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Regional Energy Connectivity in Asia and the Pacific



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Regional Energy Connectivity in Asia and the Pacific

- Improves energy security through resource diversity and mutual support
- Lowers system costs through least-cost dispatch and reserve sharing
- Integrates renewable energy across wider balancing areas
- Enhances resilience to climate and supply shocks
- Expands regional electricity markets and investments



Subregional Cooperation Platforms

ASEAN Power Grid (APG)
- Southeast Asia interconnection backbone

CAREC
- Central and West Asia power trade corridors

Greater Mekong Subregion (GMS)
- Sharing cross-border trading experience

SASEC
- Expanding South Asia energy trade



Pan-Asia Grid Initiative (PAGI)

Vision: Connect subregional grids into a broader regional network

- Scale-up renewable energy integration
- Improve reliability and energy security
- Unlock cross-border investment opportunities
- Build on APG, CAREC, GMS and SASEC foundations
- MDBs can support planning, financing and policy harmonization



Current Momentum and Opportunities

- Rapid growth in solar, wind and hydropower resources
- HVDC transmission and battery storage are becoming more competitive
- Rising demand from urbanization, electrification and data centers
- Regional markets can lower costs and improve reliability

Enablers:

- Coordinated planning
- Common technical standards
- Market reforms and digitalization
- Blended finance and risk mitigation

Final Remarks

Challenges

- Energy sovereignty and political economy considerations
- Regulatory and market fragmentation
- Financing large transmission investments
- Cybersecurity and grid stability requirements

Questions needing answers

- Which interconnections should be prioritized?
- How can risks be allocated between countries and investors?
- What policy reforms are most critical for regional power trade?

Connectivity is key to energy security, affordability and decarbonization in Asia and the Pacific.