



## Deconstructing Carbon-Neutrality

### Why in news?

Recently, 32 countries declared their proposed intention to achieve carbon neutral status by mid-century.

### What is the temperature goal?

- UN Secretary General has urged all countries, especially India, to make explicit declarations in the climate targets.
- Article 4.1 of the Paris Agreement asks countries to reach global peaking of greenhouse gas emissions as soon as possible.
- It also requires countries to undertake rapid reductions in carbon emissions to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases.
- The temperature goal referred in the Paris Agreement is to limit temperature rise to well below 2°C and further pursuing efforts to restrict it to 1.5°C above pre-industrial levels.

### What is the problem with this target?

- The balance between emissions and removal of greenhouse gases is sought not on a country-wise basis but for the world as a whole.
- The carbon neutrality goals of the countries do not reflect the principle of equity and the principle of common but differentiated responsibility.
- It is also incompatible with achieving the goal of 1.5°C or 2°C.
- Moreover the three-way compatibility between temperature goals, carbon neutrality and equity is not guaranteed.
- According to IPCC report, for a 50% probability of restricting temperature rise to less than 1.5°C, there should be carbon budget of 480 Giga-tonnes of carbon dioxide equivalent (GtCO<sub>2</sub>eq).
- At the current rate of emissions of about 42 GtCO<sub>2</sub>eq per year, this budget would be consumed in 12 years.
- To keep within the 480 Gt budget, global carbon neutrality must be reached by 2039 which is infeasible.

## **How are the emissions in the west?**

- In U.S., emissions have peaked in 2005 and have declined at an average rate of 1.1% from then till 2017, with a maximum annual reduction of 6.3% in 2009.
- If it reaches net-zero by 2050, the cumulative emissions between 2018 and 2050 would be 106 GtCO<sub>2</sub> which is 22% of the total remaining carbon budget- very high share.
- If U.S. stays within its fair share of the remaining carbon budget, it would have to reach net zero emissions by 2025.
- But it would still owe a carbon debt of 470 GtCO<sub>2</sub> to the rest of the world for having used more than its fair share of carbon space in the past.
- Similarly, European Union, to keep to its fair share of the remaining carbon budget would have to reach net zero by 2033, with a constant annual reduction in emissions.
- So this climate policy modelling has promoted the illusion that three-way compatibility is feasible through negative emissions by expanding the carbon capture.
- They also promote the other illusion that not resorting to any serious emissions increase is the means to guarantee the successful development of the third world.

## **Why India should not join the carbon neutrality declarations?**

- India's twin burden of low-carbon development and adaptation to climate impacts requires serious, concerted action.
- One, India has to stay focused on development — both as its immediate need as well as its aspirational goal.
- India's current low carbon footprint is a consequence of the utter poverty and deprivation.
- Second, India does not owe a carbon debt to the world as the country's emissions is not more than 3.5% of global cumulative emissions prior to 1990 and about 5% since till 2018.
- India's mitigation efforts are quite compatible with a 2°C target.
- So any self-sacrificial declaration of carbon neutrality will only reduce the burden of the developed world and transfer it to the backs of the Indian people.
- India's approach to eventual net-zero emissions should be contingent on deep first world emissions reductions.
- Meanwhile, India must reject any attempt to restrict its options and being led into a low-development trap.

**Source: The Hindu**



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