

# One Sun, One World, One Grid (OSOWOG)

#### Why in News

India and the UK are likely to announce a joint declaration on "one sun, one world, one grid" — or OSOWOG at the upcoming Conference of Parties (COP26).

- The **UN Climate Change Conference**, **or COP26**, is scheduled to be held between 31<sup>st</sup> October and 12<sup>th</sup> November in Scotland.
- The concept of OSOWOG is what the British have called a green grid.
- The idea behind the concept is a trans-national electricity grid supplying solar power across the globe.

## **Key Points**

- OSOWOG or the Green Grid:
  - 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 (India) 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.
  - The OSOWOG plan may also leverage the <u>International Solar Alliance (ISA)</u>, co-founded by India that has 80 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 will entail interconnectivity within the Asian continent.
  - Second Phase: It will add Africa.
  - Third Phase: It is about global interconnection.
- Significance of the Project:
  - Help all the participating entities in attracting investments in renewable energy sources as well as utilizing skills, technology and finances.
  - Lead to reduced project costs, higher efficiencies and increased asset utilization for all the participating entities.
  - **Resulting economic benefits would positively impact poverty alleviation** and support in mitigating water, sanitation, food and other socio-economic challenges.
  - Allow national renewable energy management centres in India to grow as regional and global management centres.
    - This move, during the time of the <u>Covid-19 pandemic</u>, gives India the opportunity to be seen as taking a lead in evolving global strategies.
- Issues with the Project:

#### Geopolitics:

- The project is seen as an Indian endeavour for world leadership but under Covid-19
  uncertainties, the geopolitical implications of projects like OSOWOG are hard to
  decipher.
- The **mechanism of cost-sharing will be challenging,** given the varied priorities of participating countries depending on their socio-economic orders.
- Globalisation vs De-Globalisation:
  - The OSOWOG will turn out to be an expensive, complex and very slow progress project.
  - The strategic benefits, if any, of having a single grid will be obliterated in the wake of any geopolitical problem.
  - In India, the major issue of renewable energy developers is to deal with different state governments and hence, different laws and regulations.
  - Further, the project also contradicts the **Prime Minister's** <u>Aatmanirbhar Bharat</u> <u>(self-dependent India) vision</u>, as it extends the reliance for a major strategic entity, energy supply, to other countries through this grid.
- Centralised vs Distributed Generation:
  - There is a difference in voltage, frequency and specifications of the grid in most regions.
  - Maintaining grid stability with just renewable generation would be technically difficult.

### **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.
- Institution building is key to fulfilling the ambitions of a multi-country grid project. In this context, ISA (International Solar Alliance) can act as an independent supranational institution to take decisions about how the grid should be run and conflicts settled.

Source: IE

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