



THINKING THROUGH NET ZERO

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ORIGINS

Art 2 Paris Agreement temperature goals

- **Keeping** global average temperature **to well below 2° C** above pre-industrial levels
- **Pursuing efforts to limit** the temperature increase **to 1.5° C**
- So as to significantly reduce the risks and impacts of climate change

PARIS NET ZERO

Art 4

“In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible ... and to undertake rapid reductions thereafter ... so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century”

NET ZERO TARGETS FOR WHOM?

1. **States** – as part of their Paris NDCs. Ideally set out in legislation as **binding** targets, e.g. UK Climate Change Act 2008: “It is the **duty** of the Secretary of State **to ensure** that the net UK carbon account for the year 2050 is at least 100% lower than the 1990 baseline”
2. **Sub-national actors** – e.g. cities and local authorities
3. **Companies** (mere *disclosure* of climate risks insufficient)

NB. 2. and 3. are voluntary/non-binding (for now). However, they are also already governed by other existing, binding climate regulation laws

NET ZERO TARGETS BY WHEN?

- Need for states and corporates to align themselves with the Paris 1.5 degrees goal ('**alignment**')
- But also to consider issue of **equity** (including e.g. historical responsibility for GHG emissions)
- Many developed countries and large MNCs (e.g. Shell, HSBC) have fastened on targets of achieving net zero **by 2050** for alignment with Paris
- Cf. Extinction Rebellion – net zero by 2025 (climate **emergency**)

WHAT GETS COUNTED MATTERS

State targets – the issue of **out-of-country emissions**

- International aviation and shipping
- The potential for domestic emissions to be offset by international credits (UK won't now use these to meet its target)
- Emissions from the manufacturing stage of imported goods, produced offshore, which are consumed in-country (e.g. 1/2 of food consumed in the UK is produced overseas)
- Emissions from exports of fossil fuels (e.g. oil and gas) when these are used abroad – UK and Norway exports

WHAT GETS COUNTED MATTERS

Corporate Targets – scope 1-3 emissions (geography again!)

- Scope 1 emissions - those on companies' **own premises**
- Scope 2 emissions - those from **off-site power** needed to run operations
- Scope 3 emissions - those produced across the supply chain, including **by clients using a company's product** or service (e.g. Shell – those using its oil and gas)
- For many sub-national actors and corporates, Scope 3 emissions will be crucial in terms of their climate impact
- Imperative that Scope 3 are considered in net zero planning

WHAT GETS COUNTED MATTERS

Targets – the issue of **which gases**

- Targets should include all seven greenhouse gases groups (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and NF₃), typically reported in terms of carbon dioxide equivalent (CO₂e)
- Greenhouse gases to net zero or CO₂ to net zero? ('Climate neutrality' v 'carbon neutrality')
- Net zero strategies should include all gases but should ideally include a specific net zero target for CO₂ emissions as well

THE 'NET' IN NET ZERO

- Allows for **sources** not to be zero emissions as long as any remaining emissions are balanced by **sinks/removal**
- Carbon capture, use and storage (CCUS) technologies
- Offsetting using 'nature based solutions' (planting trees, reinstating peat bogs etc)
- Too much reliance on CCUS and offsetting may be seen as 'greenwashing'

THE UNFCCC'S RACE TO ZERO

FOUR PS

- 1. Pledge:** Make a high-level and ambitious commitment to reach net-zero in line with global efforts to limit warming to 1.5° C
- 2. Plan:** Set out what activities will be undertaken to achieve net zero, especially in the short-to medium-term. Set **interim targets** to meet in the next decade, which reflects a fair share of the required 50% global reduction in CO2 by 2030 (UK's is **at least 68% by 2030**)
- 3. Proceed:** Act immediately towards delivering on the net zero plan
- 4. Publish:** Commit to report progress