

## "India must use green technologies to boost growth and become a climate leader."

The UN's Emissions Gap Report comes as a sharp warning to countries preparing to meet in Madrid in December, under the aegis of the UN Framework Convention on Climate Change, that every year of inaction is jeopardising the main goal of the Paris Agreement: to keep the rise in global temperature over pre-industrial times well below 2°C, and

ideally at 1.5°C. Emissions gap represents the difference between current actions to reduce greenhouse gases (GHGs) and what is needed to meet the target.

In quantitative terms, the UN report estimates that there would have to be a 2.7% average annual cut in emissions from 2020 to 2030 for temperature rise to be contained at 2°C, while the more ambitious 1.5° C target would require a 7.6% reduction. But countries with large emissions, such as the U.S., China, the European Union (EU) nations and India, will face more challenging demands if corrective measures to decarbonise are not implemented now.

Climate warnings issued over the years have failed to impress most politicians, but the EU is considering an emergency declaration, and the British Parliament adopted a resolution earlier this year. What the emissions gap findings make clear, however, is that symbolism can do little to mitigate the effects of dangerous climate change. Hundreds of millions of people could face the extreme impacts.

In the U.S., the Trump administration has initiated the process of withdrawing from the Paris Agreement, but there is considerable sub-national support for climate action. The EU, where public pressure to act on climate change is high, is working on legislation to bring about net zero emissions. The U.K., responsible for a large share of historical emissions, has turned its net zero 2050 goal into a legal requirement.

#### Top greenhouse gas emitters

Excluding land-use change emissions







For these rich nations, the road to lower emissions is mainly through innovation and higher efficiencies in energy use. China and India, on the other hand, have to reconcile growing emissions with development needs. Their best



options are a scaling up of investments in renewable energy, leapfrogging to clean technologies in buildings and transport, and greater carbon sequestration.



Changes in global levelized cost of energy for key renewable energy technologies, 2010-2018

Here, as the UN report points out, India could do much more. It needs to provide more consistent support for renewable energy, have a long-term plan to retire coal power plants, enhance ambition on air quality, adopt an economywide green industrialisation strategy, and expand mass transport.

In the key area of buildings, the energy conservation code of 2018 needs to be implemented under close scrutiny. With a clear vision, India could use green technologies to galvanise its faltering economy, create new jobs and become a climate leader.



# GS World Team...

### Emission Gap Report

#### Context

 The annual United Nations Environment Programme (UNEP) flagship Emissions Gap Report has been released.

#### What is the "Emissions Gap"?

- Also called as the "Commitment Gap", it is the difference between the low level of emissions that the world needs to drop to, compared with the projected level of emissions based on countries' current commitments to decarbonization.
- It measures the gap between what we need to do and what we are actually doing to tackle climate change.

#### Why does the Emissions Gap Matter?

- The gap is important because if we can't close it and meet the emissions reduction target, we will face increasingly severe climate impacts worldwide.
- Therefore, it is important that policymakers, and their citizens, know what the gap is so that the commitments countries are making are sufficient to close the gap.
- The Emissions Gap Report measures and projects three key trendlines:
- The amount of greenhouse gas emissions every year up to 2030.
- The commitments countries are making to reduce their emissions and the impact these commitments are likely to have on overall emission reduction.
- The pace at which emissions must be reduced to reach an emission low that would limit temperature increase to 1.5oC, affordably.
- The report also identifies key opportunities for each country to increase the pace of emission reduction necessary to close the gap.

#### Key findings of the report:

- The world will fail to meet the 1.5°C temperature goal of the Paris Agreement unless global greenhouse gas emissions fall by 7.6 per cent each year.
- Global temperatures are set to rise about 3.2 degrees

- C by 2100, the report says, bringing catastrophic weather including hotter, deadlier heatwaves and more frequent floods and drought.
- The top four emitters (China, USA, EU and India) contributed to over 55% of the total emissions over the last decade, excluding emissions from land-use change such as deforestation.
- The rankings would change if land-use change emissions were included, with Brazil likely to be the largest emitter.

#### Where India stands?

- India is the fourth-largest emitter of Green House Gases (GHGs).
- It is among a small group of countries that are on their way to achieve their self-declared climate targets under the Paris Agreement.
- The report names five key areas that will be decisive in the future:
- At least €1.45 billion (\$1.59 billion) annual investment in renewables and more efficient energy use.
- Coal phaseout.
- Decarbonization of transport.
- Decarbonization of industry.
- Increased access to electricity for 3.5 billion people.

#### Solutions:

- A full decarbonization of the energy sector is necessary and possible.
- Renewables and energy efficiency are critical to the energy transition.
- The potential emission reduction thanks to renewable energy electricity totals 12.1 gigatonnes by 2050.
- Electrification of transport could reduce the sector'sCO2 emissions by a huge 72 per cent by 2050.
- Each sector and each country has unique opportunities to harness renewable energy, protect natural resources, lives and livelihoods, and transition to a decarbonization pathway.



**Expected Questions (Prelims Exams)** Consider the following statements related to the United Nations' Carbon Emissions Gap Report: 1. According to it, the maximum emissions of the world are emitted by G20 countries. The emission of global GHG has increased by 1.5°C per year. 2. 3. According to this report, due to increase in GHG the total emission has been equivalent to 55.3 gigatonnes carbon dioxide emissions.. Which of the above statements is/are incorrect? (b) Only 1 (a) 1 and 2 (c) 2 and 3 (d) 1, 2 and 3 **Expected Questions (Mains Exams)** Recently released Emissions Gap Report by the United Nations has raised questions Q. on the commitment to fight climate change by developed and developing countries'. In the context of this report, examine the steps taken by India in this direction. (250 words) Note: Answer of Prelims Expected Question given on 28 Nov., is 1 (c) CommitteedToExce

