

Paris pledges only a third of what is needed to avoid worst impacts of climate change. Adopting new technologies in key sectors, at investment of under US\$100/tonne, could reduce emissions by up to 36 gigatonnes per year by 2030, more than sufficient to bridge the gap.

Kigali Amendment to Montreal Protocol, action on short-lived climate pollutants, and increased pre-2020 G20 ambition on Cancun pledges can also help minimize climate impacts.

Governments and non-state actors need to deliver an urgent increase in ambition to ensure the Paris Agreement goals can still be met, according to a new UN assessment, unenvironment.org reads.

The eighth edition of UN Environment's Emissions Gap report, released ahead of the UN Climate Change Conference in Bonn, finds that national pledges only bring a third of the reduction in emissions required by 2030 to meet climate targets, with private sector and sub-national action not increasing at a rate that would help close this worrying gap.

The Paris Agreement looks to limit global warming to under 2°C, with a more ambitious goal of 1.5°C also on the table. Meeting these targets would reduce the likelihood of severe climate impacts that could damage human health, livelihoods and economies across the globe.

As things stand, even full implementation of current unconditional and conditional Nationally Determined Contributions makes a temperature increase of at least 3°C by 2100 very likely - meaning that governments need to deliver much stronger pledges when they are revised in 2020.

Should the United States follow through with its stated intention to leave the Paris Agreement in 2020, the picture could become even bleaker.

The report does, however, lay out practical ways to slash emissions through rapidly expanding mitigation action based on existing options in the agriculture, buildings, energy, forestry, industry and transport sectors.

Strong action on other climate forcers - such as hydrofluorocarbons, through the Kigali Amendment to the Montreal Protocol, and other short-lived climate pollutants such as black carbon - could also make a real contribution.

"One year after the Paris Agreement entered into force, we still find ourselves in a situation where we are not doing nearly enough to save hundreds of millions of people from a miserable future," said Erik Solheim, head of UN Environment.

"This is unacceptable. If we invest in the right technologies, ensuring that the private sector is involved, we can still meet the promise we made to our children to protect their future.

But we have to get on the case now.”

CO₂ emissions have remained stable since 2014, driven in part by renewable energy, notably in China and India. This has raised hopes that emissions have peaked, as they must by 2020 to remain on a successful climate trajectory. However, the report warns that other greenhouse gases, such as methane, are still rising, and a global economic growth spurt could easily put CO₂ emissions back on an upward trajectory.

The report finds that current Paris pledges make 2030 emissions likely to reach 11 to 13.5 gigatonnes of carbon dioxide equivalent above the level needed to stay on the least-cost path to meeting the 2°C target. One gigatonne is roughly equivalent to one year of transport emissions in the European Union (including aviation).

The emissions gap in the case of the 1.5°C target is 16 to 19 GtCO₂e, higher than previous estimates as new studies have become available.

“The Paris Agreement boosted climate action, but momentum is clearly faltering,” said Dr. Edgar E. Gutiérrez-Espeleta, Minister of Environment and Energy of Costa Rica, and President of the 2017 UN Environment Assembly. “We face a stark choice: up our ambition, or suffer the consequences.”

Investing in technology key to success

To avoid overshooting the Paris goals, governments (including by updating their Paris pledges), the private sector, cities and others need to urgently pursue actions that will bring deeper and more-rapid cuts.

The report lays out ways to do so, particularly in agriculture, buildings, energy, forestry, industry and transport. Technology investments in these sectors – at an investment cost of under \$100 per tonne of CO₂ avoided, often much lower – could save up to 36 GtCO₂e per year by 2030.

Much of the potential across the sectors comes from investment solar and wind energy, efficient appliances, efficient passenger cars, afforestation and stopping deforestation.

Focusing only on recommended actions in these areas – which have modest or net-negative costs – could cut up to 22 GtCO₂e in 2030.

These savings alone would put the world well on track to hitting the 2°C target, and unlock the possibility of reaching the aspirational 1.5°C target.

Non-state action and other initiatives

Actions pledged by non-state and sub-national bodies (such as cities and the private sector) could reduce the 2030 emissions gap by a few GtCO₂e, even accounting for overlap with Nationally Determined Contributions. The world’s 100 largest emitting publicly traded companies, for example, account for around a quarter of global greenhouse emissions,

demonstrating huge room for increased ambition

The Kigali Amendment to the Montreal Protocol aims to phase out the use and production of hydrofluorocarbons – chemicals primarily used in air conditioning, refrigeration and foam insulation. If successfully implemented, it kicks-in too late to impact the 2030 gap, but can make a real contribution to reaching the longer-term temperature goals.

By mid-century, reductions in short-lived climate pollutants, such as black carbon and methane, could help reduce impacts that are based on cumulative heat uptake and help to ensure a steady and lower temperature trajectory towards the long-term Paris goals.

“Enel is committed to achieve 100% CO₂-free power generation by 2050 and the pathway we’ve chosen to reach this target is to create self-sustaining ecosystems where renewable generation is combined with storage and electric mobility within intelligent networks capable of operating and balancing power flows autonomously.”

“Reducing the global emissions gap on the way to achieving a zero emission society requires a faster implementation of this new vision of the electricity system through sustainable innovation driven by the open cooperation of all relevant stakeholders, from utilities to research, startups, governments, international bodies and the civil society. This transition is proving to be financially as well as environmentally sound and we at Enel are glad to have embarked upon this journey and always looking forward to the future opportunities it will entail.”

Also, while the G20 is collectively on track to meet its Cancun climate pledges for 2020, these pledges do not create a sufficiently ambitious starting point to meet the Paris goals. Although 2020 is just around the corner, G20 nations can still carry out actions that lead to short-term reductions and open the way for more changes over the following decade. Avoiding new coal-fired power plants and accelerated phasing out of existing plants – ensuring careful handling of issues such as employment, investor interests and grid stability – would help. There are an estimated 6,683 operating coal-fired power plants in the world, with a combined capacity of 1,964 GW. If these plants are operated until the end of their lifetime and not retrofitted with Carbon Capture and Storage, they would emit an accumulated 190 Gt of CO₂.

In early 2017, an additional 273 GW of coal-fired capacity was under construction and 570 GW in pre-construction. These new plants could lead to additional accumulated emissions of approximately 150 Gt CO₂. Ten countries make up approximately 85% of the entire coal pipeline: China, India, Turkey, Indonesia, Vietnam, Japan, Egypt, Bangladesh, Pakistan and the Republic of Korea.

The report also looks at CO₂ removal from the atmosphere – through afforestation,

reforestation, forest management, restoration of degraded lands and soil carbon enhancement - as an option for action.

Additionally, a new report released by the 1 Gigaton Coalition on the same day shows that partner-supported renewable energy and energy efficiency projects in developing countries can cut 1.4 GtCO₂e by 2020 - provided the international community meets its promise to mobilize US\$100 billion per year to help developing countries adapt to climate change and reduce their emissions.

“As renewable energy and energy efficiency bring other benefits - including better human health and jobs - I urge the international community to deliver on the funding they promised to support developing nations in their climate action,” said Ms Ine Eriksen Sørensen, Norway’s Minister of Foreign Affairs. “Partner-supported renewable energy and energy efficiency projects and policies are vital for global decarbonization, as they provide key resources and create enabling environments in critical regions.”

The Gigaton Coalition is supported by UN Environment and the Norwegian Government. The benefits of a low-carbon society on global pollution - by, for example, cutting the millions of air pollution-related deaths each year - are also clearly illustrated in *Towards a pollution-free planet*, a report by the UN Environment Executive Director that will be presented at the upcoming United Nations Environment Assembly. The report lays out an ambitious framework to tackle pollution, including through political leadership, moving to sustainable consumption and production and investing big in sustainable development.

Source: actmedia.eu