



# Economics of Climate Change

## Why in News

The [COP26 climate talks](#) are going to take place in Glasgow. Given the **magnitude of [climate change phenomena](#)** occurring all over the world, the upcoming climate deal negotiation is crucial to cap global warming at the **1.5-2 degrees Celsius upper limit** set out in the [2015 Paris Agreement](#).

- In this context, it is necessary to analyze the **impact of climate change on economic livelihoods** in the world over and the future stability of the global financial system.

## Key Points

- **Climate Change Cost:** Although there is disagreement on the magnitude, several economists are certain about the **possible impact of global warming on global output**.
  - According to one [International Monetary Fund \(IMF\)](#) estimate, unchecked global warming would reduce 7% of world output by 2100.
  - The [Network for Greening the Financial System \(NFGS\)](#) group of world central banks puts it even higher at 13%.
- **Most Vulnerable Area:** It is unanimously accepted that the **developing world will be the worst affected area** by climate change.
  - Presently, much of the world's poor live in the **tropical or low-lying regions** already suffering climate change fall-out like droughts or rising sea levels.
  - Moreover their countries **rarely have the resources to mitigate** such damage.
- **Impact on Micro-Level:** Climate change will drive up to **132 million more people into extreme poverty by 2030**, a [World Bank](#) paper last year concluded.
  - Factors included lost farming income; lower outdoor labour productivity; rising food prices; increased disease; and economic losses from extreme weather.
- **Analysing Net Zero Emission Scenario: 'Net zero emissions'** refers to achieving an overall balance between [greenhouse gas](#) emissions produced and greenhouse gas emissions taken out of the atmosphere.
  - However, there are **several economic repercussions** owing to Net Zero emissions.
  - A report by **think tank Carbon Tracker** estimated that over **USD 1 trillion of business-as-usual investment** by the oil and gas sector would no longer be viable in a genuinely low-carbon world.
  - Moreover, the IMF has called for the **end of all fossil fuel subsidies** - which it calculates at \$5 trillion annually if defined to include undercharging for supply, environmental and health costs.
  - This may lead to an **unemployment crisis of mass level**.
- **Below Par Carbon Pricing:** Tax or permit schemes that try to price in the damage done by emissions create incentives to go green.
  - However, so far **only a fifth of global carbon emissions** are covered by such programmes, pricing carbon on average at a **mere USD 3 a tonne**.

- This is well below the **USD 75/tonne the IMF** says is needed to cap global warming at well below 2°C.
- **Risk of Inflation:** Anything which factors in the polluting cost of fossil fuels is likely to lead to **price rises in some sectors**.
- **Failure of Green Decoupling:** **Sustainable growth** implies that economic activity can grow as needed without adding yet more emissions.
  - However, this has failed to manifest uptil now.
  - Presently, higher rates of economic growth are achieved but it is accompanied by gains in emissions or achieved by shifting dirty production from one national territory to another.
- **Inadequate Green Finance:** At a global scale, the rich countries which since their industrial revolutions have generated the bulk of emissions have **promised to help developing countries** transition via **USD 100 billion** of annual transfers – a promise so far not fulfilled.

## Way Forward

- **Covering Up Economic Risk of Net Zero Emissions:** The global financial system needs to be insulated against both the physical risks of climate change itself and the upheavals likely to happen during a transition to net zero.
  - Central banks and national treasuries should form a combined strategy to balance economic growth with sustainable development.
  - A vital step should be explicitly including policies for climate mitigation in the government budget, along with energy, roads, health and education.
- **Switching to Hydrogen Economy:** Power generation by **green hydrogen** will be a viable solution to achieve the target of 'net-zero' emission to remain under 1.5° C.
  - It will also be a leap forward in minimising the dependence on conventional fossil fuels.
- **Mobilising Climate Finance:** There is also a need to launch a major campaign to mobilise climate finance and focus should be given on energy efficiency, use of **biofuels, carbon sequestration**, carbon pricing.

**Source: IE**

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