











Elements to Shape the Roadmap on Energy Connectivity

Sustainable Energy Division

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ESCAP's Regional Road Map on Power System Connectivity



ESCAP's road map proposes nine detailed strategies for regional stakeholders to address and suggests key milestones, time frames and responsible entities for realizing each strategy.

Strategy 1: build trust and political consensus for cross-border electricity trade

Strategy 2: develop a regional cross-border electricity grid master plan

Strategy 3: develop and implement intergovernmental agreements on energy cooperation and interconnection

Strategy 4: coordinate, harmonize and institutionalize policy and regulatory frameworks

Strategy 5: move towards multilateral power trade and create competitive markets for cross-border electricity

Strategy 6: coordinate cross-border transmission planning and system operation

Strategy 7: mobilize investment in cross-border grid and generation infrastructure

Strategy 8: build capacities and share information, data, lessons learned and best practices

Strategy 9: ensure the coherence of energy connectivity initiatives and the Sustainable Development Goals

The text of the roadmap summary above is abbreviated, the full approved text is available at https://www.unescap.org/sites/default/d8files/event-documents/CE 2021 4.pdf

International Organization Stakeholder Mapping



Possible Synergies with Initiatives by International Development Organizations:

USAID:

- Regional Power Market (Power Central Asia)
- •Central Asia Energy Utility Partnership

GIZ:

•Strengthen frameworks for regional & national RE and EE integration.

EBRD:

- Financing of power plant and transmission infrastructure refurbishments & expansion.
- •Investments aimed at scaling renewable energy technology.
- •Investments aimed at expanding electricity trade in Tajikistan & Kyrgyzstan.

ADB:

- •Energy Interconnectivity & Regional Power Market
- •Increasing Cross-Border Energy Trading within the Central Asian Power System.
- •Fostering Expanded Regional Electricity and Gas Interconnection and Trade under CAREC 2030 strategy
- Financing for TAPI pipeline
- •Financing for grid expansion, modernization and, in the case of Tajikistan, reconnection to the Central Asian Power System (CAPS) in CA countries

AIIB:

- Financing new renewable energy power plants in the region.
- Financing hydropower facility refurbishments.

EU SECCA:

- Promote a Sustainable Energy Mix
- Provide for strengthened and more inclusive policy, regulatory and institutional frameworks for the transition to a sustainable energy system.

World Bank:

- Regional Electricity Market, Interconnectivity & Trade:
- Reinforcement and digitalization of regional interconnections
- •Strengthening enabling environment and institutional capacity
- Facilitate enhanced electricity trade and connectivity as part of the clean energy transition in Central Asia.
- Water-Energy Nexus

Central Asian Energy Connectivity Roadmap





UNECE aims to work with all regional stakeholders to develop a roadmap on energy connectivity for Central Asia, similar to the one ESCAP created for the entire Asian region.



Through stakeholder consultations, UNECE hopes regional stakeholders can highlight essential considerations that need to be addressed.



These regional perspectives are crucial for creating tailored approaches that fit macro and micro socioeconomic and environmental contexts.



Consequently, UNECE aspires that sustained stakeholder engagement at all levels will enable a roadmap to flourish from the roots up.



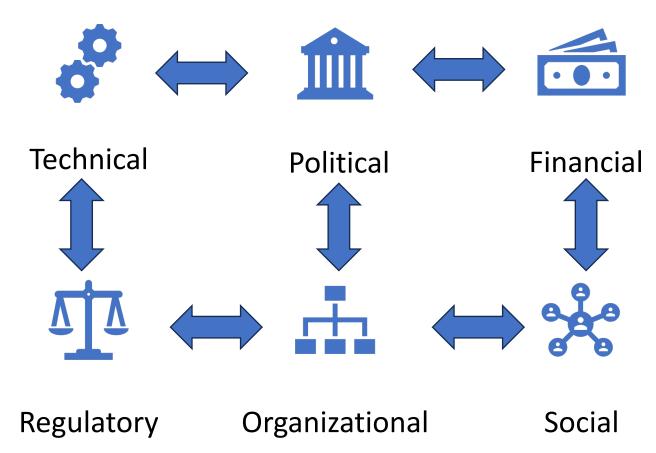
ESCAP's nine strategies can serve as a starting point, guiding stakeholder discussions throughout the process.

Aligning Stakeholder Considerations



Proactively aligning technical, political, financial, social, organizational and regulatory factors through sustained stakeholder engagement will enable Central Asian nations to create an enabling environment for regional energy integration, essential for reaping economic, environmental, and energy security benefits.

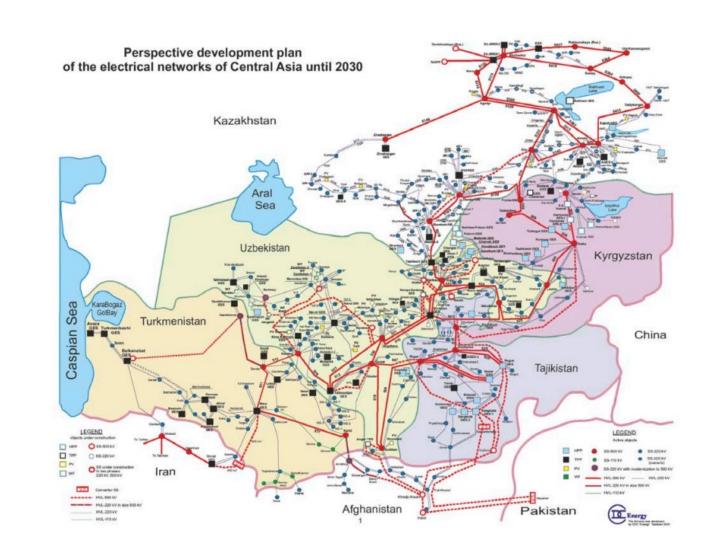
- •Political accord: fundamental enabler of successful connectivity initiatives
- •Organizational framework: To guide and monitor development
- •Enabling financing: secure participation of all available sources of capital
- •Technical Capacity: strengthen national and cross-border grid infrastructure to enable RE integration
- •Regulatory framework: to enable secure, flexible and efficient operations
- •Social acceptance : ensure public support, boost capacity, and maximize inclusion of relevant populations



Conclusion



- 1. Technical, Political, Financial & Insitutional alignment is crucial.
- 2. Siloed approaches to energy connectivity will face barriers and lead to higher socioeconomic and environmental costs.
- 3. Stakeholder participation is essential to roadmap development.
 - Need to account for regional considerations/factors/needs.



Thank You!

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