



In news

- **FGD (Flue Gas Desulphurisation)** is a **pollution control technology** used to remove **sulphur dioxide (SO₂)** emissions from exhaust gases of **coal-based thermal power plants**.
- Helps **reduce air pollution** and **acid rain** caused by SO₂.

POLICY BACKGROUND:

- **Introduced in India** via **MoEFCC's 2015 notification**.
- Mandated all thermal power plants to install FGD systems by **2018**.
- Deadline **delayed** to **2027-2029 in phases** due to implementation challenges.

Key Recommendations (Based on 2024 Study):

- **FGD installation** should be **mandatory only** for:
 - Power plants using **imported coal** or
 - **High-sulphur domestic coal** (>0.5% sulfur content).
- Not required for **low-sulphur coal plants**, which comprise the majority.

Key Findings:

- **92% of Indian coal** has **low sulphur content (0.3-0.5%)**.
- **Indian stack heights** and **climatic conditions** aid in natural dispersion of SO₂.
- **Full-scale FGD implementation** would:



- Use significant **freshwater resources**.
 - Add **69 million tonnes of CO₂** emissions by 2030.
 - Provide only **marginal reduction** in SO₂ levels.
 - **Acid rain** is **not a major concern** in India, as per **IIT Delhi's 2024 study**.
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Mains Utility:

- Use this data to **critically evaluate environmental policies**.
- Supports arguments for **context-specific environmental regulation** and **cost-benefit analysis** in policymaking.