DEVELOPING A LONG-TERM VISION, IMPLEMENTATION PLAN, ROAD MAP AND INSTITUTIONAL FRAMEWORK FOR IMPLEMENTING “ONE SUN ONE WORLD ONE GRID”

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SUMMARY

Introduction: Interconnection and Energy Transition

Brief description of the OSOWOG Study by EDF

Phase 1 on assumptions

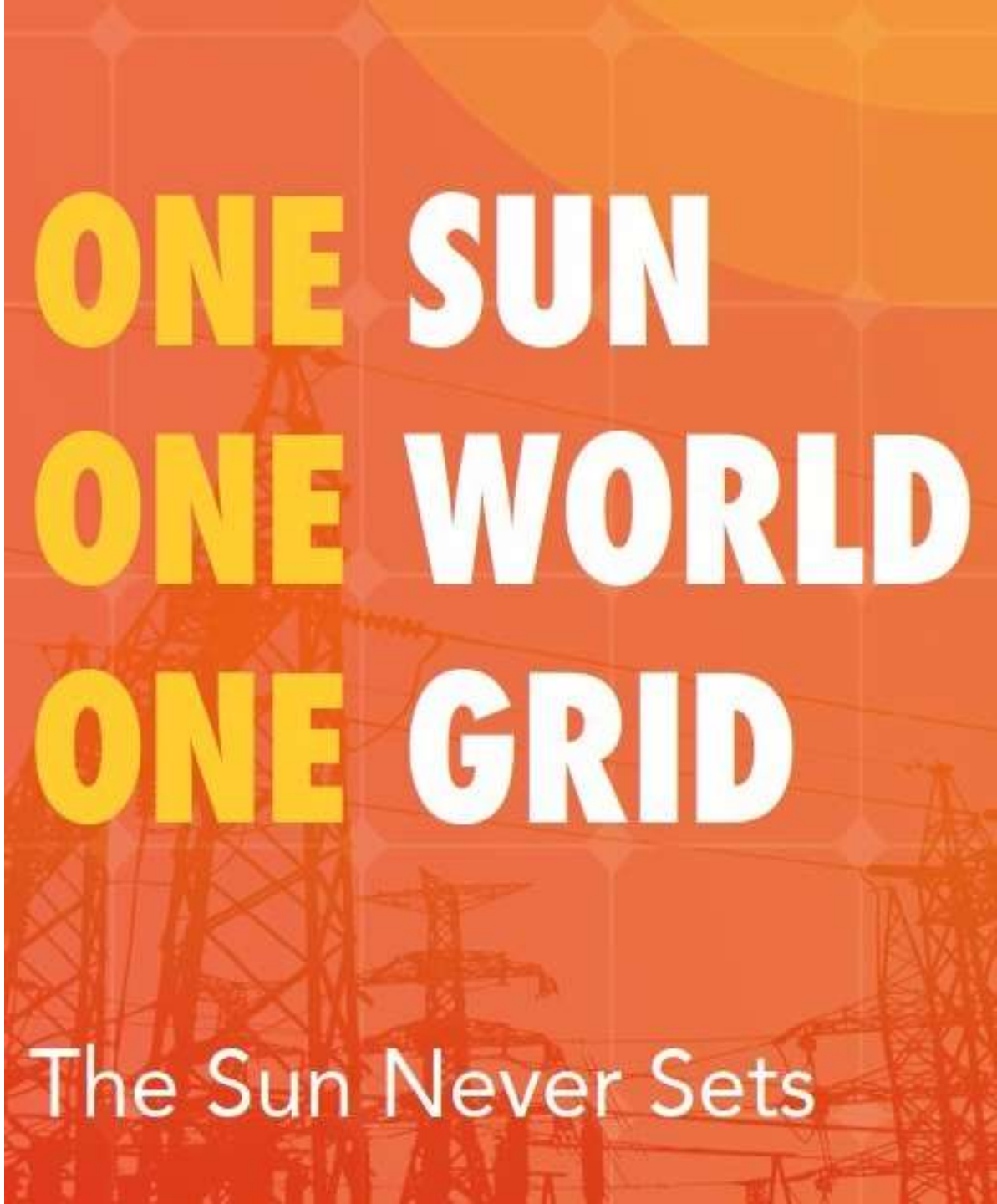
Phase 2 on simulations

Phase 3 on institutional framework

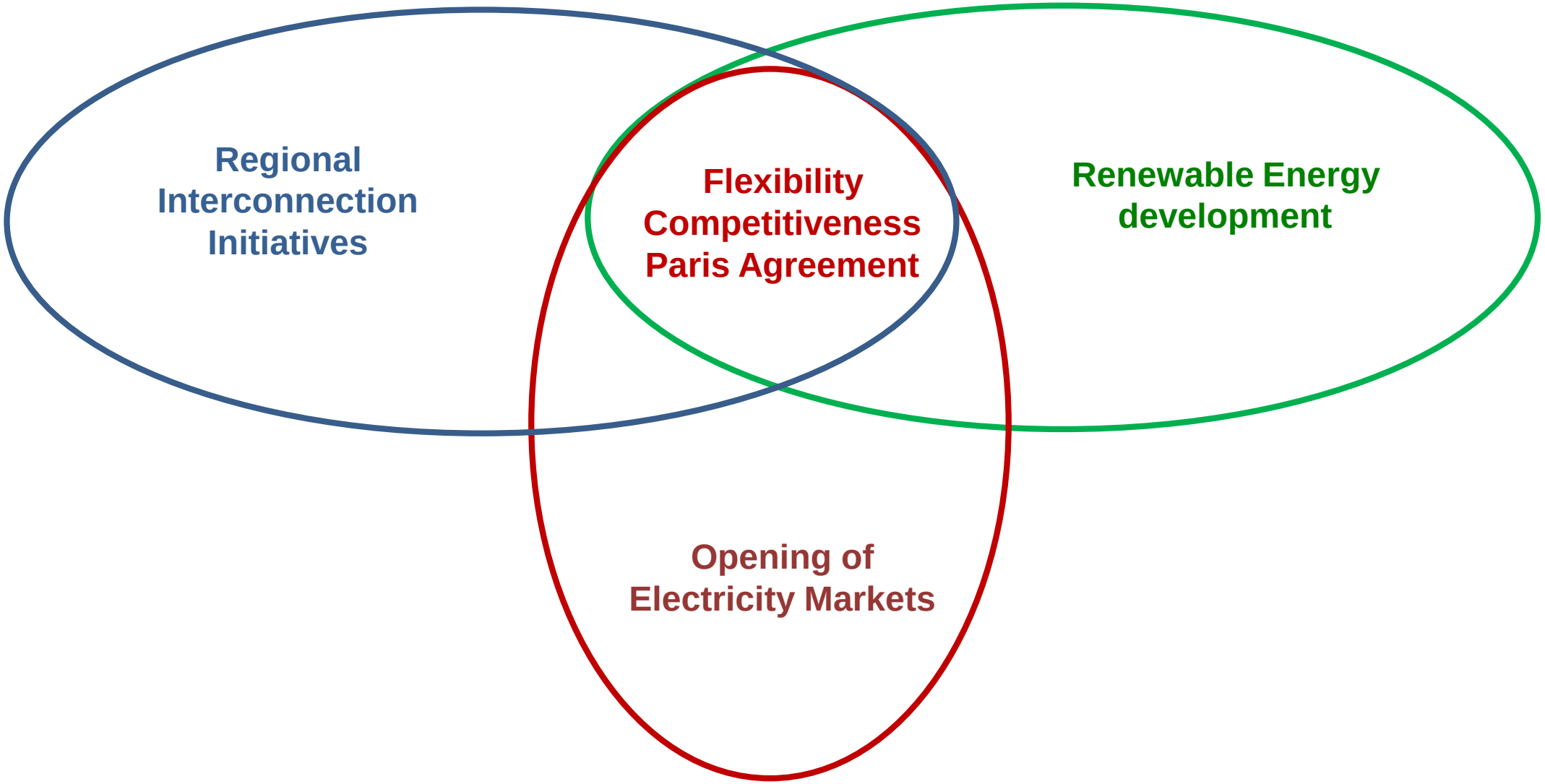
Conclusion

Special thanks to :

- **dedicated Task Force composed of PowerGrid, CEA, CTUIL, CERC, SECI and POSOCO for assumptions regarding India**
- **WB experts for Scenarios of interconnection of India with GCC**

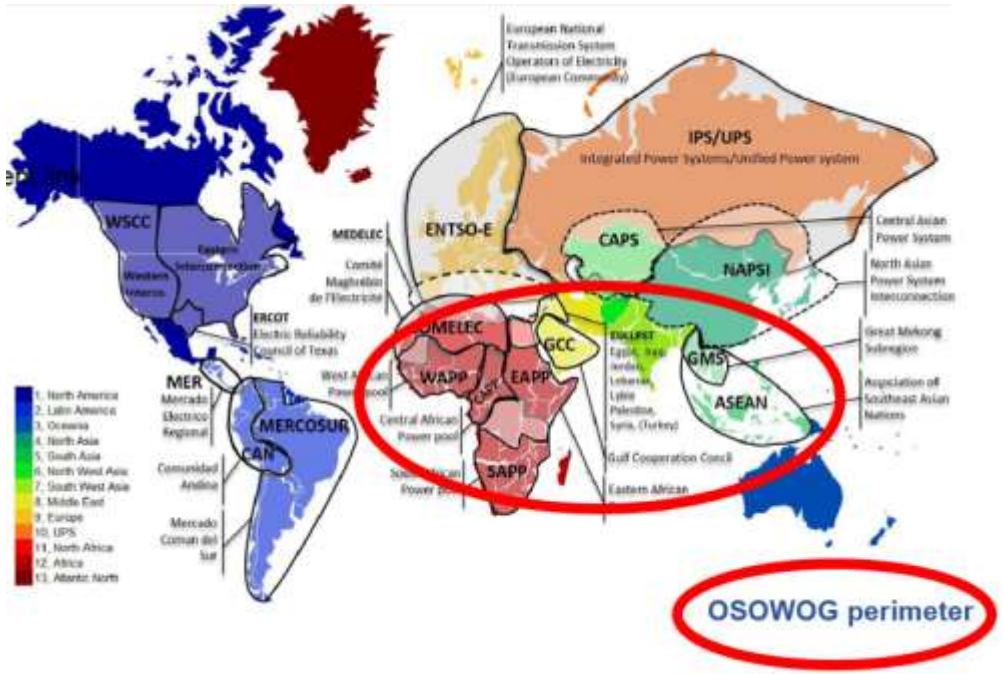


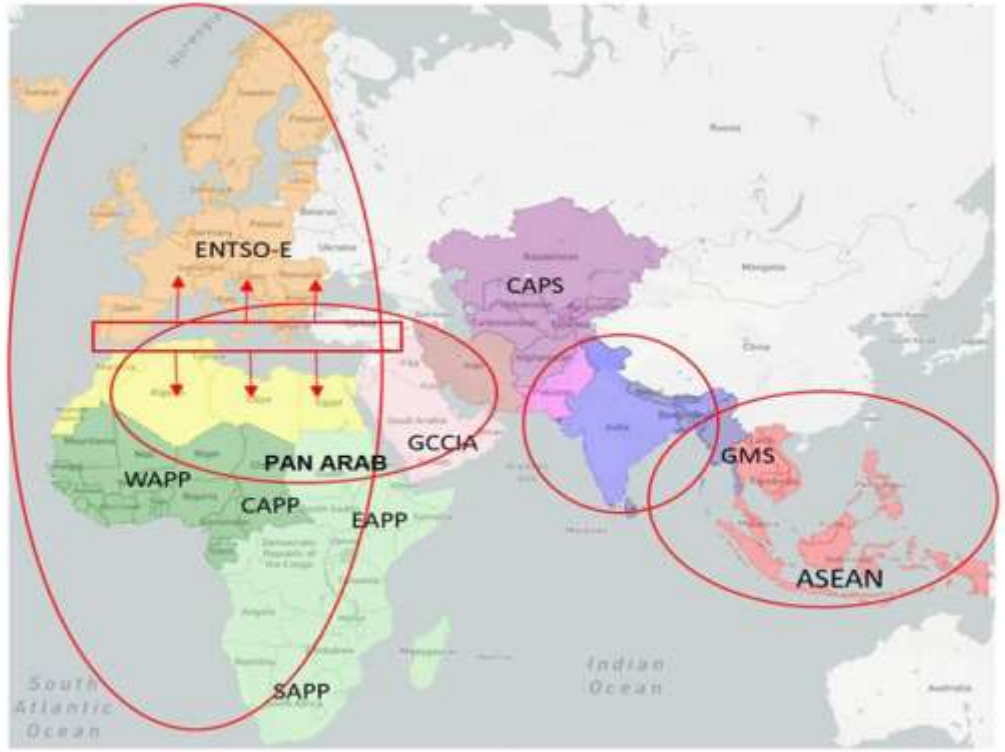
Decarbonization, Electrical Markets and Interconnections are related



The Perimeter of OSOWOG Road Map study 2020-2050

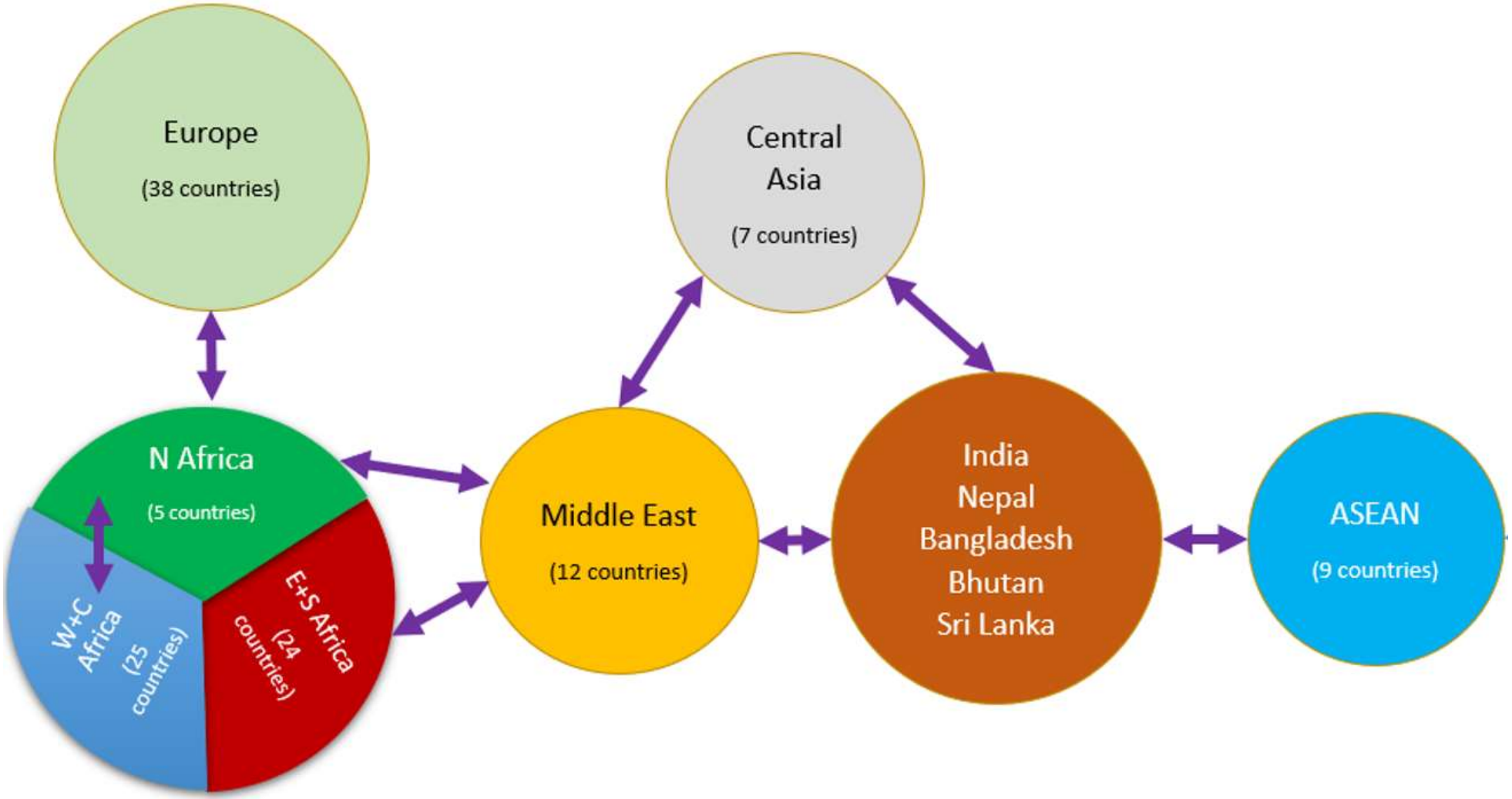
The perimeter encompasses >120 countries and is demarcated in four parts





Solar Time	-1 h	0	+1 h	+2 h	+3 h	+4 h	+5 h	+6 h	+7 h	+8 h

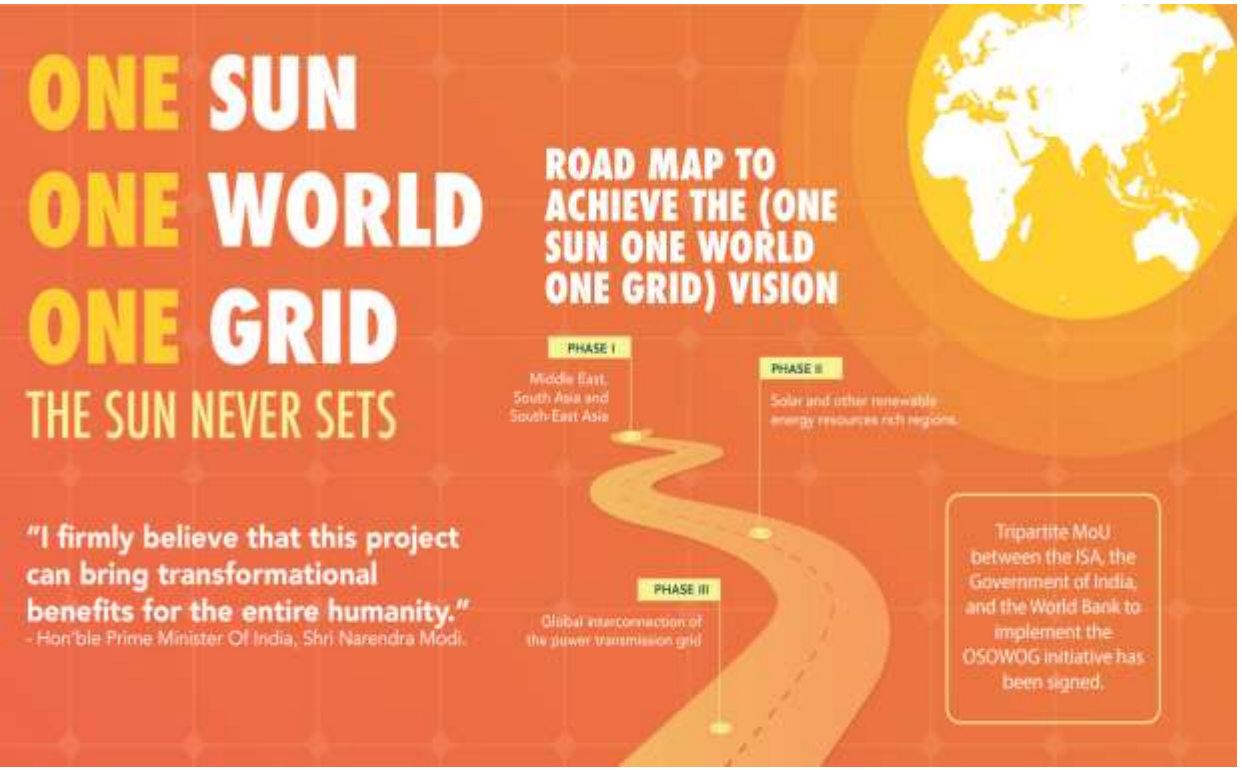
Corridors with Pilot Interconnections



GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY

INTERNATIONAL SOLAR ALLIANCE

WORLD BANK GROUP



ROAD MAP 2020-2050 and 2050 vision

Phase 1: Assumption Phase - Done
Supply Demand - Power Market - Input data

Phase 2: Simulations- Finalizing
Power mix evolutions
Pilot interconnections
Corridor Development till 2050

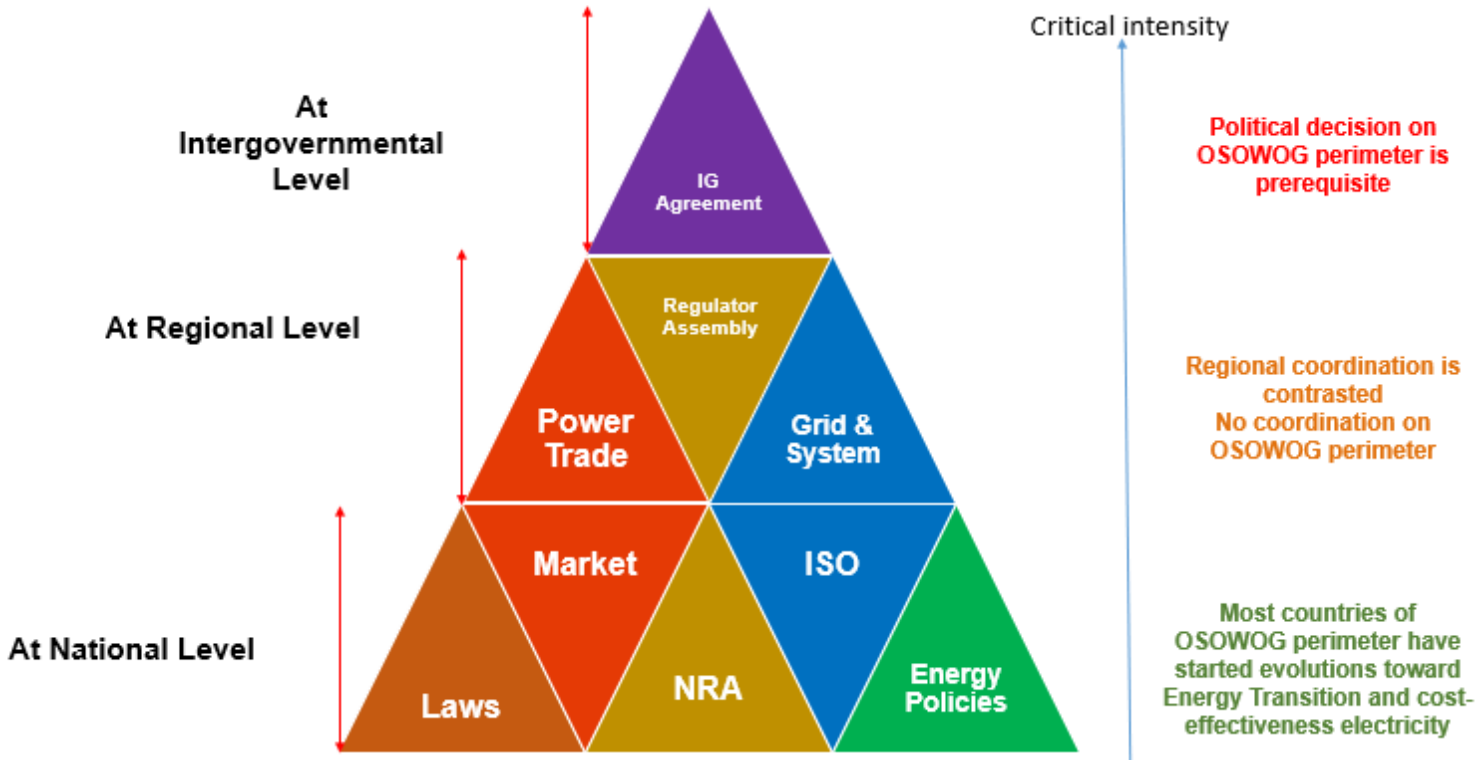
Phase 3: Institutional Framework for Full-scale Roll out
Regional Consultations
Regulatory and Power Trade Requirements

First results of Phase 2

Simulations confirm OSOWOG is a worthful initiative !

- Interconnections are essential to pursue an ambitious common decarbonization policy in the mix of the regions involved
- Interconnections are the flexibility tools that, when combined with storage and demand-response means, make it possible to pool renewable energies geographically between heterogeneous energy mixes.
- Each corridor appears economically justifiable to exchange renewable energy flows and achieve supply-demand balance at the lowest cost every hour. A development plan will be presented for each corridor up to 2050 as part of Phase 2

Phase 3 - Institutional Framework for implementing Global Vision



Consultations determining the most suitable proposition for improving both regulation and power trade frameworks would pave the way for development of a robust institutional framework.

Focus on "extensive" stakeholder consultation

- Consultations on Regulations, Energy Policies and Electricity Sector Organizations (Power trade, Grid and System Operation, Economically viable Mechanisms etc.,)
- Establishing institutional framework for operationalizing OSOWOG
- Evaluation of options for an appropriate institution
- Organization of the final National Workshop

The benefits brought by OSOWOG

- **Wholesale and retail Price reduction** with importation of cheaper energy
- **Flexibility** for facing intermittency
- **System Safety** (less risk of blackout) with more available energy
- **Economical CO2 Emission cuttings** (Paris Agreement)

For developing Renewable Energies at reasonable costs
and
For helping all people to access at clean and affordable electricity

Merci

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