Emissions Gap Report 2020
Key Messages

Summary:

Despite a brief dip in carbon dioxide emissions caused by the COVID-19 pandemic, the world is still heading for a temperature rise in excess of 3°C this century – far beyond the Paris Agreement goals of limiting global warming to well below 2°C and pursuing 1.5°C. However, a green pandemic recovery can cut around 25 per cent off the greenhouse emissions predicted in 2030 and put the world close to the 2°C pathway. Governments should pull out all the stops to implement a green recovery and strengthen their pledges before the next climate meeting in 2021.

Although the COVID-19 pandemic will cause a dip in 2020 emissions, this will not bring the world closer to the Paris Agreement goal of limiting global warming this century to well below 2°C and pursuing 1.5°C

- The year 2020 is on track to be one of the warmest on record, with wildfires, droughts, storms and glacier melt intensifying.
- In 2019, total greenhouse gas emissions, including land-use change, reached a new high of 59.1 gigatonnes of CO_2 equivalent ($GtCO_2e$).
- Carbon dioxide emissions are predicted to fall up to 7 per cent in 2020. However, long-term, this dip means only a 0.01°C reduction of global warming by 2050.
- Government pledges under the Paris Agreement, known as Nationally Determined Contributions (NDCs), are still woefully inadequate. Predicted emissions in 2030 leave the world on the path to a 3.2°C increase this century, even if all unconditional NDCs are fully implemented.
- The levels of ambition in the Paris Agreement must be roughly tripled for the 2°C pathway and increased at least fivefold for the 1.5°C pathway.

The pandemic is a warning from nature that we must act on climate change, nature loss and pollution. It also provides an opportunity for a recovery that puts the world on a 2°C pathway

- A green pandemic recovery could cut up to 25 per cent off the emissions we would expect to see in 2030 based on policies in place before COVID-19. This

far outstrips emissions savings that would be delivered under unconditional NDCs, although more will be needed to achieve the 1.5°C goal.
- A green recovery could put emissions in 2030 at 44 $GtCO_2e$ – within the range of emissions that give a 66 per cent chance of holding temperatures to below 2°C.
- Measures to prioritize include direct support for zero-emissions technologies and infrastructure, reducing fossil fuel subsidies, no new coal plants, and promoting nature-based solutions – including large-scale landscape restoration and reforestation.

To date, the opening for using recovery measures to accelerate a green transition has largely been missed. Unless this is reversed, the Paris Agreement goals will slip further out of reach

- Around one-quarter of G20 members have dedicated shares of their spending, up to 3 per cent of GDP, explicitly to low-carbon measures.
- For most, spending has been predominantly high carbon, implying net negative emissions, or neutral, having no discernible effects on emissions.
- There nonetheless remains a significant opportunity for countries to implement low-carbon policies and programmes. Governments must take this opportunity in the next stage of COVID-19 fiscal interventions.

The growing number of countries committing to net-zero emissions goals by mid-century is the most significant climate policy development of 2020. To remain feasible and credible, these commitments must be urgently translated into strong near-term policies and action and reflected in NDCs.

- At the time of report completion, 126 countries covering 51 per cent of global greenhouse gas emissions had adopted, announced or were considering net-zero goals. If the United States of America adopts a net-zero target by 2050, as suggested in the Biden-Harris climate plan, the share would increase to 63 per cent.
- Although the net-zero emissions goals are encouraging, they highlight a vast discrepancy between the ambition of the goals and the inadequate level of ambition in NDCs.
- More countries need to develop long-term strategies consistent with the Paris Agreement, and new and updated NDCs need to become consistent with the net-zero emissions goals.

The shipping and aviation sector, which account for 5 per cent of global emissions and growing, also requires more attention

- If current trends are continued, combined international emissions from shipping and aviation will likely consume between 60 and 220 per cent of allowable CO_2 emissions by 2050 under the 1.5°C scenario.

- Improvements in technology and operations can improve the fuel efficiency of transport if incentivized, but projected increases in demand mean this will not result in decarbonization and absolute reductions of CO_2. Both sectors need to combine energy efficiency with a rapid transition away from fossil fuel.
- Additional policies are required to drive changes in technology, operations, fuel use and demand.

Stronger action must include facilitating, encouraging and mandating changes in consumption behaviour by the private sector and individuals

- Around two-thirds of global emissions are linked to private households, when using consumption-based accounting. The mobility, residential and food sectors each contribute about 20 per cent of lifestyle emissions.
- Governments must enable and encourage consumers to avoid high-carbon consumption. Possible actions include replacing domestic short haul flights with rail, incentives and infrastructure to enable cycling and car-sharing, improving energy efficiency of housing, renewable energy defaults from grid providers and policies to reduce food waste.
- The combined emissions of the richest one per cent of the global population account for more than twice the poorest 50 per cent. The elite will need to reduce their footprint by a factor of at least 30 to stay in line with the Paris Agreement targets.