ADB’s Draft Energy Policy: Supporting Low Carbon Transition in Asia and the Pacific

Sakari Oksanen
Consultant, ADB

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**Sector-Wide evaluation of the 2009 Energy Policy**

**The Draft for 2021 Energy Policy**
II. Guiding Principles of the New Energy Policy
Securing Energy for a Prosperous and Inclusive Asia and the Pacific

Guiding Principle 1

➢ ADB will accelerate efforts to bring affordable, reliable, sustainable and modern energy to all, in order to eradicate poverty and to promote inclusive economic growth.

➢ ADB will enable use of energy in productive activities and creates associated employment and business opportunities in rural areas.

As a response to:

Operational priorities of ADB Strategy 2030
• OP1: poverty reduction
• OP2: gender equality
• OP4: liveable cites
• OP5: rural development

Key sustainable development targets
• SDG 7.1 energy access

Changed energy landscape
• Last-mile electrification
• Off-grid and distributed systems
• Reliability of electricity networks
• Clean energy for cooking becoming priority
• Urban poor
Towards a Sustainable and Resilient Energy Future

Guiding Principle 2

ADB will tackle climate change, enhance environmental sustainability, and build climate and disaster resilience through

- improving energy efficiency as a basis for energy transformation.
- increasing the use of renewable energy with storage;
- pursuing planned phase-out of coal in the region;
- promoting innovative energy technologies;
- supporting resilience planning, assessment and investments.

As a response to:

Operational priorities of ADB Strategy 2030

- OP3: climate change
- OP4: liveable cities
- OP5: rural development

Key sustainable development targets

- SDG 7.2 renewable energy
- SDG 7.3 energy efficiency

Changed energy landscape

- Need to align with the Paris Agreement
- Falling costs of renewable electricity
- New and innovative technologies and business models
Engaging with Institutions and Framing Policies

Guiding Principle 3

✓ ADB will support operational efficiency, financial sustainability, and good governance of energy sector institutions and companies.

✓ ADB will also assist in creating the policy and regulatory frameworks needed to manage the energy transition and climate actions.

✓ Support DMC’s to develop capacity to join supply chain in renewable energy industries

As a response to:

Operational priorities of ADB Strategy 2030

• OP6: Governance and institutional development

Changed energy landscape

• Policies and regulations aligned with Paris Agreement and NDCs
• New types of regulatory needs
• Need own manufacturing capacity and expertise to develop renewable energy
• Heightening role of the private sector through market driven forces
Promoting Regional Cooperation to Enhance Energy Security

Guiding Principle 4

- ADB will promote regional energy cooperation and the integration of energy systems, in order to strengthen energy security and increase cross-border access to cleaner energy sources.

- ADB also pursues regional knowledge sharing and financial collaboration.

As a response to:

Operational priorities of ADB Strategy 2030

- OP7: regional cooperation and integration

Changed energy landscape

- Prospects for gigawatts-scale cross-border renewable energy development
- Advancements of high voltage transmission technologies enabling higher transmission capacities and lengths
- New initiatives in energy cooperation to increase renewable energy (e.g. One Sun, One World, One Grid and Global energy Interconnection)
Cross-sectoral Operations to Maximize Development Impact

Guiding Principle 5

- ADB will continue to combine finance, knowledge, partnerships, and its country-focused approach to deliver integrated and cross-sectoral solutions that provide comprehensive and magnified development impacts from its energy sector activities.

- Country-focused and differentiated approach, promoting innovative technology and providing integrated solutions

As a response to:

ADB Strategy 2030

ADB will be stronger, better, and faster in its delivery to maximize the development impacts of its operational agenda.

Changed energy landscape

- Need to manage programs consisting of small and widely dispersed projects
- Demand for cross-sectoral and cross-thematic interventions (food, water, transport, health nexus)
- Need to accrue and disseminate new knowledge and best practices efficiently
III. Highlights of Policy Updates and Changes for further Consultation
Encouraging and Supporting Low-Carbon Transition

Low carbon SUPPLY
- Bioenergy
- Geothermal
- Hydropower
- Ocean energy
- Solar
- Wind
- Motive power
- Electronics, digitalization and smart systems
- Direct heating
- Heat pumps
- Induction, electric arc
- Hydrogen (blue, turquoise and green)
- CCS/CCUS
- Power-to-X
- Advanced biofuels
- BESS, pumped hydro
- Heat storage

Efficient and resilient TRANSMISSION AND DISTRIBUTION
- Increase the share of renewable energy in power generation
- Support structural shift to higher share of electricity
- Convert, balance and store with new energy carriers and technologies
- District heating and cooling
- Cold storage, cold chain
- Clean cooking
- Low-energy buildings
- Heat storage
- Distributed energy
- Smart control and IoT

Smart DEMAND
- In industry, support fuel shift away from coal
- In residential and commercial demand, support
- In transportation, support transformation in
- Minerals and metals
- Chemicals
- Refining
- Pulp and paper
- Food
- Assembly
- District heating and cooling
- Cold storage, cold chain
- Clean cooking
- Low-energy buildings
- Heat storage
- Distributed energy
- Smart control and IoT
- Two-wheelers
- Light vehicles
- Trucks
- Public transport systems
- Rail
- Shipping
- Aviation
Long-Term Planning for Low-Carbon Transition

ADB will support DMCs to develop long-term roadmap and planning for low-carbon transition in the energy sector including 3 milestones

- Decreasing the carbon intensity
- Peaking of carbon emissions
- Achieving carbon neutrality

Energy sector roadmaps will dovetail into the development of national long-term strategies which establish sustainable, equitable, low-GHG and climate-resilient development pathways.

The roadmap will deploy appropriate technologies:

- Low-carbon technologies (energy efficiency, renewable energy)
- Zero carbon technologies (carbon capture, utilization and storage combined with fossil fuels)
- Negative emission technologies (sustainable bioenergy with carbon capture and storage)

ADB will pursue the development of competition and private sector participation through market-based mechanisms.
Fossil Fuels

✓ ADB will not finance any coal mining, oil and gas field exploration and drilling activities

✓ ADB will not finance any new coal-fired capacity for power and heat generation

✓ ADB will support DMCs to develop strategic approaches and policies for a Just Transition that addresses the socioeconomic impacts of transitioning away from fossil fuels

✓ ADB may finance natural gas pipeline, gas-to-power, industrial and household use of gas projects subject to the following conditions:
  • Meeting basic energy access requirement
  • Consistent with country’s long-term low-carbon transition plan, AND
  • Contribute to lower CO₂ emissions compared to grid emission factor, AND
  • Use high-efficiency and best available technologies AND
  • Does not (indirectly) support activities that are not Paris aligned.

✓ Detailed guidance note will be issued to staff in processing natural gas projects
Natural Gas Can Support Low-carbon Transitions

- Natural gas can be used where it is consistent with a country’s Paris-aligned long-term low-GHG emissions transition plan in particular, and the MDB Paris Alignment framework.

- CO2 reduction and air quality improvement because of lower carbon contents compared to other fossil fuels such as coal (-50% CO2 emissions) and minimal SOX and particulate matter;

- Providing comparatively clean energy access for house heating/cooking using gas instead of coal;

- Co-generation/tri-generation (power generation, heating and cooling) with high efficiency up to 90%;

- Flexible power supply, balancing intermittent renewable energy power supply;

- Need to consider long term impacts to avoid stranded assets and prepare decarbonization with new technologies such as carbon capture and storage and hydrogen.
Large Hydropower

✔️ ADB will **selectively support large hydroelectric power plants** (including pump storage) with seasonal storage reservoirs with multipurpose benefits subject to:

- Positive contribution to low-carbon transition with life cycle greenhouse gas emission analysis
- Incorporation of climate resilient designs
- Robust environmental mitigation strategies; and
- Proper resettlement and economic rehabilitation of the affected people

✔️ **Detailed guidance note will be issued to staff in processing large hydropower projects**
Waste-to-Energy

✓ ADB will support waste-to-energy investments as they provide an opportunity for integrated cross-sectoral projects enhancing the livability and health in cities and rural areas, and prevents environmental hazards caused by landfills.

✓ In such waste-to-energy projects, the choice for combustion prudently follows the waste management order to prioritize:
  
  • Reducing waste generation and waste to landfills, whilst supporting ICT technologies to extract valuable materials as early as practical in the waste logistics chain;
  • Increased integration with waste re-use and recycling, notably the integration of biological and mechanical treatment and recycling;
  • Using waste to generate energy within the confines of planned eco-industrial parks which integrates the above.

✓ Detailed guidance note will be issued to staff in processing waste-to-energy projects.
Other Technologies

 ✓ ADB may participate in financing projects with hybrid electricity solutions involving fossil fuels together with renewable energy for isolated grids in islands and remote areas.

 ✓ ADB will support DMCs to be informed and participate in new technologies such as battery storage, carbon capture, utilization and storage, green hydrogen, and ocean energy.

 ✓ ADB will support cross-sectoral technologies (electric vehicles, solar pumps for irrigation, renewable energy for clinics/cold chain for vaccines).

 ✓ ADB will continue its policy of not to be involved in financing investments in nuclear energy.
Thank you