



# Clean AI

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## Context

- The **International Monetary Fund's report** that pointed to the likelihood of the **economic gains of Artificial Intelligence (AI) applications outweighing the environmental costs of the increased energy demand that AI data centres will require** is reassuring.
- It underscores that this transformational technology is **not fundamentally at odds with the global imperative to pursue sustainable growth strategies** across the board.
- **Countries that are better prepared with renewable energy generation are bound to see a lower social and environmental cost to pursuing their AI ambitions.**
- India's AI infrastructure — at least the part of it that the government is indirectly funding through the **IndiaAI Mission** — **does not rise to the level of weighing at a macro level on the nation's energy mix.**
- Still, the need for pursuing renewables specifically for AI is necessary to follow.
- This is already in a sense the government's approach to the issue, outlined at the AI Action Summit in Paris earlier this year.
- While AI is not the sole industry where a push for renewable energy and sustainable practices is important, the sector nevertheless offers itself up for two main reasons.
  1. The first is the **sheer volume of electricity that it is set to consume.**
    - **AI expansion alone could increase electricity prices by up to 9 percent**, adding to price pressures coming from many other sources.
  2. The second is that **data centres lend themselves uniquely to captive renewable infrastructure.**
    - Some Indian firms have already made moves to purchase renewable energy, and the hundreds of acres that data centres occupy are ripe for complementing equipment **with solar cells.**
    - Nuclear energy may also turn out to be a welcome contribution: **small modular reactors** at emerging data centre clusters, in conjunction with other renewable sources, would avert a sizeable quantity of emissions.
    - **Electricity use is not the only** environmental footprint that the AI age will leave behind — the technology requires **large-scale mining of minerals and water use, and produces effluents in the manufacturing of the electronics supply chain.**