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 **Intra State (InSTS) and Inter State (ISTS) Transmission System** 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 CO_2 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 EPC (Engineering, Procurement, and Construction)** operations.

Power Purchase Agreements (PPAs)

- These are **long-term agreements** (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.