

Asia Clean Energy Forum 2025





One Sun One World One Grid (OSOWOG) – "The Sun Never Sets"

Hon'ble Prime Minister Narendra Modi announced the OSOWOG Initiative - creation of a connected global grid to contribute solar power from surplus regions to solar deficit regions will lead to balanced energy production and consumption on a global scale



Hon'ble Prime Minister of India, Shri Narendra Modi, Announced One Sun One World One Grid, First assembly of International Solar Alliance (October 2018)



ISA First World Solar Technology Summit, MoU- signed among the ISA, the Government of India and the World Bank. *(ISA to act as Nodal Agency)*

(Sept, 2020)





COP-24 Theme of India Pavilion One World One Sun One Grid *(Dec, 2018)*



The first plenary on OSOWOG Side-lines of the Third Assembly of ISA-Member countries (October 2020)





Consortium Awarded the work -Developing a long-term vision, implementation plan, road map, institutional framework for Implementing OSOWOG (January, 2021)



India has committed to double its already expanding RE capacity by 2030

Higher share of RE provides impetus for regional cooperation to drive regional synergies for energy mix

Installed Capacity (GW) and Annual Generation (BU)



- Share of RE to reach ${\sim}60\%$ of installed capacity by FY30
- India can cater to Regional RE Demand
- Energy Storage Solutions such as BESS / Hydro incl PPSP to play a critical role

wcased separately for the purpose of illustration of capacity

India's Climate goals



Reduce emissions intensity of its GDP by 45% by 2030 (base year 2005)



50% of installed electricity generation capacity from non-fossil fuel by 2030



500 GW non-fossil fuel installed capacity (2030)



Create an additional carbon sink of **2.5-3 bn tonnes** of CO₂ equivalent by 2030



Net Zero by 2070



Prospects for Enhancing Regional Energy Security in South Asia through Hydropower

Hydro Potential in South Asia offers opportunity for grid balancing for Rapid Renewable energy Expansion underway in India



- Nepal and Bhutan expected to be major export players in South Asia
- India, Bangladesh and Sri Lanka can benefit from regional hydropower trade to meet clean energy commitments





Existing and Planned Cross Border Trade in South Asia

Source

In FY24, India traded about 18 GWh with Nepal, Bhutan, Bangladesh and Myanmar with plans to increase





Way Forward for Regional Energy Cooperation

In South Asia Context, initiatives such as OSOWOG, cross border trade planning will provide further impetus to Power System Integration in South Asia Region & Greening the Cross Border Electricity Trade



Building Regional, Sub-Regional, Continental and Global Consensus on Interconnections



Navigating Centralised ~

Decentralised Approach~

Combination



Deepening International Energy Cooperation and Navigating Geopolitical realities



Feasible & Credible Inter-Regional/Continental Pilots, Further Optimisation of cost of Transmission

Non Engineering Cost

(Right of Way,

Environmental, Land

Acquisition, Compensation)



Navigating Economies of Scale

~ Economies of Large

Numbers

Commercial Feasibility, Cost

and Benefit sharing



Policy, Regulatory and market harmonization, Mobilising Investment & Finance, World Solar Bank



New Technological & Threat Trade off -Energy Storage, Hydrogen & **Cyber Security**



Thank You!

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