GLOBAL TECH ADVOCATES & TECH LONDON ADVOCATES

GOING NET ZERO:
A QUICK GUIDE TO GET STARTED

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THE NET ZERO FRAMEWORK

The Race to Net Zero is a significant change for any organisation; it's not easy but it's not complicated either – and the logic is quite straightforward too.

Whether you look to convert to renewable energy, to reduce plastic or electronic waste or adopt "clean" electric mobility, all those steps to Net Zero are essentially change management processes, and one very successful approach is to break the challenge in smaller, more manageable pieces across the board.

Anyone in any team, unit, at any level of a hierarchy can build on initial successes, share best practices, and replicate them at scale.

Therefore, while it's true that the scale and the complexity are different whether you are a start-up, an SME, or a global multinational, the logic is very much the same.

This is intended to be a simple and quick guide, including some reference sources, that any organisation can use to get off the starting blocks; it is an adaptation from widely available business literature, developed by the TLA Eco Working Group, based on work produced by its Leader Rosario Di Dio for LSBU (London South Bank University) in 2022.

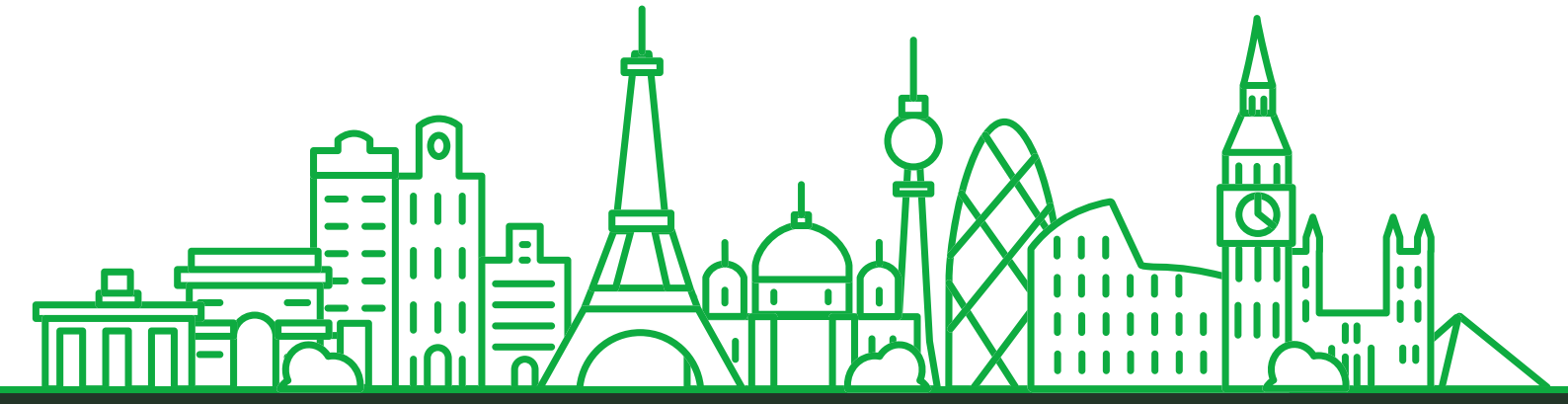
The basic principle is that to get to Net Zero any organisation needs:

01 A simple but rigorous science-based framework

02 The Goals: 1.5°C and Net Zero.

03 The Journey: We are all in this together for the long term.

Just start today, embrace learning from small and contained mistakes, the sooner you make a few, the sooner you will scale your successes and get to Net Zero!



PART 1: A SIMPLE BUT RIGOROUS SCIENCE-BASED FRAMEWORK

To understand and address climate change and to reach Net Zero, you need to rely on science, full stop.

Since 2010, the world scientific community, represented in the Intergovernmental Panel on Climate Change (IPCC), reached consensus on three key theses:

1.1
"Human influence was the dominant cause of global warming between 1951 and 2010" (Note 1).

1.2
"Global warming, and its effects on climate change are proportional to CO2e emissions (the so-called Green House Gases-GHG: CO2 and CO2 "equivalent", i.e. gases like methane and others that contribute to global warming just like CO2)" (Note 2).

1.3
"Global warming causes climate changes of increasing frequency, duration, and intensity".

One very tangible example: the global sea level had reached a new record high in 2021, increasing by 10cm since 1993. This rise is in fact accelerating, amplifying the destructive impact of hurricanes and floodings, which in turn is affecting not only the "island states" and coastal megacities but also global financial hubs like New York, London, or Singapore, threatening human lives worldwide and the stability of the global economic system.

In summary, there is a scientifically validated connection (Note 3) between the human-induced increases of CO2e in the atmosphere, global warming and the incremental but accelerating climate changes that produce devastating effects on natural life and human systems globally.

That connection is the solid and compelling scientific foundation for the Net Zero "story".

PART 2: THE GOALS: NET ZERO AND 1.5°C

In order to stop the damages caused by global warming and climate change, emissions in the atmosphere need to be reduced drastically.

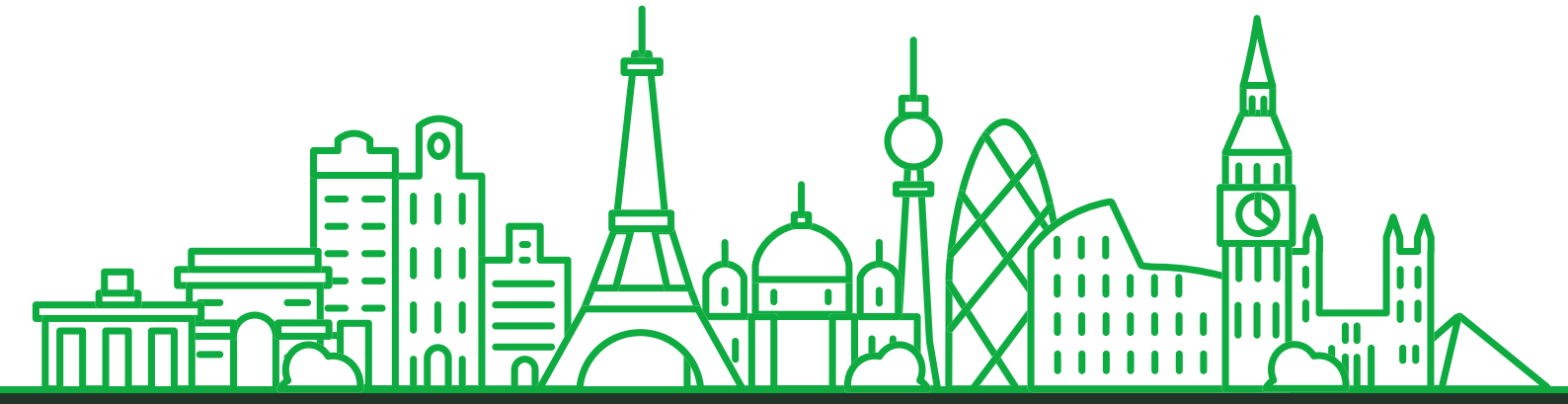
Net Zero:

The internationally agreed measurement is that human-caused CO2e emissions need to fall by about 45% from 2010 levels by 2030, and then by 90-95% around 2050; any remaining, hard-to decarbonise emissions to be balanced by long-term/permanent removals ("the NET in Net Zero").

1.5°C.:

Should Net Zero be achieved globally, global warming will be limited to well below 2°C, i.e. 1.5°, thus allowing the humankind, as a whole, to mitigate and adapt to the adverse effects of climate change.

These science-based targets have been embodied in the historical The Paris Agreement | UNFCCC in 2015 (Note 4) with its two symbolic notions of 1.5°C average global temperature increase and Net Zero in 2050.



PART 3: THE JOURNEY: WE ARE ALL IN THIS TOGETHER, FOR THE LONG TERM

How does that translate in the agenda for businesses?

a) The "UNFCC-approved" journey: "From Pledge to Publish".

Pledge: The head-of-the organization should pledge to reach Net Zero GHGs by 2050 if not earlier, setting an interim target by 2030 and covering Scope 3 emissions as well.

Plan: No more than 12 months later, a detailed short-medium and long-term plan is submitted to the UNFCCC, with focus on emission reduction/ removal and NOT on carbon credits.

Proceed: execute plans, from short to long term.

Publish: report annually and publicly the progress against interim and long-term targets, the actions being taken and communications with other stakeholders about progress/success and challenges.

b) The "internal" journey:

In order to comply with the UNFCC approach, organisations need to appoint a Net Zero Champion, tasked of setting up a plan and leading execution and delivery through 6 steps:

1) Stakeholder management:

- Engaging your business as a whole: employees, board, and senior team.
- Building a business case and find a senior sponsor.
- Maintaining the momentum until Net Zero is BAU (Business as Usual).

2) Survey:

Defining a baseline for levels of understanding, engagement, interest, opportunities around the Net Zero story within the organisation.

3) Audit: Measuring the organisation's "carbon footprint".

You cannot manage what you cannot measure, so you need to collect the relevant data to build the first official "snapshot" of the organisation's quarterly and annual scope 1,2, and 3 CO2e emissions.

This baseline needs ongoing updating to establish progress against targets.

The "gold standard" for capturing this information is the GHG protocol (Note 5).

EXAMPLE OF DATA REQUIRED BY SCOPE TYPE:

Scope 1.

Electricity – on site electricity generation (e.g. diesel generators, solar panels).

- Amount of electricity generated.
- If the electricity you produce is renewable and the percentage of it.

Transport – company owned vehicles.

- The fuel type: petrol, diesel, electric or hybrid.
- Distance travelled in km or miles.
- Number of journeys.

Scope 2.

Electricity – purchased electricity.

- Amount of electricity purchased.
- If the electricity you produce is renewable and what percentage of it.

Scope 3.

Waste from operations – including general office waste.

- Waste type: food waste, wood, paper and card, electrical equipment, plastics, metals, construction, landfill waste, recycled waste, incineration.
- Amount: kg, tonnes, bags, lbs.
- Disposal: landfill, recycled, composted, incinerated.

4) Setting Science-Based Targets:

An emissions reduction target is defined as 'science-based' if it is in line with the scale of reductions required to keep global warming well below 2°C from pre-industrial levels (+1.5°C pathway to achieve Net Zero).

As usual, they must be SMART (Specific, Measurable, Achievable but challenging, Realistic, Time-bound).

5) Action plan:

The priority should be placed on "low hanging fruits" with high impact and must include baseline, target reduction, timings, costs and owner.

Example:

"We will switch to green energy for both of our office sites by H1 FY 24-25 and we aim to reducing Scope 2 CO2e emissions by 15% from 1000 tonnes (baseline FY23-24) to 850 tonnes and monetary costs by 10%. The action owner is the CFO".

6) Reporting:

For internal (communication and future updates, performance monitoring) and external use (see UN UNFCCC Global Climate Action Portal-Note 6).

NOTES.

Part 1:

Note 1: A helpful overview to get started can be found on Wikipedia at:

https://en.wikipedia.org/wiki/Climate_change

Note 2: IPCC, 2015: https://www.ipcc.ch/

Note 3: This connection is called "Science".

Natural phaenomena have been regularly observed and measured on global scale from 1951 to date; then they are analysed and interpreted through theories that have been widely corroborated and therefore accepted by scientists worldwide. These theories explain past evolutions and offer reliable quantitative and qualitative predictions on future impact.

Part 2:

Note 4:

https://unfccc.int/process-and-meetings/the-paris-agreement

Part 3:

Note 5:

https://ghgprotocol.org/. The mission of the Greenhouse gas protocol initiative (GHG protocol) is to develop and promote internationally accepted greenhouse gas (GHG) accounting and reporting standards through an open and inclusive process.

Note 6:

https://climateaction.unfccc.int/