

The global race to net-zero

WHAT ABOUT HERE AND NOW DECISIONS?

APPENDIX



Related references and documents per country



Belgium

In the National Energy and Climate Plan (available [here](#)) approved in December 2019, Belgium has a binding GHG emission reduction target of 35% in 2030 compared to 2005 for non-ETS sectors. Moreover, a royal decree of 18 July 2013 (available [here](#)), sets GHG to be 80% to 95% lower in 2050 than 1990 levels.



Brazil

An “indicative” goal of carbon neutrality was mentioned in the NDC submitted to the UN on December 2020 (available [here](#)). Brazil’s targets to reduce emissions by 37% and 43% from 2005 levels by 2025 and 2030 respectively are unchanged on paper, but an increase in the base year emissions used as a reference means that Brazil can continue to increase its emissions and still meet its targets.



Canada

On November 2020, Canada submitted a draft legislation called “The Canadian Net-Zero Emission Accountability Act” with the objective of attaining net-zero emissions by 2050. (available [here](#)). It requires successive Canadian governments to design carbon targets and a plan to meet them every five years from 2030-2050. The legislation, which comes without penalties for not meeting goals, does not mention the role of carbon removal technologies, not intermediate goal.



Chile

The nation submitted its updated 2020 NDC to UN in April 2020 (available [here](#)).

The unconditional targets have three components¹:

- An **absolute**, economy-wide target excluding emissions or removals from the Land Use, Land Use Change and Forestry sector of **95 MtCO₂e in 2030**;
- A GHG emissions budget for the period from 2020 to 2030 that will not exceed 1100 MtCO₂e;
- A 2025 peak year for GHG emissions

It also contains a conditional 2030 target of up to 45% net GHG emissions reduction by 2030 from 2016 levels.



China

The announcement of carbon neutrality before 2060 and the CO₂ emissions peak by “around 2030” will probably shape the China’s 14th five-year plan (2021-2025). On October 2020, the Plenum issued a [guide to action](#) “Proposals for Formulating the 14th Five Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035” (available [here](#), Chinese version), promoting “green development”. The State Council is now drafting the final plan, that will be published on March 2021. In its 2016 NDC (available [here](#)), China set **four intermediary targets by 2030**:

- Carbon dioxide emissions peaking around 2030
- CO₂ emissions per unit of GDP dropping 60%–65% by 2030 from 2005 level
- Share of non-fossil fuels in primary energy consumption increasing to around 20%
- Forest stock volume increasing by around 4.5 billion cubic meters on the 2005 level



The EU

The European Commission is working towards a bloc-wide 2050 net zero emissions target, under a “Green Deal” (more information on the Green Deal & climate neutral target [here](#)).

¹ Unconditional targets are considered voluntary and implementable without outside support, whereas conditional targets are assumed to be set conditional on either financial support from bloc of countries, or conditional on supportive climate-related policies pursued by other countries.

The Commission is also working on a European Sustainable Finance Strategy (more information on the website [here](#)) that will help reaching climate neutrality. On 11 December 2020, the heads of the EU Member States [agreed](#) on a stronger 2030 domestic emissions target of “at least 55%” **net reduction** (meaning it includes emissions sinks in LULUCF) below 1990 levels. This goal should be submitted as part of the EU’s NDC by the end of the year.



Fiji

A Low Emission Development (LED) Strategy was submitted to UN for carbon neutrality by 2050 (“UNFCCC Low Emission Development Strategy (2018-2050)” available [here](#)). The report provides projections for four scenarios that rely more or less on variables such as negative emissions (Business As Usual (BAU) Unconditional, BAU Conditional, High Ambition and Very High Ambition). Fiji’s 2016 NDC (available [here](#)) includes intermediate targets such as reaching 100% of renewable electricity in electricity generation by 2030.



France

French lawmakers voted a net zero target into law in November 2019 (French legislation “Loi n° 2019-1147 du 8 November 2019 relative à l'énergie et au climat”, available [here](#) – French version). The law aims at reducing by 40% fossil fuel consumption compared to 2012, by 2030 and at halting electricity generation from coal by 2022. The nation, that failed to meet its first carbon budget over the period 2015-2018 (a 4% overshoot, or 72 million tonnes of CO₂), has set an **annual carbon budget of 422 million tonnes of CO₂ equivalent** for the period 2019-2023. In addition to this law, the French €100bn Recovery Plan unveiled in September 2019 is said to allow the avoidance of 57 MtCO₂ eq. on an unknown timeframe (see our article “France’s €100bn Recovery Plan: the government strikes a balance between socio-economic emergency and ecological transition” [here](#)). The “**Stratégie Nationale Bas Carbone**”, has been adopted in 2015, a tool supporting the carbon neutrality goal and is broken down by sectors and provides for quantified GHG emission reduction targets in 2030 and 2050 for each sector. The new version of the SNBC and the carbon budgets for the periods 2019-2023, 2024-2028 and 2029-2033 were adopted by Order in Council in April 2020 and is available [here](#) (French version).



Germany

The Climate Action Plan 2050, published in November 2016 (available [here](#)) defines the long-term goal and the GHG neutrality by 2050. The medium-term target is to cut GHG emissions in Germany by at least 55% by 2030 compared to 1990 levels. In its plan, the German government also lays down 2030 targets for the individual sectors, describes the development pathways, lists initial measures for implementation and establishes a process for monitoring and updating policies and measures.



Hong Kong

In November 2020, during the 2020 Chief Executive Policy Address, Carrie Lam announced Hong Kong’s neutrality target (full speech is available [here](#)). This pledge reinforced Hong Kong’s commitments as set in the “Hong Kong’s Climate Action Plan 2030+” (Jan. 2017, available [here](#)) which stated a carbon intensity reduction by 65% to 70% by 2030 compared to 2005 levels. This 2030 Climate Action plan will be updated in the coming months to “set out more proactive strategies and measures”.



Iceland

In September 2018, the government announced a new Climate Strategy (available [here](#)), making Iceland carbon neutral before 2040. The Strategy consists of 34 Government measures, ranging from an increase in reforestation to a ban on new registration of fossil fuel cars by 2030 – the full list is available in the document mentioned above. More details can also be found on the Government of Iceland official website, [available here](#).



Ireland

On October 2020, the government published the draft text of the “Climate Action and Low Carbon Development (Amendment) Bill 2020” (available [here](#)) and committed to a 7% average yearly reduction in overall greenhouse gas emissions over the next decade, and to achieving net zero emissions by 2050. . The key features of the Bill are putting our 2050 climate target in law, carbon budgets including a provision for setting sectoral targets and annually-revised Climate Action Plan



The Netherlands

In the National Energy and Climate Plan (available [here](#)) approved in November 2019, the Netherlands aim at reducing GHG emissions by 49% compared with 1990 by 2030; and to reduce GHG emissions by 95% by 2050. These goals are laid down in the Climate Act - available [here](#) (Dutch version) - which was approved by the Parliament in May 2019.



New Zealand

The legislation “Zero Carbon Act”, passed in November 2019, enshrined the country’s 2050 **net zero** emission target, available [here](#). The amendment sets targets to reduce net emissions of all GHG (**except biogenic methane**) to zero by 2050 and to reduce emissions of biogenic methane to 24–47% (New Zealand has important sheep livestock) below 2017 levels by 2050, including to 10% below 2017 levels by 2030. The 2020 NDC which stated a goal of “30% GHG reduction below 2005 by 2050, including LULUCF” does not include net zero target.



Norway

In February 2020, Norway submitted its enhanced NDC (available [here](#)), under which the country will cut emissions by at least 50% by 2030, aiming towards 55% below 1990 levels (47-52% excluding LULUCF net removals). Norway has committed to achieving net zero emissions from its land sector in 2030, but is permitted to use up to 1.6 MtCO₂e in net removals from the land sector.

Moreover, the NDC does not include a reference to the carbon neutrality target for 2030 approved by the Parliament in 2016 (see the measure signed in 2016, available [here](#) (Norwegian version)).



Portugal

Portugal lauched a roadmap in December 2018 to reach net-zero GHG emissions by 2050. It outlines strategies for energy, transport, waste, farming and forests. More details are available on the website [here](#), or in the document “Long-Term Strategy for carbon-neutrality of the Portuguese economy by 2050”, published in June 2019, available [here](#).



Singapore

There is no commitment to a firm date, but Singapore cited decarbonization as the ultimate goal of a long term strategy submitted to the UN in March 2020 (available [here](#)). More precisely, it states “**to halve emissions from its peak to 33 MtCO₂e by 2050 & net zero emissions as soon as viable in the second half of the century**”.



South Africa

In September 2020, the government unveiled the Low Emission Development Strategy (available [here](#)), outlining its aim of becoming a net zero economy by 2050.



Spain

In May 2020, the government presented a draft law, which needs to be approved by Parliament. The draft proposes to make Spain’s electricity system 100% renewable by the middle of the century, ban all new coal, oil and gas extraction projects with immediate effect, end direct fossil fuel subsidies and make all new vehicles emission-free by 2040. To reach the 2050 goal, the

government proposed interim targets. By 2030, the government pledged to reduce emissions 23% from 1990 levels and double the proportion of renewable sources in total energy consumption to 35-42%.



Sweden

The legislation “The Climate Policy Framework” passed in June 2017 and set the target of **net zero GHG emissions by 2045**, is available [here](#). In addition, Sweden set the target of **“emissions from activities in Sweden must be at least 85% lower than in 1990”**. Although this target seems to be net zero target does not mention embodied emissions. It also set three intermediary goals:

- By 2030, emissions from domestic transport, excluding domestic aviation, will be reduced by at least 70% compared with 2010.
- By 2030, emissions in Sweden in the sectors that will be covered by the EU Effort Sharing Regulation² should be at least 63% lower than in 1990.
- By 2040, emissions in Sweden in the sectors that will be covered by the EU Effort Sharing Regulation should be at least 75% lower than in 1990.

More details on Sweden’s net zero GHG emissions by 2045 can be found on the Swedish Environmental Protection Agency website, available [here](#).



United Kingdom (England, Scotland, Wales and Northern Ireland):

The legislation “The Climate Change Act 2008 (2050 Target Amendment), passed in June 2019, is available [here](#). The target will require the UK to bring **all GHG emissions to net zero by 2050**, compared with the previous target of at least 80% reduction from 1990 levels. Nonetheless, how the legal obligation will be enforced remain unclear. The Climate Change Act 2008 requires the government to set five-yearly carbon budgets, running until 2032. The UK is on track to meet its third carbon budget (the current one, covering 2018–22). On December 2020, the UK announced an **intermediary target** through its first NDC (available [here](#)), **committing to a 68% reduction in GHG emissions below 1990 levels by 2030**. However, the NDC does not cover emissions from international aviation and shipping emissions. The NDC announcement does not specify whether it covers emissions from the land use, land use change and forestry sector (LULUCF).



United States

Joe Biden pledged to make the USA carbon neutral by 2050 but the only intermediary target that was part of his political agenda is a 100% carbon-free power sector target by 2035 (for more details on his agenda, see our report “*U.S. 2020 Presidential Election*” – Oct. 2020, available [here](#)).

² The emissions covered are mainly from transport, machinery, small industrial and energy plants, housing and agriculture. These emissions are not included in the European Union Emissions Trading System, which covers most of the emissions from industry, electricity and district heating output, as well as flights departing from and arriving in the European Economic Area.