Decarbonising Key Sectors in India

Source: IE

A recent study by **Centre for Social and Economic Progress (CSEP) and IMF** estimates India needs **USD 467 billion by 2030 to decarbonize its power, steel, cement, and road transport sectors,** which contribute over 50% of **CO_2 emissions.**

Decarbonising Key Sectors

Sector	Additional Funding and Key Decarbonization Measures
Steel	USD 251 billion, **Carbon Capture & Storage (CCS)**, shift to green hydrogen, energy efficiency
Cement	USD 141 billion, CCS, alternative fuels, clinker substitution.
Power (Electricity)	USD 47 billion, **Renewable expansion (solar, wind), grid modernization.**
Road Transport	USD 18 billion, Electric vehicles, biofuels, charging infrastructure.

Decarbonisation & India's Target

- **Decarbonisation:** Systematic reduction of CO_2 emissions to mitigate global warming and achieve net-zero emissions.
  - Decarbonising steel, cement, and power sectors alone could mitigate about 6.9 billion tonnes of CO_2 by 2030.
- **India's Decarbonization Targets**: At **COP26** in **Glasgow** (2021), India presented its **Panchamrit** climate action plan, which includes five key targets:
  - Achieving **500 GW** of non-fossil fuel energy capacity by 2030.
  - Meeting **50%** of energy needs from **renewables** by 2030.
  - Reducing **CO_2 emissions** by **1 billion tons** by 2030.
  - Cutting **carbon intensity** by **45%** by 2030.
  - Targeting **Net-Zero emissions** by 2070.
- **Progress**:
  - Achieved its **non-fossil fuel capacity target** in **2024-five years ahead of schedule (2030)**, with **242.78 GW (around 50%)** of its 484.82 GW total installed capacity from non-fossil sources.
  - India pledged to create **2.5–3 billion tonnes** of carbon sinks by 2030. By 2021, it had already achieved **2.29 billion tonnes**.
  - India aimed for a **45% reduction** in emissions intensity by 2030, and had already achieved **36%** by 2020.

Read More: Decarbonising India's Logistics Sector