

Decarbonising Key Sectors in India

Source: IE

A recent study by Centre for Social and Economic Progress (CSEP) and <u>IMF</u> estimates India needs **USD 467 billion by 2030 to decarbonize its power, steel, cement, and road transport sectors,** which contribute over 50% of **CO2 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 CO₂ 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 CO₂ 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 CO₂ 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

