

## New Solar Project in Rajasthan | Rajasthan | 31 Jan 2025

Why in News?

Jakson Green (India) and Blueleaf Energy (Singapore) have partnered to develop 1 GW of solar projects in Rajasthan, with an investment of USD 400 million (Rs 3,400 crore).

## **Key Points**

- Project Scope & Timeline:
  - The 1 GW portfolio consists of three solar projects funded through debt and equity.
  - Projects include <u>Intra State (InSTS) and Inter State (ISTS) Transmission System</u> projects.
  - 25-year Power Purchase Agreements (PPAs) secured through bidding from Rajasthan Rajya Vidyut Utpadan Nigam Ltd (RUVNL), Solar Energy Corporation of India Limited (SECI), and National Hydroelectric Power Corporation (NHPC) Limited.
  - The three solar projects are expected to be progressively commissioned in 2025-2026.
- Renewable Energy Expansion Goals:
  - The partnership targets adding more than 5 GW of renewable energy to the Indian grid by 2030.
  - The Rajasthan projects will generate 1,800 GWh (Gigawatt hours) of green energy annually, enough to power 1.5 million households.
- Environmental Impact:
  - The project will prevent 22 million tons of CO2 emissions over 25 years.
  - Equivalent to removing **5 million cars** from roads.
- Job Creation & Economic Benefits:
  - The initiative will create jobs during the **construction and operational phases**.
- Financial & Banking Support:
  - Ernst & Young (EY) was engaged as the investment banker for the transaction.
  - Jakson Green secured credit facilities:
    - Rs 2.96 billion from First Abu Dhabi Bank (Mumbai).
    - Rs 600 million from HSBC (Hong Kong and Shanghai Banking Corporation).
  - Funds will support domestic & international <u>EPC (Engineering, Procurement, and Construction)</u> operations.

## **Power Purchase Agreements (PPAs)**

- These are <u>long-term agreements</u> (typically 25 years) between electricity generators and buyers (usually public utilities).
- It involves committing generators to supply power at fixed rates, locking in significant generating capacity.
- They are inflexible and unable to adapt to dynamic market conditions.

## Engineering, Procurement, and Construction (EPC) Model

- Under this model, the cost is completely borne by the government.
- Government invites bids for engineering knowledge from the private players.
- Procurement of raw material and construction costs are met by the government.

- The **private sector's participation is minimal** and is limited to the provision of engineering expertise.
- A challenge of the model is the **significant financial burden** it places on the government.

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