



SWEDEN

2045

TARGET STATUS



ACHIEVED



IN LAW



PROPOSED
LAW



IN POLICY
DOCUMENT



TARGET UNDER
CONSIDERATION



GOVERNANCE

INTERIM TARGETS



2030



2040

PUBLISHED PLAN



YES



NO

ANNUAL REPORTING



YES



NO



USE OF OFFSETS

OFFSETS ALLOWED?



YES



NO

CONDITIONS SET?



YES



NO

LIMITS ON OFFSETS?



YES



NO



COVERAGE

TARGET GASES?



ALL GHGs



CO₂ ONLY



OTHER

CONSUMPTION EMISSIONS?



YES



NO

INT. AVIATION AND SHIPPING?



YES



NO

achievement. Some entities have already achieved targets, or already claim to be 'net negative' due to natural resources that absorb CO₂ from the air.⁴⁵

Coverage: This includes several important questions. Firstly, which gases are covered? National reporting generally follows the international standard, covering all sources and sinks of a basket of gases (CO₂, N₂O, CH₄ and F-gases) within national territories. But this does not necessarily apply to targets set – for example, China's net zero pledge may cover CO₂ only; the government has yet to clarify. Commitments by states and regions, cities and corporates show much more variation. Another question for nations is whether the commitment includes emissions from international aviation and shipping. Finally, for businesses, a key issue is whether the pledge covers activities categorised as Scope 1 (covering sources and sinks directly managed by the entity), Scope 2 (indirect emissions from

Major match: Shell and BP

Major oil companies, including Shell and BP, made a splash in 2020 by announcing net zero targets. A healthy dose of scepticism followed these announcements on whether they will translate to the real world emissions reductions they claim. Taking a closer look, the Transition Pathway Initiative found none of the major oil companies' net zero targets align with a 1.5°C future.¹

Shell's target, which aims to reduce the carbon intensity of its operations and sold energy products by 100% by 2050,² is considered the most ambitious in the sector and closest to alignment with a 2°C scenario.³ Shell has also provided clarity on future use of large-scale CCS projects and investments in nature-based solutions (though the clarity has also generated concerns over the scale of the offsetting planned).^{4,5} In contrast BP aims for a 50% reduction in the carbon intensity of its sold products by 2050.⁶

A common theme through oil companies' targets is a focus on CO₂ emissions reductions over those of other gases, leaving the door open for the expansion of methane (fossil gas) products even as carbon intensity is reduced.⁷ Meanwhile a number of significant oil and gas giants, notably Sinopec, ExxonMobil and Saudi Aramco, have not made any net zero pledge at all.

- 1 <https://www.transitionpathwayinitiative.org/tpi/publications/58.pdf?type=Publication>
- 2 <https://www.shell.com/energy-and-innovation/the-energy-future/our-climate-target.html#iframe=L3dlYmFwcHMvY2xpbWFOZV9hbWJpdGlvb2I8>
- 3 <https://www.carbonbrief.org/analysis-shell-says-new-brazil-sized-forest-would-be-needed-to-meet-1-5c-climate-goal>
- 4 <https://www.ipieca.org/news/shell-announces-strategy-to-accelerate-net-zero-emissions-target/>
- 5 <https://www.carbonbrief.org/analysis-shell-says-new-brazil-sized-forest-would-be-needed-to-meet-1-5c-climate-goal>
- 6 <https://www.bp.com/en/global/corporate/news-and-insights/press-releases/bernard-looney-announces-new-ambition-for-bp.html>
- 7 <https://www.linkedin.com/pulse/bps-reimagining-energy-strategy-spring-hope-margriet-kuijper/>

Image credit: Worksite Ltd, Unsplash



energy use) or Scope 3 (all other indirect emissions across the entity's value chain).

Offsetting: The difficulty of eliminating all emissions means that offsets feature in many net zero commitments, explicitly or by implication. While the details of future international credit markets under

⁴⁵ Defined, for different countries, either as for CO₂ only or all greenhouse gases. We include in the 'Achieved' category countries with and without published net zero targets, but where their latest NDC submission lists a) their territory-wide emissions as a net carbon sink, net negative, or similar language, and b) an intent to maintain this emissions status, conditional or unconditional on international support.