GLOBAL EMISSIONS GAP

MORE ACTION IS NEEDED TO PUT THE WORLD ON A PARIS-ALIGNED PATHWAY

Updates to the Nationally Determined Contributions (NDCs) of the Paris Agreement pledges by 2030 were announced prior to the recent Conference of Parties meeting in Glasgow, Scotland (COP26). The United Nations Environment Programme emissions gap report states that these current NDCs are not yet on a Paris-aligned pathway, and G20 members as a group do not have policies in place to achieve their current NDCs. It further states that more government policy support is needed to deliver NDC commitments and for the world to accelerate progress toward a 2°C pathway.[49]

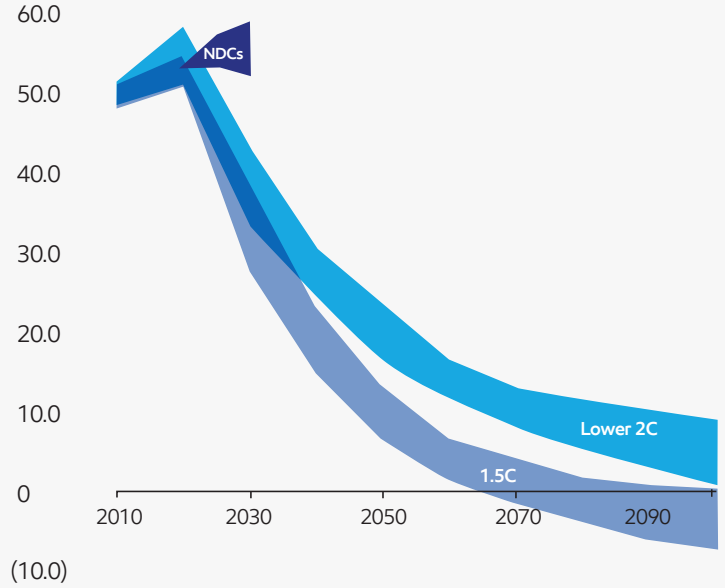
Assuming the latest NDCs are implemented through policy by all signatories to the Paris Agreement, total greenhouse gas emissions are expected to peak before 2030. Levels that year are still expected to be 5% higher than in 2019.[50] To limit global warming to below 2°C, CO_2 emissions would need to decrease by about 25% from the 2010 level by 2030 and reach net zero around 2070.[50]

The emissions gap remains large. Compared to previous unconditional NDCs, the new pledges for 2030 reduce projected 2030 emissions by only 7.5%, whereas a 30% reduction is needed for 2°C, and 55% is needed for 1.5°C.

Comparing the IEA scenario that describes energy demand under stated policies (STEPS) with its scenario that describes energy demand under the announced pledges (APS) highlights that further emission reductions in all sectors will be required. In addition, innovation to provide new solutions for harder-to-abate sectors, such as heavy industry and commercial transportation, will be needed to further reduce global emissions to limit temperature rise to 2°C.

Global GHG emissions

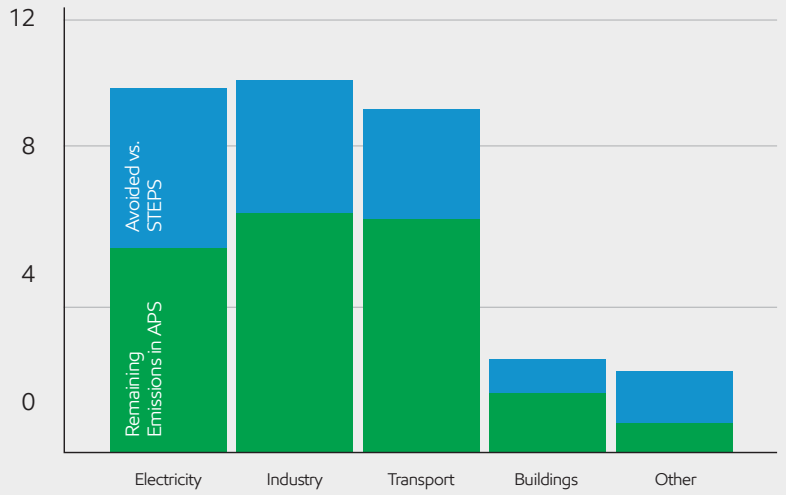
(GT CO_2e)



Source: UNFCCC 2021 Synthesis report, IPCC senario database: range shown is Interquartile within scenario group

Emissions by sector in IEA APS versus STEPS in 2050

(GT CO_2)



Source: IEA WEO 2021