



One Sun One World One Grid

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Why in News

Recently, the Government of India has called for bids to roll-out the **'One Sun One World One Grid'** (OSOWOG) plan.

The plan focuses on a framework for **facilitating global cooperation**, building a **global ecosystem of interconnected renewable energy resources** (mainly **solar energy**) that can be seamlessly shared.

Key Points

- The **vision** behind the OSOWOG is **'The Sun Never Sets'** and is a constant at some geographical location, globally, at any given point of time.
- This is by far **one of the most ambitious schemes undertaken by any country** and is of global significance in terms of sharing economic benefits.
- It has been taken up under the **technical assistance program of the World Bank**.
- OSOWOG plan may also **leverage the International Solar Alliance** (ISA), co-founded by India that has 67 countries as members.
- With **India in the middle**, the solar spectrum can easily be divided into **two broad zones**, which are:
 - **Far East** including countries like Myanmar, Vietnam, Thailand, Lao, Cambodia etc.
 - **Far West** covering the Middle East and the Africa Region.

- **Three Phases of the Plan:**
 - **First Phase:** It deals with the **Middle East, South Asia and South-East Asia** (MESASEA) interconnection.
 - Fostering cross-border energy trade is an important part of India's **Neighbourhood-first policy**.
 - India has been supplying power to Bangladesh and Nepal and has been championing a **South Asian Association for Regional Cooperation** (SAARC) electricity grid minus Pakistan to meet electricity demand in the region.
 - The initial plans also involve setting up an **under-sea link** to connect with **Oman** in the West.
 - **Second Phase:** It deals with the MESASEA grid getting **interconnected with the African power pools**.
 - **Third Phase:** It is about **global interconnection**.
- **Significance:**
 - The proposed integration would lead to **reduced project costs, higher efficiencies and increased asset utilization** for all the participating entities.
 - This plan will **require only incremental investment** because it will not require a parallel grid infrastructure due to working with existing grids.
 - It will help all the participating entities in **attracting investments** in renewable energy sources as well as utilizing skills, technology and finances.
 - Resulting economic benefits would **positively impact** poverty alleviation and support in mitigating water, sanitation, food and other socio-economic challenges.
 - It will allow **national renewable energy management centres in India to grow** as regional and global management centres.
 - This move, during the time of the **Covid-19 pandemic**, gives **India** the opportunity to be seen as **taking a lead in evolving global strategies**.

- **Backdrops:**

- India is already expediting ISA's plan to set up the **World Solar Bank** (WSB) with a capital of USD 10 billion.
WSB aims to compete with other newly created funding institutions like the **Asian Infrastructure Investment Bank** (AIIB) and the **New Development Bank** (NDB).
- The **USA's withdrawal** from the **Paris climate deal**.
OSOWOG will help to **mitigate its ill effects on climate** by providing clean and renewable energy sources, enabling member countries to fulfill their **Nationally Determined Contributions** (NDCs) towards reducing global warming.
- China's attempts to co-opt countries into its **One Belt One Road** (OBOR) initiative, a programme to invest billions of dollars in infrastructure projects, including railways, ports and power grids, across Asia, Africa and Europe.
OSOWOG will provide a **strategic rebalance in favour of India** and will **control the increasing Chinese dominance** in Asian subcontinent, providing a **better alternative** to developing countries.

Way Forward

- The move is the **key to future renewable-based energy systems globally** because regional and international interconnected green grids can enable sharing and balancing of renewable energy across international borders.
- It allows **grabbing opportunities to learn quickly from global developments** and share renewable energy resources to **reduce the global carbon footprint and insulate the societies from pandemics**.

Source: Livemint