



THE
LAW SOCIETY
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香港律師會

7th Belt and Road Conference

**Legal Professionals Joining Efforts
in Advancing **EIGHT MAJOR STEPS** to Build
High Quality Belt and Road Cooperation**



Session 2 – Promotion of Green Economy and the Use of Clean and Future Energy

Green Power Corridor for the Energy Transition in Asia

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The Economic and Social Commission for Asia and the Pacific (ESCAP)

■ The Commission promotes cooperation among its 53 member States and 9 associate members

■ ESCAP secretariat supports inclusive, resilient and sustainable development by generating action-oriented knowledge, and by providing technical assistance and capacity-building services

■ ESCAP secretariat supports countries in achievement of national development objectives and the implementation of the 2030 Agenda for Sustainable Development



- **59%** of the world's population
- **49%** of global energy demand
- **57%** of global fuel-related GHG emissions

Global framework for SDG 7



GOAL

TARGETS

INDICATORS

7 AFFORDABLE AND
CLEAN ENERGY



7.1 ensure **universal** access to affordable, reliable and modern energy services

Proportion of population with access to **electricity**

Proportion of population with primary reliance on **clean fuels** and technology

7.2 increase **substantially** the share of renewable energy in the global energy mix

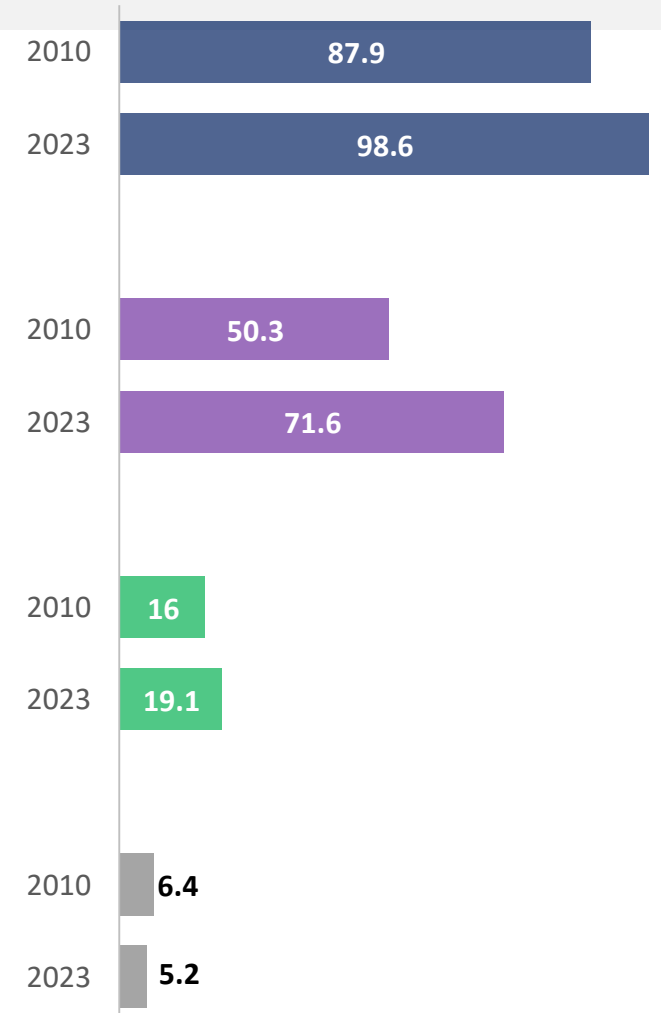
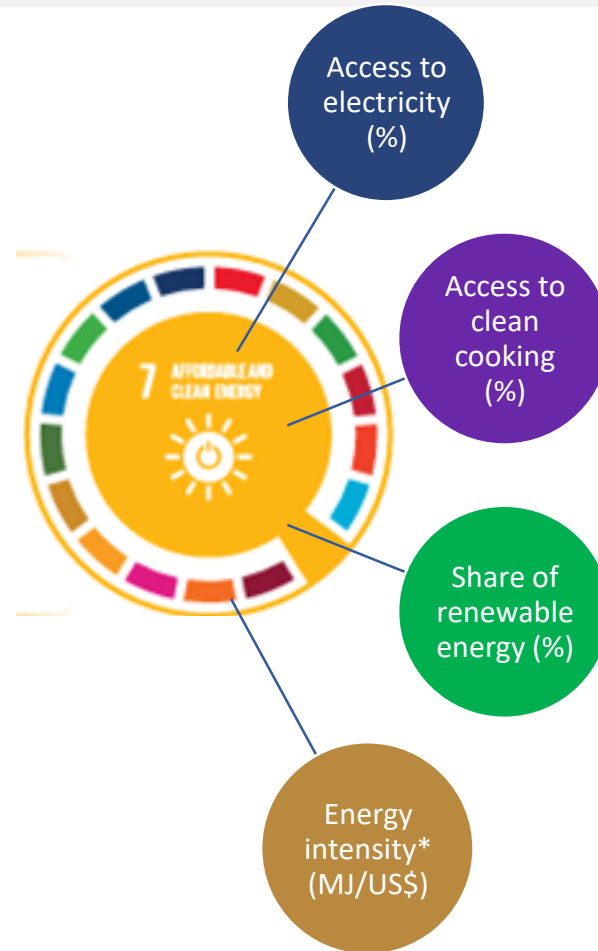
Renewable energy share in the total **final energy consumption**

7.3 **double** the global rate of improvement in energy efficiency

Energy **intensity** measured in terms of **primary energy** and **GDP**

The rapidly evolving regional energy landscape

- ***Sustainable energy provides positive linkages to key SDGs and climate action***
- Substantial, but uneven progress on SDG 7
- Renewable energy gaining but not fast enough (in Asia-Pacific, outpaced by demand growth)
- Energy transition increasingly interlinked with energy security



Source: [Closing the gap for SDG 7 in the Asia-Pacific region](#)

* Energy efficiency measured by decreased energy intensity as a proxy measure

Power system connectivity - the need for larger, more integrated power systems



Economics

- Access to lower-cost resources
- Potential for export revenues
- Increased economies of scale

Security

- Lower reserve margin requirements
- Increase resource diversity

Sustainability:

- Access to regions with high RE potential
- Enables integration of variable RE (resource smoothing)

ESCAP's Regional Roadmap on Power System Connectivity

Planning

- Develop a regional master plan (Strategy 2)
- Coordinate cross-border transmission planning (Strategy 6)

Financing and development

- Mobilize investment in cross-border infrastructure (Strategy 7)

Operations

- Move toward multilateral trading and competitive markets (Strategy 5)
- Co-ordinate cross-border system operations (Strategy 6)

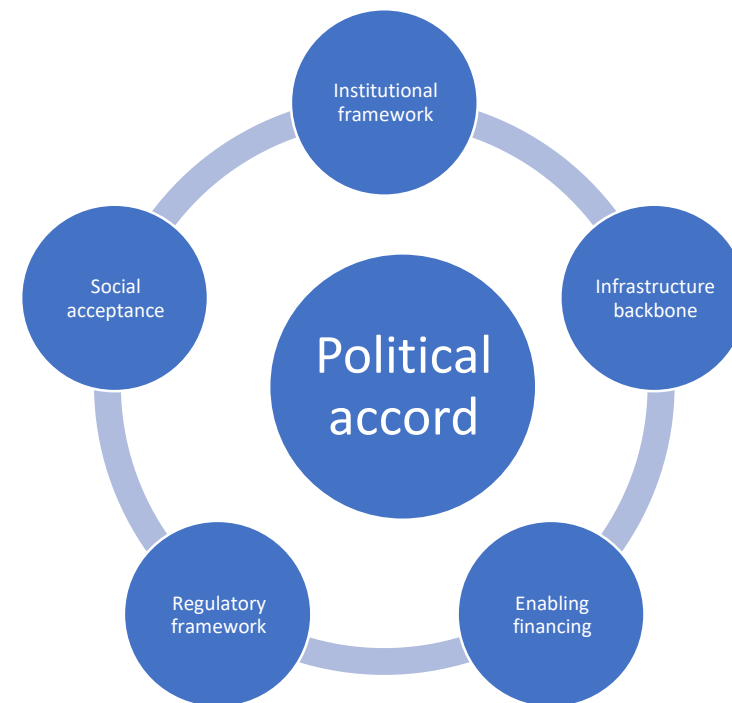
Cross-cutting

- Build trust and political consensus (Strategy 1)
- Develop intergovernmental agreements (Strategy 3)
- Coordinate, harmonize, and institutionalize policy and reg frameworks (Strategy 4)
- Build capacity and share information, data, best practices (strategy 8)
- Ensure coherence of connectivity with the SDGs (Strategy 9)

Sustainable connectivity: Green Power Corridors

Green Power Corridor is a proposed framework to guide sustainable connectivity

- **Political accord:** fundamental enabler of successful connectivity initiatives
- **Institutional framework:** To guide and monitor development
- **Enabling financing:** secure participation of all available sources of capital
- **Infrastructure backbone:** 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



Green Power Corridors: Regulatory Framework

The regulatory framework governs electricity trading, infrastructure development and cross-border operations

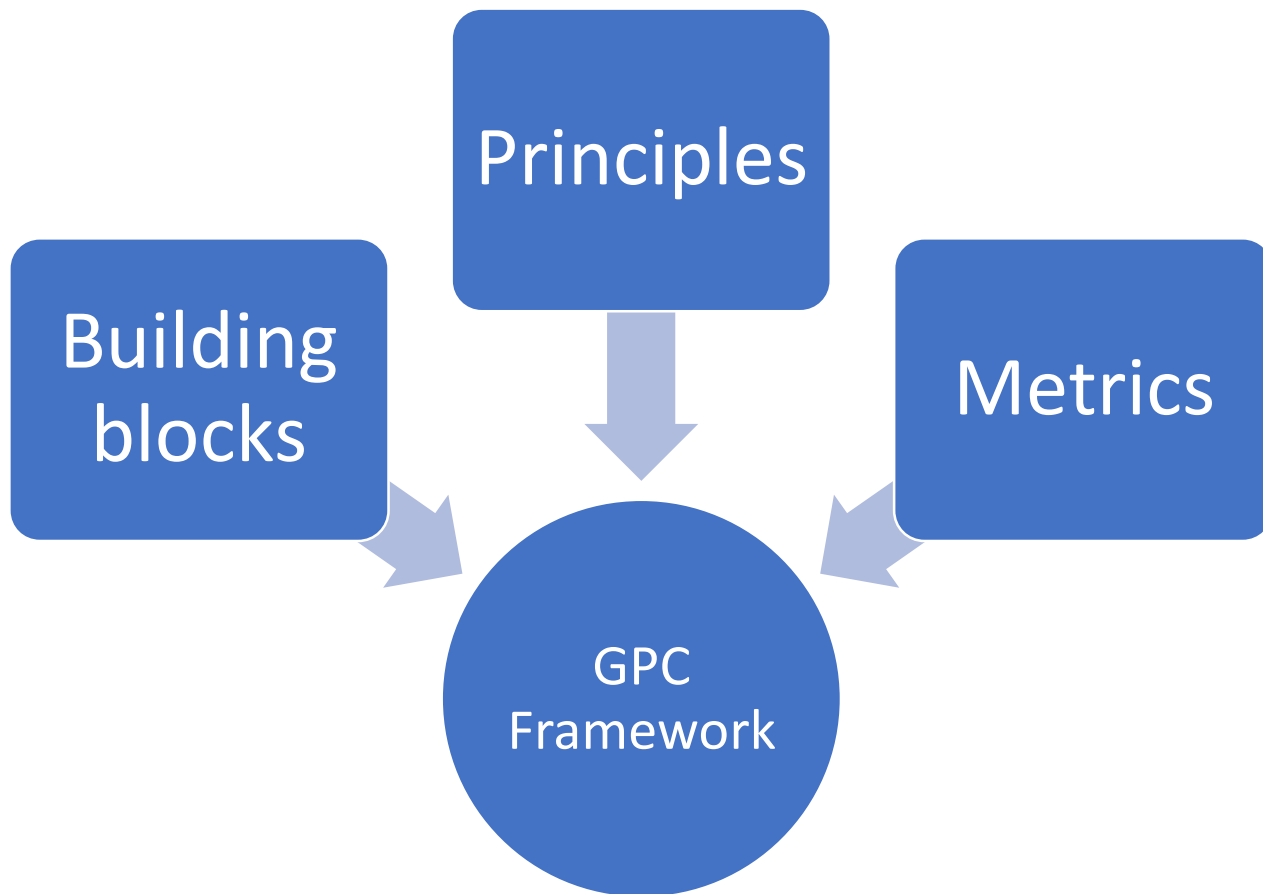
Principles:

- Develop **harmonized grid codes** that enable secure and flexible operations
- Enable bilateral/ multilateral cross-border **power trading arrangements** through harmonized and coordinate procedures/ agreements
- Establish multilateral trading arrangements that emphasize **flexible and least-cost trading** of electricity
- Develop appropriate and consistent **cost-sharing and cost-recovery mechanisms**

Role of regulators:

- Establish and enforce technical standards and carry out oversight of system operations across borders
- Develop bilateral/ multilateral agreements defining the terms of electricity trade and align national regulations with regional standards
- Develop/ manage electricity trading platforms
- Set fair and transparent cost/ capacity allocations

Green Power Corridor Framework: Metrics



The GPC Framework also includes:

- A set of metrics to enable the measurement of connectivity projects against SDGs
- Easy to use- questionnaire based methodology allowing stakeholders to consider options/ policies for maximizing positive impacts and minimizing negative impacts
- Assess impact of connectivity projects across range of SDG targets

Assessing sustainability impacts of connectivity projects

Case Study: Monsoon Wind

As a preliminary multi-dimensional analysis



<https://www.energynewscenter.com/>

<https://www.adb.org/projects/55205-001/main>

<https://www.adb.org/multimedia/partnership-report2023/our-stories/southeast-asias-biggest-wind-power-plant/>

- 600 MW wind farm, built in Lao PDR for export to Vietnam
 - First cross-border wind project in Asia
- Project co-benefits:
 - Lao PDR: revenues, job creation
 - Vietnam: meet rising demand

Regional cooperation for the energy transition

Cross-border power system connectivity requires greater regional cooperation

Shared vision created through initiatives such as the **Regional Road Map on Power System Connectivity** and **Belt and Road Initiative** to develop common goals and strategies for regional energy transition

Regional Frameworks to guide and coordinate planning and implementation and ensure alignment of national policies with regional goals

Governance and regulatory cooperation to set norms and standards for operationalizing cross-border connectivity



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