Sustainability 101: A short guide to key concepts and terminology

Windsor debates

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Building a better working world

Climate change is one of the defining issues of our time. The science is conclusive: we face significant and irreversible human-made changes to the climate. We know action is urgently needed if we are to limit the global temperature increase to 1.5°c above pre-industrial levels, in line with the Paris Agreement. This is the only way we can avert catastrophe and protect the planet for future generations.

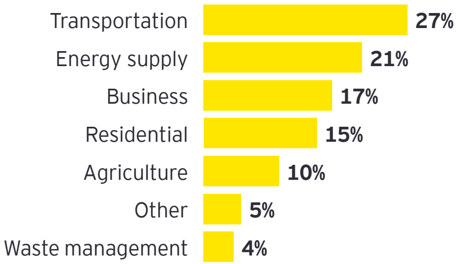
Climate change is now recognised as presenting significant risks to the global economy, with impacts that are complex, varied and hard to measure across different sectors and regions. However, addressing climate change also creates many opportunities in every business sector, with a sustained advantage for early adopters.

Sustainability terminology is complex, varied and continually growing. This document is designed to help you navigate the complex myriad of sustainability jargon. It is not a complete list of all sustainability terms but will help clarify the meaning of the key topical phrases and discussion points.

What is the climate change problem?

Scientific consensus is that humanity has caused increased warming by releasing greenhouse gases to power our modern lives. Greenhouse gasses such as carbon dioxide, methane, nitrous oxide and fluorinated gasses absorb energy from the sun, trapping it in our atmosphere, causing the earth's surface to warm up.

According to a 2019 report by the Department for Business, Energy and Industrial Strategy (BEIS), the main sources of greenhouse gases by sector and in order of largest emitters include:



If the planet continues to warm at its current trajectory the polar ice caps will melt, submerging many coastal areas in water. Climate change will make our day-to-day weather unpredictable and unstable. In some parts of the world, we will see extreme weather conditions – hurricanes, tornadoes, rainfall. In other parts of the world, we will see extended drought. Together this will result in a loss of biodiversity, reduced water quality and food security and, ultimately, a hunger and refugee crisis.

How is climate change impacting the Thames Valley?

According to Thames Water, climate change is having a series of consequences for the Thames Valley, including:

- Increasing temperatures and increased likelihood of heatwaves.
- Increasing incidence of extreme weather events, like drought and flooding.
- Strain on water resources and water quality, that could go as far as causing food and water shortages.
- Less stable ground conditions that are increasing related risks like landslides.

These consequences have the potential to deeply impact and disrupt all aspects of people's lives in the Thames Valley, threatening health and homes, affecting businesses' productivity, supply chains and even ability to operate, putting a heavy burden on public services and infrastructures.

Air pollution is also a threat to the region, with some areas in cities like Reading or Oxford, amongst others, flagged as having high levels of dangerous pollutants like NO_2 or airborne particulate matter. These pollutants have been shown to have a long-lasting impact on health conditions, like asthma.

What do we mean by ‘sustainability’?

The most frequently quoted definition of sustainability comes from the Brundtland report (1987), that describes sustainable development as:

> Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

This concept encompasses a large range of concerns, including environmental (preserving ecological integrity and fighting climate change), economic (maintaining fair and efficient economic systems) and social (protecting universal human rights and access to basic necessities).

What are the Sustainable Development Goals (SDGs)?

In 2015, 193 member states of the United Nations adopted 17 SDGs with the aim of ending poverty, fighting inequality and injustice, and tackling climate change by 2030.

The SDGs cover broad challenges such as economic inclusion, diminishing natural resources, geopolitical instability, environmental degradation and the impacts of climate change. Business, academia and non-profit organisations globally played a part in their development.

Many companies have also been working to address environmental, social and economic issues. They recognise that they can address complex sustainability challenges only by scaling up their efforts and collaborating with peers, industry and sector bodies, customers, governments, non-profit organisations, and wider society.

What is environmental, social and governance (ESG)?

ESG is the term used to identify matters that traditionally are associated with sustainability or corporate responsibility, but that are deemed to have a material financial impact on an organisation’s short- and long-term value. These matters can vary based on industry and geography, on the nature and scale of the organisation’s operations and supply chain, on its business strategy and values, and on its investor base.

Climate change is one of the highest-priority risks for investors today because of the financial stability risks it could bring. Investors and issuers alike are relying on new investor-led guidance – including the Taskforce on Climate-related Financial Disclosures (TCFD) – to better assess, manage and disclose climate change risks to companies and portfolios. Many boards and companies today are therefore focusing their ESG efforts on their assessment of, and response to, climate change risk, either as one of several top risks or as a singular entry point into the ESG domain.

What is the Paris Agreement?

In 2015, at the 21st annual United Nations Climate Change Conference of the Parties (COP21), all the world's countries signed up to the Paris Agreement, whose central aim was to restrict global temperature rise this century to 'well below' 2°C above pre-industrial levels, and 'to pursue efforts' to limit warming to 1.5°C.

In practice, it is up to each country to submit and implement their own plans for climate action. These plans, National Determined Contributions (NDCs), must include the nation's roadmap to reduce its greenhouse gases emissions, as well as its plan to build resilience to adapt to the effects of climate change. The Paris Agreement works on a five-year cycle, where at the end of each cycle, countries come together again to review and increase their ambitions. The 26th Annual United Nations Climate Change Conference of the Parties (COP26), that will happen this year in Glasgow, will be the first of these reviews.

What is COP26?

The Conference of the Parties (COPs) are the supreme decision-making bodies of the United Nations that review and implement treaties across a number of topics, including desertification, biodiversity, nuclear weapons and climate change.

At the 26th Annual United Nations Climate Change Conference of the Parties (COP26) almost every country on earth, treaty-bound by the Paris Agreement, will need to collaborate to reduce greenhouse gas emissions globally and in an equitable way.

The main event, initially planned for November 2020 and postponed due to COVID-19, will be held in the SEC Centre, Glasgow, UK, from 1–12 November 2021. The event will be held under the presidency of the UK Government, in partnership with Italy.

Alok Sharma, current UK Secretary of State for Business, Energy and Industrial Strategy, is the President of COP26.

This is the most important climate summit since the Paris Agreement at COP21 for the following reasons:

Attendance of world-leaders

This will be the first time world leaders will get together since 2015 to discuss climate change.

Re-submitting climate targets

The Paris Agreement has a five-yearly 'ratchet mechanism' where all governments review their national determined contributions (NDCs). COP26 will be the first time that countries can upgrade or change their pledges to tackling climate change since Paris. It's important to note that the emissions commitments agreed at COP21 (Paris) are neither legally binding, nor enough to keep warming 1.5°C or 2°C above pre-industrial levels.

Deadline for mobilising $100 billion of green finance for developing countries

In 2009, developed nations pledged to jointly provide $100 billion in climate finance by 2020 for developing nations. This **Green Climate Fund** is drawn from public funds and the business community. EY is an accredited delivery partner to the Green Climate Fund.

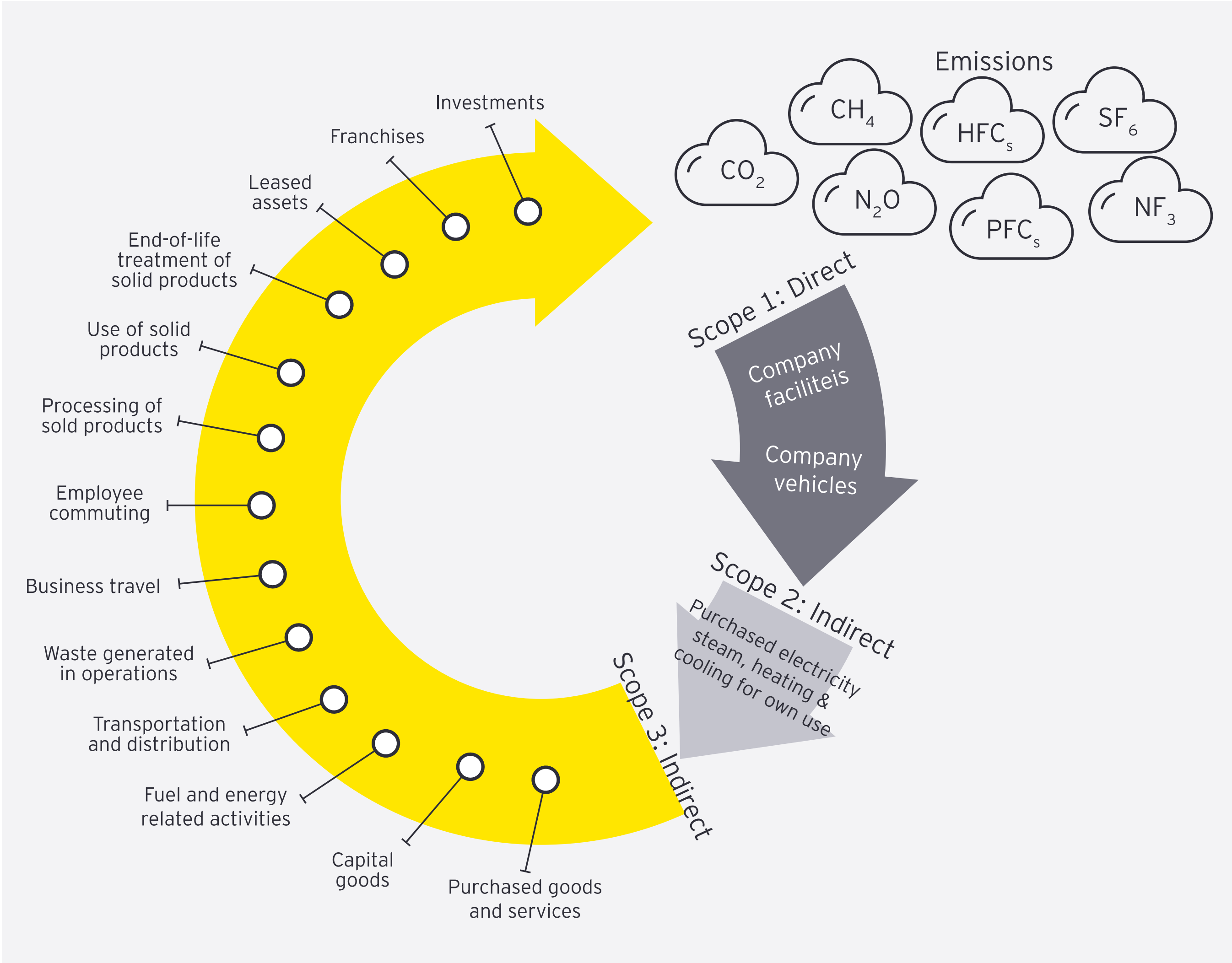
What are Scope 1, 2 and 3 emissions?

Given that the key to halting climate change is to decarbonise, that is, to reduce carbon emissions, measuring carbon output is important. The carbon footprint of a company is often segmented into Scope 1, Scope 2 and Scope 3 emissions.

Scope 1 emissions are those that occur from sources owned or controlled by a company.

Scope 2 emissions are supply-chain emissions related to purchased electricity, steam, heating and cooling for the industry's own use.

Scope 3 emissions are all other supply-chain emissions including those related to financial assets owned by the company.



What are the main decarbonisation targets?

Carbon neutral
Carbon dioxide emissions are balanced by carbon dioxide removals over a specified period. This is often achieved by purchasing carbon credits or offsets.

Carbon negative
The amount of carbon dioxide sequestered, or offset is greater than what has been emitted.

Net zero
This is achieved through significant reduction in absolute carbon emissions, typically in line with science-based targets, and then offsetting or sequestering the remainder to achieve a net zero position.

What is a circular economy?

A circular economy is a system that aims to eliminate waste and enable the continual use of resources. This concept is based on three principles:

1. Design out waste and pollution
2. Keep products and materials in use
3. Regenerate natural systems

In a circular economy, the emphasis is on designing goods to be long-lasting, easy to repair and reuse, easy to disassemble and to remake into items that are as good as, if not better than, their original form. It is not just about squeezing more life from a fixed stock of resources that have been sourced at the expense of the environment.

What can businesses and individuals do to combat climate change?

Businesses
- Sign up to well-recognised business decarbonisation initiatives like RE100 and Science Based Targets (SBT).
- Reduce direct energy emissions (Scope 1 and 2) and indirect emissions from supply chains and investments, e.g. pension funds (Scope 3). It's important to note, energy saving measures aimed to reduce carbon footprint often results in a reduction in costs. These can include:
  - Switching to 100% renewable energy
  - Reducing use of single-use plastics
  - Improving waste management.
- Integrating sustainability throughout business strategy, instead of as an afterthought.
- Follow well-established governance frameworks, like the WEF governance guidelines.

Individuals
- Review pension plans and other financial assets and investments to ensure alignment with decarbonisation.
- Reduce the number of long-haul flights taken and consider using sustainable or public transport.
- Reduce consumption of meat and food waste which are responsible for a high proportion of an individual's carbon footprint.
- Buy renewable energy for your home.

To discuss how EY can help your business address its sustainability strategy, please contact:

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