# One Sun, One World, One Grid

The One Sun One World One Grid (OSOWOG) is a transnational electricity grid supplying power all over the world. The idea was first proposed by Prime Minister Narendra Modi's during the first assembly of the International Solar Alliance (ISA) in 2018.

As per the draft made by the Ministry of New and Renewable Energy (MNRE) the scale of the OSOWOG is ambitious, aiming to provide energy to about 140 countries through a common grid that will transfer solar power.

This article will give further information about the One Sun One World One Grid initiative within the context of the IAS Exam.

## What is the need for the OSOWOG?

Apart from addressing environmental concerns, India also seeks to have a geopolitical edge over China. Experts are of the opinion that OSOWOG is the answer to China’s One Belt One Road initiative.

These same experts are also of the opinion that announcing infrastructure projects in other countries is a way of asserting superiority.

Other potential benefits also means improving the quality of life potential benefits include widespread scale up in energy access, abatement in carbon emissions, lower costs of living and improved livelihoods.

Annually India imports about $250 billion worth of fuels. This includes oil, diesel, LNG, fossil fuels, coal etc.

If OSOWOG can be implemented, then India has alternative means to meet its energy requirements through sustainable energy that may reduce imported inflation pressures.

### Challenges of One Sun, One World, One Grid

Although the idea is brilliant where sustainable development is concerned, the OSOWOG faces some serious challenges in its implementation:

- Due to the development of advanced electricity storage technologies, it becomes less viable to follow the sun at any latitude or be dependent on its rays all the time.

- Large grids won't be necessary as installing a microgrid is enough. Microgrids are individual solar panels that one can even set up at the rooftop of their house.

- The bigger the electricity grid the more vulnerable it is to accidents, natural disasters, cyber attacks etc that can disrupt electricity supply.

- Most of the equipment for solar equipment like cells, panels etc comes from China. This can be a hurdle as China will be least inclined in supporting a rival project like the One Sun One World One Grid

- There can be trust issues between the grid participants on account of sovereignty and local implications.

- Interconnection may open ways for other countries to muscle in on other economies and even likely bring them to a grinding halt.

## How can the OSOWOG be implemented?

Despite the grand scale of the One Sun, One World, One Grid and a host of other challenges it faces, there are ways it can be implemented to a certain extent

**Creation of a Supranational Rule-Based Organisation:** A supranational organisation can implement the OSOWOG. In this case the ISA can be that organization.

**Engaging with China constructively:** Given India's dependence on Chinese imports, OSOWOG will have to find ways to deal with China while at the same time give credence to local industry under the Make in India program.

In the end it is a novel idea to establish a global solar grid, considering the implications of climate change.

Since it might not be possible to rope in 140 countries, India can start small by creating a grid consisting of SAARC nations.