

Slowing the pace of building solar capacity

What is the issue?

\n\n

\n

- Solar power tariffs dropped to Rs 3.15 per unit in recent power auctions.

\n

- In this level, solar energy seems roughly competitive with thermal power.

\n

\n\n

What is the present scenario?

\n\n

\n

- Lower solar power costs are now a global phenomenon. e.g California derives about 40% of its grid power from solar energy.

\n

- This has led to **wholesale electricity rates dropping to zero at noon**, when solar power generation actually exceeds grid demand.

\n

- India's current solar power capacity is about 12 Gigawatt (GW) and if the Jawaharlal Nehru National Solar Mission targets are fulfilled, it will hit 100 GW by 2022.

\n

- As solar power capacity increases and it becomes cheaper to boot and it could replace thermal power, which uses coal and gas.

\n

\n\n

What are the problems?

\n\n

\n

- Though solar energy much cleaner and does not involve dependence on imported fossil fuel building huge solar capacities at rapid speed also has its consequences.

\n

- **Subsidies** - The industry still receives large subsidies thus make this form of energy deceptively cheap.
\n
- Without the subsidies and generous tax holidays, solar power is still substantially more expensive than thermal power.
\n
- **Storage** - Solar power is **discontinuous**, therefore expensive and hard to store.
\n
- Hence, when solar power is available, it receives preference on grids, forcing thermal power plants to reduce production at such times.
\n
- This affects the plant load factor and hence, profitability, of thermal power plants.
\n
- Without alternate arrangements fast growth in the highly subsidised solar power industry could lead to economic distortions.
\n
- **Import dependence** - Solar energy equipment **needs rare earth metals** and China is pretty much the only source of these at the moment.
\n
- Hence in strategic terms, solar power could also lead to a critical **import dependency on China**.
\n
- **Research** - With growing research, it is very likely that current state-of-the-art solar energy technology will be outmoded in a few years.
\n
- A phased adoption will ensure that India's solar energy industry is not locked into obsolete technology.
\n
- It will also provide the thermal power industry a chance to review future investments, and grid managers breathing space to develop smarter grids that manage the energy mix better.
\n

\n\n

\n\n

Source: Business Standard

\n



SHANKAR
IAS PARLIAMENT
Information is Empowering