

* India will achieve net zero by 2070 : PM

- COP 26 Summit, Glasgow

- PM declared India's net zero target : 2070
- Earlier, India had strongly resisted demands for a net zero target by developed countries.

- Path to achieve net zero for India -

- By 2030 → ensure 50% of its energy needs from renewable sources.
 - reduce C emissions by a billion tonnes
 - reduce Emissions Intensity per unit of GDP by less than 45%
 - install systems to generate 500 GW of renewable energy (↑ of 50 GW from existing target of 450 GW)
- India needs climate justice.
 - ↳ Rich, developed countries with historical C emissions should provide at least \$1 trillion in climate finance
 - ↳ To assist developing countries.
- Principles of Equity & CBDR-RC (Common

but Differentiated Responsibilities & Respective Capabilities) needs to be followed.

- Way Forward:

- India will now require **shift to clean energy sources** \Rightarrow may impose cost.
- No focus on climate adaptation & mitigation in global negotiations
- Changes needed in cropping patterns
 \hookrightarrow To make **agri resilient**.
- Sustainable practices of certain communities
 \hookrightarrow should be made part of school curricula
- Lessons from India's schemes - Jal Jeevan Mission, SBM, Ujwala etc.

* World leaders pledge to save forests, etc

- COP26 summit @ Glasgow -

• Deforestation issue

↳ World lost 2.58 lac km² of forest a/q to Global Forest Watch in 2020

↳ So, pledge to stop deforestation by 2030

↳ \$19 bn in public & prt funds to invest for this.

↳ Expansion of commitment by 40 countries in the 2014 New York Declaration of Forests

• Global Methane Pledge

↳ announced in Sept 2021 by US & EU

↳ to slash CH₄ (methane) emissions by 30% from 2020 levels by 2030

↳ Now, covers emissions from $\frac{2}{3}$ rd of global economy.

↳ Brazil (5th largest emitter) is a signatory

↳ RIC → have not signed up.

↳ Australia refused it.

• Funding

↳ 12 countries pledged to provide \$12bn

b/w 2021-25 for developing countries
↳ to restore degraded land & tackle
wildfires.

→ Methane emissions' sources -

- Cows' digestive systems
- Landfill waste
- Oil & Gas Production.

* India calls for hike in climate finance

- India's statements at the like Minded Developing Countries (LMDC) meet at COP26
 - ↳ Climate finance cannot continue at levels decided in 2009
 - ↳ It should be at least \$1 trillion
 - ↳ India appreciated Third World Network (TWN) for its support to LMDC
- Significance of LMDCs

- Unity of LMDCs necessary for negotiations to preserve the interests of the Global South.
- Countries need multilateral cooperation & not global economic & geopolitical competition & trade wars
- LMDCs should join India's initiatives like ISA, CDRI & LeadIT

* India's climate commitments

- India at COP26

- declared to achieve net zero by 2070

- Commitments declared by India

By 2030 → ensure 50% of its energy needs from renewable sources.

→ reduce C emissions by a billion tonnes

→ reduce Emissions Intensity per unit of GDP by less than 45%

→ install systems to generate 500 GW of renewable energy (↑ of 50 GW from existing target of 450 GW)

- No peak year declared

↳ Peak year means the year from which emissions will start to reduce.

↳ To achieve Net zero by 2070, India needs to peak by 2040.

- India's NDCs in 2015

↳ install 175 GW of renewable energy capacity by 2022

- Achievements till Feb 2021

Type	Capacity	% of total capacity
Renewables	94 GW	25%
Renewables + Large hydro projects	139 GW	38%

- India's conditionalities -

↳ India will reach net zero by 2070 only if other developed countries commit to net zero by 2050.

The lowdown on India's Glasgow announcement

Targets : Comparison of India's Commitments

Factors	Paris Agreement 2015	COP 26 Glasgow
Emissions Intensity	33-35 % reduction by 2030 below 2005 levels	Raised to 45 %
Non fossil based energy	Increase to 40 % by 2030	50%
Create Carbon sink	2.5-3 Gt CO ₂ e by 2030	-
Projected C emissions	-	Reduce by 1 bt by 2030
Net-zero emissions	-	By 2070
Installed renewable generation capacity	175 GW by 2030	500 GW by 2030

India's declarations at COP 26 Climate Summit

- Indian climate analysts have praised it
- International commentators have criticised India's **Net Zero emissions** trajectory by 2070 instead of 2050.

India's Stand prior to COP 21

- India is a developing country and not responsible for the **historical emissions**.
- Thus it **was not obliged to cut emissions**.

India's stand since the COP 21 in Paris.

- India needs to grow rapidly to meet the aspiration of a 1.25 billion population
- Out of this, 300 million people are without access to energy.
- Still India has **pledged to reduce emissions**, use renewable energy, enlarge forest cover

Contradictory signals by Govt of India-

- Officials were proclaiming the unacceptability of net-zero and the unlikelihood of higher targets
- Some said commitments are contingent on financial assistance from developed countries.

Progress & Achievables:

1. On Emissions Intensity (EI), or emissions per unit of GDP

• India's submissions of NDCs show a steady decline of EI of 2% p.a. from 2005 onwards which is achievable and on par with the capacity of an emerging country.

2. On Carbon emissions reduction

- India's current annual emissions are around 2.8 bt and are projected to reach about 4.5 bt in 2030.
- This needs a substantial 20% reduction.

Recent steps taken by Govt:

- Railways' net-zero 2030 target cutting 60 mt annually & LED bulbs cutting another 40 mt a year over the next decade.
- India has already added around 101 GW of solar and wind energy.
- The Central Electricity Authority (CEA) in its 2020 Report on Energy Mix for 2029-30 has projected around 525 GW or 64.3% non-fossil fuel installed capacity.

India's failures at COP 26

- India could have joined the Declaration to end deforestation by 2030.
- India's commitments also don't mention the NCD target for forest and tree covers.
- India did not join the Global Methane Pledge to reduce the effects of short-lived but potent GHG by 30% by 2030 from 2020 levels.

Where does India stand on methane emissions?

Two of the most prominent outcomes so far of the ongoing COP26 in Glasgow.

1. Global Methane pledge:

- First announced in September by the US and EU
- One of the central aims of this agreement is to cut down methane emissions by up to 30 per cent from 2020 levels by the year 2030.
- At least 90 countries have signed the Global Methane Pledge.
- Methane is a potent greenhouse gas with Global Warming Potential (GWP) of around 20-25 (for a 100-year timeframe GWP).
- According to the latest IPCC Report, methane accounts for about half of the 1.0°C net rise in global avg temp since the pre-industrial era.
- Methane is the second-most abundant greenhouse gas in the atmosphere, after carbon dioxide, and accounting for about 20 percent of global emissions.

- Methane has a much shorter atmospheric lifetime (12 years as compared to centuries for CO₂).
- Notably as per a report of the IEA, more than 75 per cent of methane emissions can be mitigated with the technology that exists today.
- Thus rapidly reducing methane emissions is regarded as the single most effective strategy to reduce global warming in the near term

2. Glasgow Leaders' Declaration on Forests & Land Use:

- Initiated by the **United Kingdom** aims to halt deforestation and land degradation by 2030.
- It is a successor to the **2014 New York Declaration for Forests** that sought to reduce emissions from deforestation by 15%-20% by 2020 and end it by 2030.
- The pledge includes \$19 bn of public and private funds to invest in protecting and restoring forests.
- The pledge aims to ensure that natural forests aren't cleared out for commercial plantations. It

also aims to halt industrial logging. The declaration also seeks to strengthen the rights of indigenous tribes and communities to forestland.

- The Glasgow Declaration has been signed by 133 countries, which represent 90% of the globe's forested land.

- Deforestation has increased over the years and is responsible for about 20% of the total carbon emissions.

India's stance:

- Notably India has stayed away from both the methane pledge and the forest conservation declaration at Glasgow.

- India has independent plans to reduce methane emissions. It plans to adopt a national strategy to increase biogas production and reduce methane emissions.

- India has been unhappy with the wording of the Glasgow Leaders' Declaration that suggests not meeting the obligations under the pledge could also mean restrictions in international trade.

- India's line of argument has been that trade and climate action should not be related as trade falls under the ambit of the WTO
- India is also considering changes to its forest conservation laws that seek to encourage commercial tree plantation as well as infra dev in forestland to meet its development goals.
- These initiatives might seem contradictory to the proposed provisions of the forest declaration at Glasgow.

Does India have a right to burn fossil fuels?

Recent UN COP26 - India has, for the first time, committed to achieving the net-zero emission target by 2070.

The Pledges - Ambitious vs Ambiguous

1. Increase non-fossil energy capacity to 500 GWs by 2030.
2. Meet 50 percent of energy requirements from renewables by 2030.
3. Reduce the total projected carbon emissions by 1 BTs by 2030.
4. Reduce the carbon intensity of the economy by less than 45 percent.
5. Achieve net zero carbon by 2070.

But more clarity on these points before any declaring that these are a breakthrough.

Historic burden and Right to Burn

- **Global north vs south arguments** in terms of owning the responsibility for reducing the emission now, often face an impasse due to different viewpoints.
- Historically developed nations have contributed more towards global warming, this should not mean that we shy away from the fact that it is a common goal.

Focus on Alternatives

- The arguments for coal as affordable, reliable and domestically available nature are questionable.
- As we are geographically blessed with a huge amount of renewable resources from solar to hydro and wind energies, tapping them with tech development will reduce the burden.

- Blind faith in the models adopted by the west centuries ago like coal needs to be changed.
- The south-south cooperation and evolving our own growth parameters will help in achieving the overall development .

Conclusion

- Blaming some for historic injustices and shunning the responsibilities is not going to lead us to a better future.
- We also need to realise the damage we will inflict on the poor, the flora and fauna etc if we repeat our mistakes.