

Context Setting

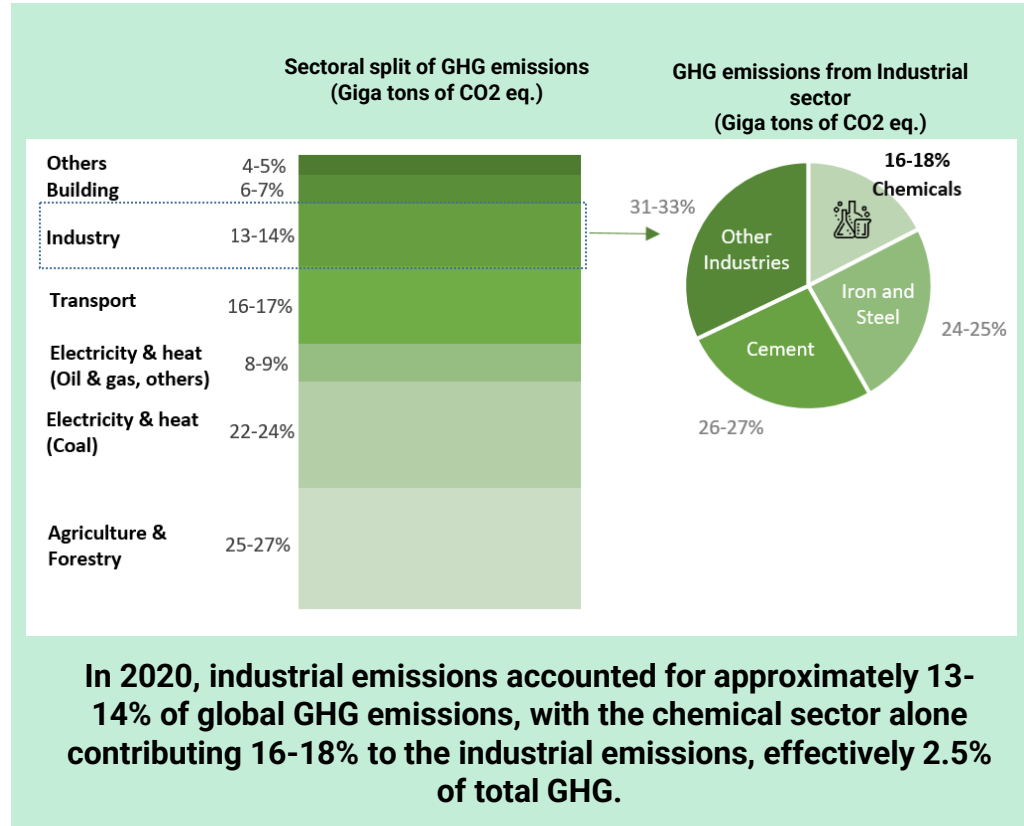
Roadmap to Net Carbon Zero



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The world is missing the mark on the goals

- **Top 7 emitters** (China, USA, EU27, India, Indonesia, Brazil, Russian Federation) **plus international transport** accounted for **55%** of global GHG emissions in 2020
- **G20** members responsible for **75%** of global GHG emissions
- **Global per capita** GHG emissions: 6.3 tCO₂e in 2020
- **India's per capita emissions:** 2.4 tCO₂e (well below world average)
- UNEP reports the international community falling far short of Paris goals, with no credible pathway to 1.5°C in place. Target now is 2°C above pre-industrial levels
- Impact: **extreme weather events** (heat waves, droughts, floods, water stress, etc.) brunt borne by the poorer countries who have contributed least GHG.

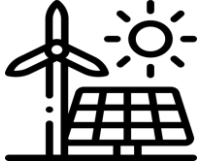


Net Zero transition in Chemicals: Collaborating for a Greener Tomorrow

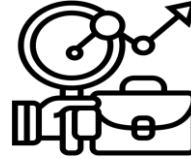
- **India has potential to lead in Net Zero transition in chemicals**, especially Green Hydrogen, Green Ammonia, Green Methanol & Bio-Fuels (SAF) etc.
- Transition depends on **Technology, Finance and Government policy initiatives**
- **Commitment from all stakeholders** is crucial to ensuring the success and sustainability of the transformation
- **Collaboration** between entrepreneurs, government, and financial sector needed for accelerated transformation
- Moving towards Net Zero and improving ease of doing business can **overcome traditional barriers to success** viz. access to feedstock, competitive power and logistics costs



Net Zero transition in Chemicals: Opportunities



India is blessed with abundant sunshine and wind, source of immense energy for Green Power and Green Chemicals (Hydrogen).



Attract **new Manufacturing industries** such as batteries, renewable polymers, etc.



Potential to **transform energy intensive Chemical industry**



Attractive opportunity for global companies to forge **partnerships** with domestic partners **for friend-shoring**



Create Jobs: High skill technology development - as well as medium skilled manufacturing and servicing jobs – leveraging the demographic dividend



Strengthens India's role in the global climate change fight.

India: The Launchpad for Net-Zero Transition

Path to Net Carbon Zero: Embracing a Sustainable Future

Actions for industry

- Measure & monitor emissions
- Decarbonize core operations & energy
- Address scope 3 emissions in supply chain
- Invest in Green Growth & Climate Tech.
- Create a Green Finance plan
- Adopt transparent reporting
- Foster green innovation & partnerships
- Drive visibility & advocacy for decarbonization & green growth

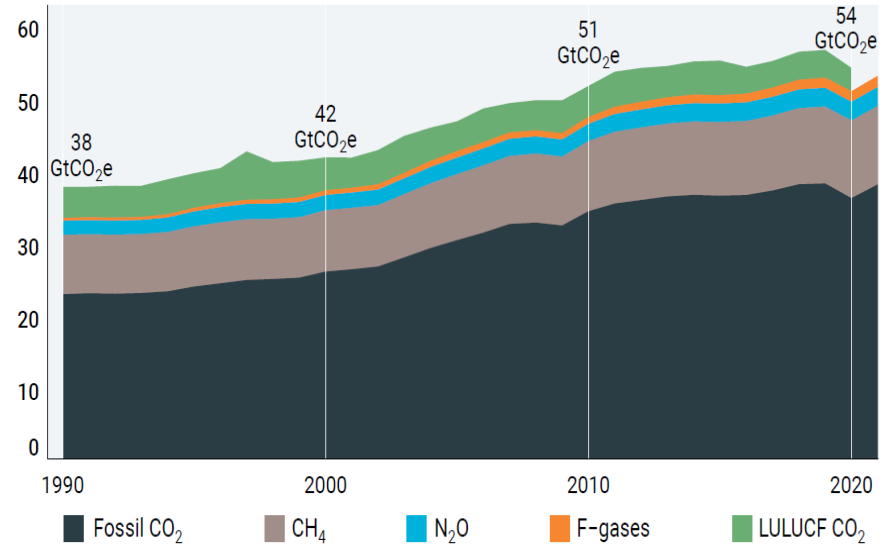
Government Support

- Financial incentives for use of clean / green technologies
- Policies encouraging renewable energy and energy-efficient practices
- Research and development funds for green technologies and support for startups eg like Birac for biotechnology
- Develop a master plan for agri waste / biofuels as energy source in chemicals
- Encourage the judicious, productive use of byproducts / so-called “Hazardous Chemicals” to promote circular economy

Thank you!

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- **Global average per capita** GHG emissions: 6.3 tCO₂e in 2020
- **India's per capita emissions**: 2.4 tCO₂e (well below world average)
- UNEP reports the international community is falling far short of Paris goals, with no credible pathway to 1.5°C in place. Target is 2°C above pre-industrial levels (preferably 1.5°C)
- Impact: **extreme weather events (heat waves, droughts, floods, water stress, etc.)** brunt of which is borne by the poorer countries who have contributed least to the problem.



Global GHG emissions averaged 54.4 GtCO₂e from 2010 to 2019, hitting a high point in 2019