducing those emissions, and offsetting residual emissions, an organisation’s net carbon emissions equal zero (6).

Carbon Neutrality, Net Zero and Net Positive

Net Zero is like Carbon Neutrality but with two key differences:

- Any offset emissions must be from projects which sequester carbon from the atmosphere. Carbon Neutrality can be achieved through purchasing carbon credits from offsetting projects that reduce/avoid carbon emissions, for example by financing renewable infrastructure, but which do not directly sequester carbon. It should be noted however that carbon neutrality plays a vital role in the transition to Net Zero when the correct projects are chosen. As the markets and technology for sequestering are developed, avoided emission credits are helping to protect the carbon sinks and precious ecosystems that we need to urgently preserve.



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- Additionally, many organisations have claimed Carbon Neutrality for several years but by only measuring, reducing and offsetting emissions from the businesses Scope 1 and 2 emissions, but not that of their wider supply chain and other Scope 3 emissions. To claim Net Zero, all material Scope 3 emissions must be taken into account.

Note that there is no set emissions reduction percentage that needs to be reached before sequestration offsets are used however organisations such as Sky and Formula 1 are aiming at a 50% reduction of their material Scope 1, 2 and 3 emissions before moving to carbon sequestration projects.

Net Positive : To achieve net positive, more carbon must be removed from the atmosphere than emitted.

Why Net Zero?

Governments all over the world are setting Net Zero targets which businesses will need to contribute towards, for example the UK set a Net Zero target of 2050, with Scotland setting its own independent target of 2045. Along with this, government legislation increases, investors are asking tougher questions, and society is demanding action. The business risks of not meeting these expectations is huge and need to be managed effectively for commercial interests and investments. Future-proofing your organisation is vital, and frameworks such as TCFD have been created to help businesses do this. If businesses act now, they can also benefit from the many commercial opportunities available such as building reputational and competitive advantage, exceeding stakeholder expectations and attracting increased investment.

The journey to get there

1. Calculate your carbon footprint (including Scope 3)

Our expert team has over 30 years' experience in carrying out carbon footprints for organisations. We help clients identify the scope and boundary of their footprint, collect all the relevant data and calculate emissions using best practice frameworks such as the GHG Protocol. We are experts at looking into your supply chain and identifying how these emissions can be included. Once this step has been completed, the company will have a baseline year to work from, and a strong understanding of where their main emissions are coming from. We also carry out independent assurance, validation and advise on assurance bodies to ensure your carbon footprint demonstrates credibility to interested parties.

Identifying the scope and boundary of your carbon footprint is the foundation to developing a Net Zero approach. Understanding the requirements of Scope 1, 2 and 3 and how these classifications apply to your organisation's activities is essential.

2. Setting a Net Zero Strategy

With an accurate understanding of your footprint, you can develop a tailored strategy to achieve Net Zero. Identifying key areas of influence, building consensus with key stakeholders and prioritising material impacts will create an approach that accelerates your progress to Net Zero. Within these various considerations including



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current business direction, stakeholder priorities, most impactful reduction recommendations, any relevant legislation and key risks and opportunities should all be considered.

3. Setting a Net Zero Target

Agreeing a Net Zero target date can be done through several routes. Aligning with government Net Zero targets is one option although many companies are currently being more ambitious and targeting 2030 or earlier. Certification around meeting the targets is also key and one route is validation with the science-based target Initiative (SBTi), which requires emissions reductions along a pathway aligned to scientific consensus on limiting global warming in time. Additionally, companies can choose to align with the PAS2060 framework if it commits to Scope 3 emissions reductions and sets targets as ambitious or more ambitious than government target dates. Once the target date has been agreed and signed off internally, an informed action plan needs to be produced prioritising emissions reduction activities with timelines, CAPEX and emissions reduction potential modelled against these.

4. Reduction and sequestration to meet the target

Carrying out the reduction measures can be one of the most rewarding parts of the journey, showing numerous other benefits such as cost savings and stakeholder and customer engagement. Once the organisation has carried out all viable reduction measures any remaining emissions will need to be sequestered. Sequestration projects will need to comply to credible standards that avoid emissions. As the number of tree planting programmes increases and new technologies develop for carbon capture and storage, it will be important to ensure the credibility of the projects being selected and that these projects provide robustly measured removals of CO₂ as well as social and environmental value.

We can support with footprinting, strategy and target development as well as advise on credible projects which align with business ESG priorities.

The Environmental, Social and Governance (ESG) Strategy Series offers a topical and practical perspective on how ESG can benefit business. Each month, our Sustainable Business team will provide the best of their insight, findings and project experience on how ESG can build value. We welcome inquiries and feedback at esg@itpennergised.com or rupert@orbisadvisory.com.

- (1) <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>
- (2) <https://ghgprotocol.org/>
- (3) <https://ghgprotocol.org/corporate-standard>
- (4) https://ghgprotocol.org/scope_2_guidance
- (5) <https://ghgprotocol.org/standards/scope-3-standard>
- (6) <https://www.carbonneutral.com/>

