

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 (GtCO₂eq).
- At the current rate of emissions of about 42 GtCO₂eq 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 GtCO₂ 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 GtCO₂ 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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