

The global race to net-zero

WHAT ABOUT HERE AND NOW DECISIONS?

April 2021 update following the Leaders Summit on Climate (hereinafter LSC)

APPENDIX





Related references and documents per country

Belgium

In the National Energy and Climate Plan (available here) approved in December 2019, Belgium has a biding 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 mentionned 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.

April 2021 update - Deforestation is a key element of Brazil's road to achieving carbon neutrality. As such, at the LSC, Brazil's Vice President Hamilton Mourao said that Brazil needs to curtail illegal deforestation by approximately 15% to 20% in order to eliminate it by 2030. President Bolsonaro also announced that he envisages a reduction in greenhouse gas emissions by 50% by 2030.

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.

April 2021 update - Canada announced that, along with Norway, Qatar, Saudi Arabia, and the US, it intends to establish a net zero producers club, uniting major oil and gas producing economies in to identify and act on solutions to phase out unabated hydrocarbon-related emissions. Canada has increased its emissions reduction targets and pledged to achieve a 40-45 % reduction in greenhouse gas emissions by 2030 compared to 2005 levels. Previously, the target was a 30% reduction for the same period (available here).

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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;
- o 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-

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.



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

April 2021 update - China's policy aims at developing both its renewables sector while controlling the construction of coal-fired power plants. China did not pledge any new climate targets at the LSC organized by the US. It did, however, reiterate its objective of peaking its carbon dioxide emissions before 2030 and become carbon neutral by 2060.

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).

The Commission is also working on a European Sustainable Finance Stategy (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 was submitted as part of the EU's NDC by the end of the year.

April 2021 update - On April 21, 2021, the European Commission ratified the EU Climate Law Regulation, setting legally-binding goals to cut emissions by at least 55%² by the end of the decade (available here). This is a global target for the 27 member states and their targets can individually vary, taking into account different socio-economic situations

Fiji

A Low Emission Development (LED) Strategy was submitted to UN for carbon neutrality by 2050 ("UNFCC 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 Conditidional, High Ambition and Very High Ambition). Fji'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 2019-2923, 2024-2028 and 2029-2033 were adopted by Order in Council in April 2020 and is available here (French version).

² The bloc as a whole will cut carbon emissions by at least 55% by 2030 compare with 1990 levels, meaning individual member countries' targets will vary, taking into account different socio-economic situations



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 vemissions 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

Japan - April 2021 update

During the two-day virtual climate leaders summit, hosted by US President Biden, Japan pledged its commitment to a new climate goal, by which it promises to cut emissions by 46% in 2030 compared with 2013 levels. Japan, the world's fifth largest emitter, previously committed to a 26% reduction, a goal that was criticized as insufficient.

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 GHGH 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

(22) 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%.

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 he 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 Regulation³ 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

³ 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.



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).

April 2021 update - On April 21st, in line with the recommendation from the independent Climate Change Committee and its sixth Carbon Budget limiting the volume of greenhouse gases emitted over a 5-year period from 2033 to 2037 (for the first time, this Carbon Budget will incorporate the UK's share of international aviation and shipping emissions) the UK government announced it would turn its climate change ambitions into law by the end of June 2021 - with legislation setting out the UK government's commitments laid in Parliament on April 21st - curtailing emissions by **78% by 2035 compared to 1990**.

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). In the first NDC, submitted in September 2016 during the Obama administration, the target was a 26-28% reduction of GHG emissions in 2025 compared to 2005 and a 80% reduction in 2050 compared to 2005.

April 2021 update - During the two-day climate leaders summit on 21 and 22 April, the Biden Administration announced on April 21st that the US federal government is setting an economy-wide target of net greenhouse gas emissions reductions of 50-52% below 2005 levels in 2030. This target has been affirmed in the updated NDC submitted by the USA on April 22 (available here) and in the statement of the White House (available here).