

## EMISSIONS GAP REPORT 2022, KEY MESSAGES

### EMISSIONS GAP REPORT 2022: The Closing Window – inadequate progress on climate action makes urgent transformation only option

As climate impacts intensify, the [\*Emissions Gap Report 2022: The Closing Window – Climate crisis calls for rapid transformation of societies\*](#) finds that the world is still falling short of the Paris climate goals, with no credible pathway to 1.5°C in place. Only an urgent system-wide transformation can avoid an accelerating climate disaster. The report looks at how to deliver this transformation, through action in the electricity supply, industry, transport and buildings sectors, and the food and financial systems.

**Despite a call for strengthened Nationally Determined Contributions (NDCs) for 2030, progress since COP26 in Glasgow has been woefully inadequate.**

- NDCs submitted since COP26 take only 0.5 gigatonnes of CO<sub>2</sub> equivalent greenhouse gas emissions (GtCO<sub>2</sub>e), less than one per cent, off projected global emissions in 2030.
- Looking at all new and updated NDCs submitted between 1 January 2020 and 23 September 2022, the count is 166 nations, representing 91 per cent of greenhouse gas emissions, up from 152 parties as of COP26.
- Most G20 members have just started implementing efforts to meet their new targets; collectively, the G20 is expected to fall short of its 2030 promises without strengthened action.

**This lack of progress leaves the world on a path towards a temperature rise far above the Paris Agreement goal of well below 2°C, preferably 1.5°C.**

- Unconditional NDCs are estimated to give a 66 per cent chance of limiting global warming to about 2.6°C by the end of the century. For conditional NDCs, this goes down to 2.4°C.
- Policies currently in place, without further strengthening, suggest a 2.8°C hike.
- Implementation of all NDCs plus net-zero commitments made by an increasing number of countries point to a 1.8°C increase. However, this scenario is not credible, based on the discrepancy between current emissions, near-term NDC targets and long-term net-zero targets.

**To get on track to meet the Paris Agreement goal, the world needs to reduce greenhouse gases by unprecedented levels over the next eight years.**

- Unconditional and conditional NDCs are estimated to reduce global emissions in 2030 by 5 and 10 per cent respectively, compared with emissions based on policies currently in place.
- To get on a least-cost pathway to limiting global warming to 2°C and 1.5°C, these percentages must reach 30 per cent and 45 per cent respectively.

- Emissions must continue to decline rapidly after 2030 to avoid exhausting the remaining atmospheric carbon budget.

**Such massive cuts require a large-scale, rapid and systemic transformation across the globe.**

- The report explores the required actions in the electricity supply, industry, transport and buildings sectors, and the food and financial systems that would back these changes.
- Even if the transformation fails to fully bridge the 2030 emissions gap, every fraction of a degree matters. Launching the transformation is necessary to move towards a carbon-neutral future that will allow us to limit global warming and deliver other social and environmental benefits, like clean air, green jobs and universal energy access.

**The transformation towards zero greenhouse gas emissions in electricity supply, industry, transportation and buildings is underway but needs to move much faster.**

- Electricity supply is most advanced, as the costs of renewable electricity for solar and wind have fallen, but obstacles exist – including ensuring a just transition and universal energy access.
- For buildings, currently available technologies need to be fully applied. For industry and transport, zero-emission technology needs to be further developed and deployed.
- The portfolio of the key actions to advance the transformation include:
  - avoiding lock in of new fossil fuel-intensive infrastructure,
  - further advancing zero-carbon technologies, market structures and planning for a just transformation,
  - applying zero-emission technology and behavioural changes to sustain reductions to reach zero emissions.

**Food systems, which account for one third of all emissions, can be reformed to deliver rapid and lasting cuts.**

- Focus areas for food systems include demand-side dietary changes (including tackling food waste), protection of natural ecosystems, improvements in food production at the farm level and decarbonization of food supply chains.
- Transformations in the four areas can reduce 2050 food systems emissions to around a third of current levels; as opposed to emissions almost doubling if current practices remain in place.
- Governments can facilitate transformation by reforming subsidies and tax schemes. The private sector can reduce food loss and waste, use renewable energy and develop novel foods that cut down carbon emissions. Individual citizens can change their lifestyles to consume food for environmental sustainability and carbon reduction.

**The financial system must overcome internal and external constraints to become a critical enabler of transformation across all sectors.**

- A global transformation to a low-carbon economy is expected to require investments of at least USD 4-6 trillion a year. This is a relatively small (1.5-2 per cent) share of total financial assets managed, but significant (20-28 per cent) in terms of additional annual resources needed.
- Delivering such funding will require a transformation of the financial system and its structures and processes, engaging governments, central banks, commercial banks, institutional investors and other financial actors.
- The six approaches to financial sector reform, which must be carried out in an integrated manner, are:
  - **Make financial markets more efficient**, including through taxonomies and transparency.

- **Introduce carbon pricing**, such as taxes or cap-and-trade systems.
- **Nudge financial behaviour**, through public policy interventions, taxes, spending and regulations.
- **Create markets for low-carbon technology**, through shifting financial flows, stimulating innovation and helping to set standards.
- **Mobilize central banks**: central banks are increasingly addressing the climate crisis, but more concrete action on regulations is urgently needed.
- **Set up climate “clubs” of cooperating countries, cross-border finance initiatives and just transformation partnerships**, which can alter policy norms and change the course of finance through credible financial commitment devices, such as sovereign guarantees.