CHARTERED ACCOUNTANTS IRELAND

CLIMATE ESSENTIALS FOR ACCOUNTANTS

UPDATED TO AUGUST 2023

IFAC International Federation of Accountants®

The sense of urgency to address climate change is intensifying across the world.

Heatwaves, floods and wildfires are increasing in occurrence, and will continue to do so without urgent action.

Businesses must play their part, and accountants will be key financial decision-makers within these businesses. However, the vocabulary of climate action may be new to them. This guide aims to demystify it and introduce accountants to jargon that they will hear with increasing frequency over the coming months and years.

CARBON

GLOBAL CLIMATE AGREEMENTS

WHAT IS CLIMATE CHANGE?

WEATHER

'Weather' refers to the state of the atmosphere at a particular time. For example, on 24 July 2023 it was 17°C in Dublin City Centre with a gentle breeze and rain throughout the day. Short-term variations to the weather are measured in minutes to days.

CLIMATE

'Climate' describes the weather over several decades.

CLIMATE CHANGE

'Climate change' means a large-scale, long-term shift in the planet's weather patterns and average temperatures. Scientific consensus holds that our climate is changing. This poses wide-ranging risks and consequences for our society, economy and environment.

> *"Climate is what you expect; weather is what you get"* - ***Mark Twain***

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WHAT CAUSES CLIMATE CHANGE?

Much of climate change is caused by human activity. One of the primary ways humans cause climate change is by generating carbon emissions.

WHAT CAN BE DONE?

Entire economies have to 'decarbonise': reduce or eliminate greenhouse gases. As most of our transport, industrial processes, heating and cooling depend on fossil fuels, this requires radical change across all sectors.

Economies will also have to adapt to the effects of climate change. For businesses, this can include factoring in risks that might be new to them. Wildfires, hurricanes and flooding are some of the physical risks. Transitional risks include developing stranded assets, carbon tax liabilities and supply chain disruption.

CLIMATE AND REPORTING

Companies are increasingly asked to provide information on their climate impact. The IFRS created the International Sustainability Standards Board (ISSB) to develop standards for a comprehensive global baseline of sustainability disclosures. The EU's Corporate Sustainability Reporting Directive (the 'CSRD') proposes significant changes to how entities report on the environmental, social and governance (ESG) impacts of their business.

All companies – even SMEs – should have a mechanism to measure and disclose their carbon emissions. There are online carbon calculators that businesses can use, including the free Climate Toolkit 4 Business from the Irish Government.

WHAT ARE CARBON EMISSIONS?

Energy is needed to power our lifestyles. In many cases, fossil fuels - coal, oil and gas - are burned to create this energy. Fossil fuels emit greenhouse gases, which cause global warming.

Carbon dioxide ('carbon' or 'CO_2') is the most common greenhouse gas emitted in terms of quantity released and total impact on global warming by human activities.

Whether you drive to work, take a flight or switch on your office air-conditioning system, you are likely to be generating greenhouse gas emissions.

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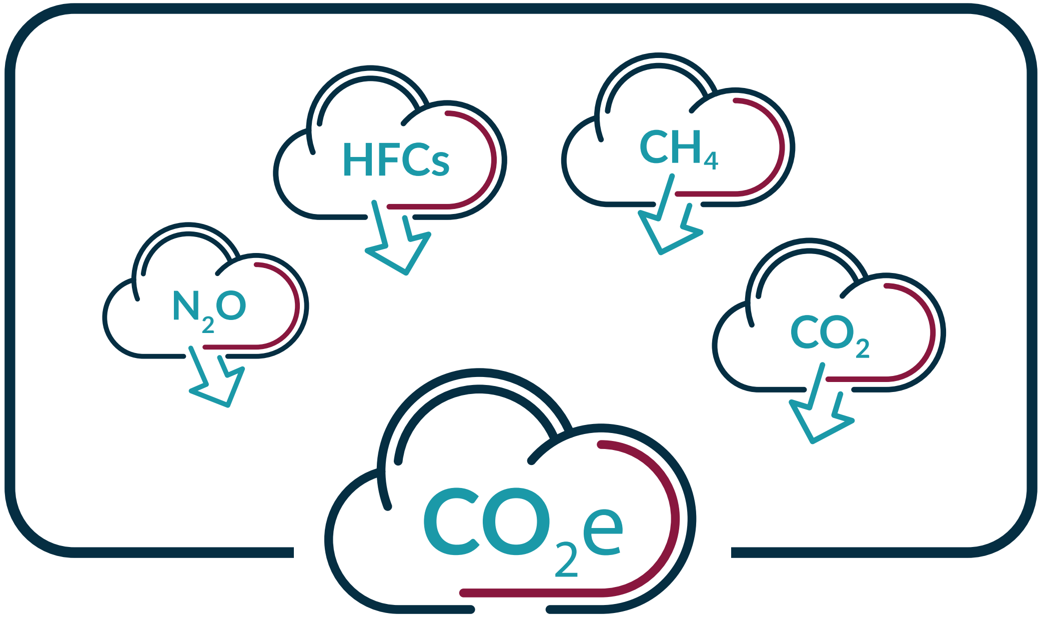
CARBON DIOXIDE EQUIVALENTS

There are a number of greenhouse gases with global-warming potential.

Other greenhouse gases such as methane, nitrous oxides and HFCs also contribute significantly to climate change. In order to use only one metric to refer to them collectively, they are often converted into **carbon dioxide equivalents (‘CO_2e’)**.



CARBON FOOTPRINT

A carbon footprint measures (in CO_2e) the **total amount of greenhouse gas** released into the atmosphere by the everyday activities of an organisation, a household, an event, a service, or a product. See also **Baseline** on pg. 10.

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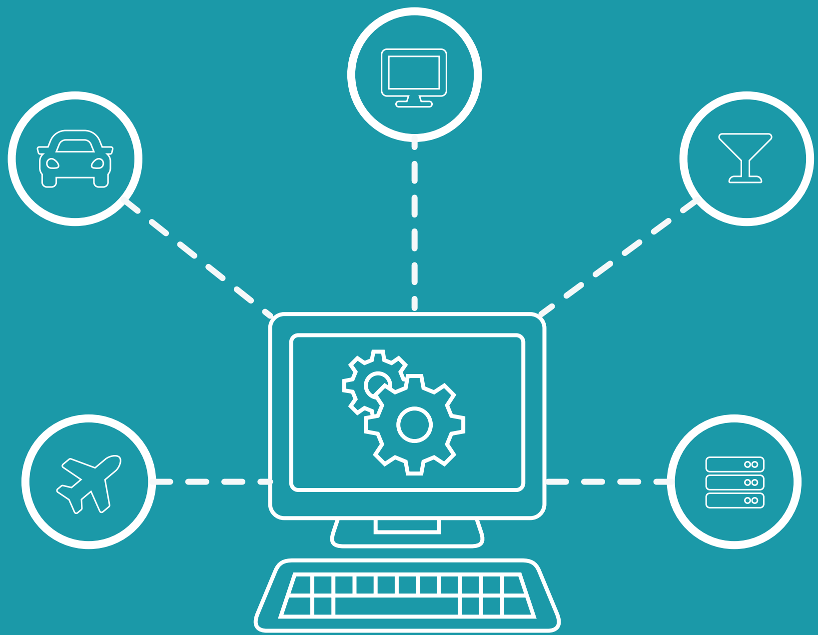
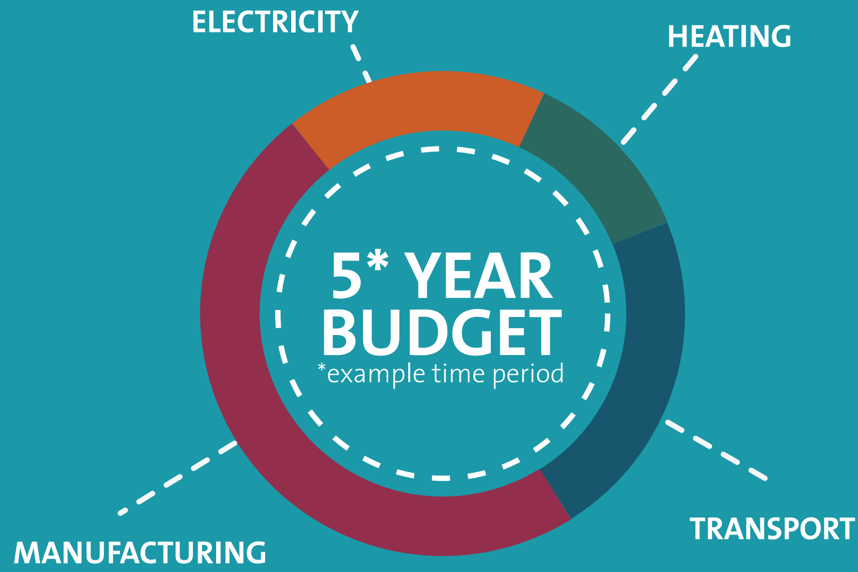
CARBON CALCULATOR

A carbon calculator is software that calculates your carbon footprint. The software calculates the amount of CO_2e produced by the activities of businesses, organisations, individuals and households over a specified period of time, usually one year. It includes direct energy used by a house or business and, indirectly, electricity use, and emissions in the value chain of a business, such as in travel, use of products, waste, procurement and distribution.





CARBON BUDGET

Climate scientists define a 'carbon budget' as the cumulative amount of greenhouse gas emissions allowed over a set period of time to stop global temperature rising more than 1.5°C above pre-industrial levels. Countries and companies are using carbon budgets to establish how much carbon can be emitted into the atmosphere without compromising the future climate. They then use these 'budgets' to create strategies to reduce their emissions.

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SCOPE 1, 2, 3 CARBON EMISSIONS

There are three scopes of carbon emissions that a company creates:

SCOPE 1

Scope 1 emissions directly occur from sources that are controlled or owned by an organisation. For example a company using a gas boiler to heat water and office space. Other sources of Scope 1 emissions are transport fuels and fugitive emissions from manufacturing processes.

SCOPE 2

Scope 2 emissions arise indirectly when the business consumes purchased electricity generated from the burning of fossil fuels.

SCOPE 3

Scope 3 emissions are linked to the organisation's operations from assets that they do not own or control. They cover emissions associated with buying goods and services, staff commuting, business travel, waste management, and procurement.
Scope 3 emissions usually form the biggest part of an organisation's carbon footprint.

"For many businesses reducing Scope 1 and 2 emissions is the first target in a strategy to reduce carbon emissions. However, Scope 3 emissions often account for the vast majority of their carbon footprint and can be the hardest to address. Being aware of economically viable solutions to reduce carbon emissions is a really important role for accountants"

DECARBONISATION

Decarbonisation means the reduction or elimination of greenhouse gases from energy sources. The term is most often used to describe the efforts by governments and businesses to reduce carbon emissions in their economies.

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NET ZERO

Simply put, 'net zero' means the balance between the amount of greenhouse gas produced and the amount removed from the atmosphere.

Although it's easy to get caught up in the terminology, only one thing matters: **companies must start reducing carbon emissions.**
Many businesses do this by:

- Driving energy efficiency internally to reduce energy consumption.
- Switching to low-carbon or renewable energy sources.
- Transitioning to electric vehicles.
- Reducing Scope 3 emissions (see page 8).

CARBON OFFSETTING

A carbon offset is an action intended to compensate for, or neutralise, the emission of carbon dioxide into the atmosphere. Often they are investments in accredited and verified emission-reduction projects. These can take the form of investments in renewable energy or low-energy technologies or nature-based solutions that directly remove carbon from the atmosphere.

The use of carbon offsetting should be only used after reducing your carbon footprint as much as possible. New quality standards for the carbon offsetting industry were published in July 2023 by the Integrity Council for the Voluntary Carbon Market to help guide buyers to high-quality credits.

There are not enough offsets in the world to effectively combat climate change, meaning that dramatically reducing carbon emissions is essential.

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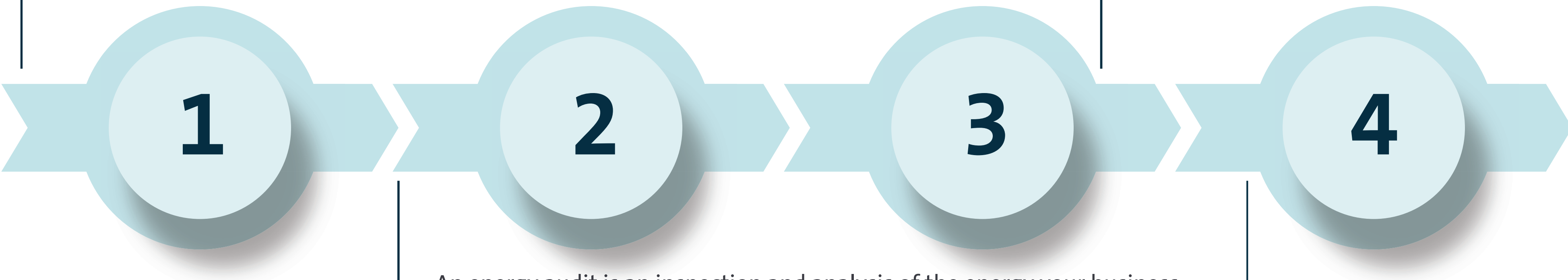
MEASURING CARBON EMISSIONS



1. ESTABLISH YOUR ‘BASELINE’

Sometimes called a ‘baseline carbon fooprint’, a baseline is the total carbon emissions generated by business activities over a given time period, e.g. a year. Data for your baseline is available from sources such as your gas and electricity invoices, employee commuting data and business travel. Your baseline will serve as a reference point for understanding and tracking changing emissions levels over time. Free online calculators are available to calculate your baseline, such as the Irish Government’s Climate Toolkit 4 Business. See **Carbon Calculators** on pg. 7

2. COMMISSION AN INTERNAL ENERGY AUDIT

An energy audit is an inspection and analysis of the energy your business uses, the equipment and processes that use the most energy, and actions you can take to save energy, as well as their estimated cost and impact. Energy audits are carried out by energy professionals. The Sustainable Energy Authority of Ireland (SEAI) offers grants towards the costs of energy audits and maintains a list of registered energy auditors.

3. REDUCE EMISSIONS

Implement actions to reduce your Scope 1, 2 and 3 emissions. These may include making operational changes that reduce energy use, switching to LED lighting, changing business travel arrangements, etc.

4. REVIEW

Check back regularly to measure reductions and communicate results to the wider team.

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MEASURING AND DISCLOSING CARBON EMISSIONS

Here are some of the best-known frameworks for calculating, assessing and disclosing climate information, and setting targets.

GREENHOUSE GAS PROTOCOL

The Greenhouse Gas Protocol is a globally recognised standard for measuring and managing greenhouse gas (GHG) emissions from companies and their value chains.

It can be used as the methodology for calculating carbon emissions and can also enable a company to track its progress towards its climate goals.

CDP

The CDP (formerly the Carbon Disclosure Project) is a global data collection and assessment programme focused on climate change.

Each year the CDP gathers data via questionnaires from companies on their GHG emissions, energy use, management and governance of climate action, and their business's risks and opportunities associated with climate change. It then scores these companies based on that data.

SCIENCE-BASED TARGETS

The Science Based Targets Initiative (SBTi) is led by a collaboration of organisations and was set up to develop international standards for target-setting by businesses and organisations.

SBTi assesses companies' carbon targets to determine whether they align with the goals of the Paris Agreement i.e. that they are `science-based'. Science-based targets show companies how much and how quickly they need to reduce their greenhouse gas emissions in line with leading climate science and the Paris Agreement goals.

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MEASURING AND DISCLOSING CARBON EMISSIONS

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TCFD

The Task Force on Climate-related Financial Disclosures (TCFD) is a framework for organisations to disclose their business's risks and opportunities associated with climate change to provide better information to stakeholders.

TCFD-based recommendations are widely adoptable and applicable to organisations across sectors and jurisdictions. In July 2023, it was announced that the FSB Task Force on Climate-related Financial Disclosures (TCFD) responsibilities will transfer over to International Sustainability Standards Board (ISSB) in 2024.

ESRS

The European Financial Reporting Advisory Group (EFRAG) has prepared the European Sustainability Reporting Standards (ESRS), which are the standards that companies subject to the Corporate Sustainability Reporting Directive (CSRD) will be required to apply (See page 4).

Among other things, the ESRS uses the concept of 'double materiality'. With 'double materiality' a disclosure is material if it is material from an 'impact' perspective (e.g. affects employees, customers, vendors, environment), a financial perspective (e.g. investors, creditors) or a combination of both.

ISSB

The IFRS created the International Sustainability Standards Board (ISSB) to develop standards for a comprehensive global baseline of sustainability disclosures. These standards enable companies to provide comprehensive, decision-useful sustainability information, in a common language but with the flexibility for regional 'building blocks' to be added.

The IFRS Sustainability Disclosure Standards use the same definition of "material" as IFRS Accounting Standards to ensure investors understand sustainability risks and opportunities relevant to their investment decisions, and there is strong links with the financial statements.

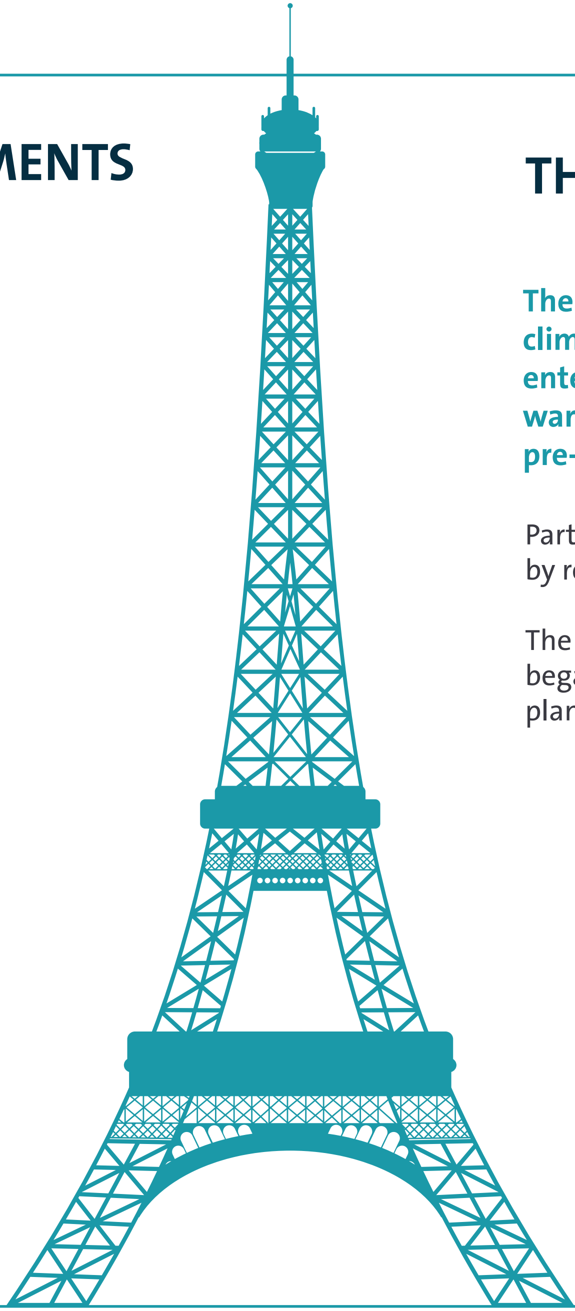
GLOBAL CLIMATE AGREEMENTS

UN FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC)

The UNFCCC is a United Nations entity. It is tasked with supporting the global response to the threat of climate change.

When the UNFCCC entered into force on 21 March 1994, it bound member states to “act in the interests of human safety even in the face of scientific uncertainty”.

There are 197 parties to the Convention and it is the parent treaty of the 2015 Paris Agreement.

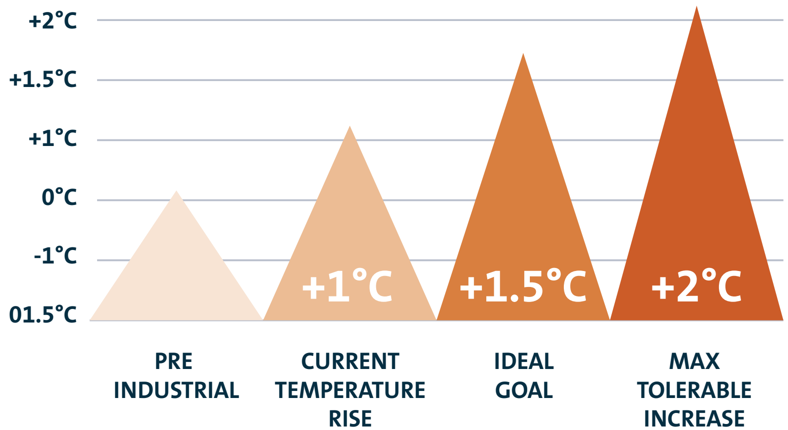


THE PARIS AGREEMENT

The Paris Agreement is a legally binding international treaty on climate change. It was adopted at COP21 in Paris in 2015 and entered into force on 4 November 2016. Its goal is to limit global warming to well below 2°C, preferably 1.5°C compared to pre-industrial levels.

Parties to the Agreement are legally bound to combat climate change by reducing their greenhouse gas emissions and adapting to its effects.

The Agreement works on a 5-year cycle of climate action. The first cycle began in 2015, with countries having to submit their climate action plans by 2020/2021.



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COP28 - UNITE, ACT, DELIVER

COP (or 'Conference of the Parties') is a summit attended by the 197 countries which have signed the United Nations Framework Convention on Climate Change (UNFCCC).

COP aims to accelerate these countries' actions towards the goals of the UNFCCC and the Paris Agreement.

COP takes place every year, although it did not happen in 2020 due to COVID-19.

This year, the United Arab Emirates will host the 28th COP ('COP28') in Expo City Dubai. The conference will run from 30 November to 12 December 2023.

> *In short, our world needs climate action on all fronts — everything, everywhere, all at once.*
>
> ***- UN Secretary-General António Guterres***

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FIND OUT MORE

Gov.ie	Climate Toolkit 4 Business
Department of Enterprise, Trade & Employment	Climate action and energy supports for business
Citizens Information	Supports for businesses going green
Sustainable Energy Authority of Ireland (SEAI)	Business & Public Sector
Environmental Protection Authority	Climate Change Adaptation: Risks and Opportunities for Irish Businesses
Chartered Accountants Ireland	Climate Essentials for Accountants
IBEC	Climate Action: A Toolkit for Business
Business in the Community Ireland	2023 Sustainability Handbook
Chartered Accountants Worldwide	Sustainability Hub
Accounting 4 Sustainability A4S	A4S Essential Guide to Valuations and Climate Change
IFAC and others	Enhancing Greenhouse Gas (GHG) Reporting - A Roadmap for Accounting and Finance Professionals & Building Blocks for Accountants

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