

The ADB logo is a dark blue square with the letters 'ADB' in white, sans-serif font. It is positioned in the top left corner of the slide.

ADB

EXPLORING NUCLEAR ENERGY - ADB's EMERGING ROLE IN POLICY, SAFETY, AND INFRASTRUCTURE READINESS

Spotlight Session: The Emerging Role of Nuclear Energy in Achieving a Sustainable Energy Future for Asia and the Pacific
10 June 2026, 2:00 p.m. to 5:30 p.m. ADB Headquarters, Manila, Philippines

Hideaki Iwasaki, Director General, Sector Department 1 (Energy and Transport Sectors)

Part I: Strategic Context and Policy Shift

ENERGY SECTOR OPERATIONS

- **VISION**
 - An inclusive, just, and affordable low-carbon energy transition in Asia and the Pacific
- **MISSION**
 - Endeavor for optimizing energy security of ADB DMCs that is sustainable and resilient, with greater private sector participation and good governance, and the deployment of innovative low-carbon energy technologies, along with emphasis on regional energy cooperation and integration, and integrated cross-sector operation to maximize development impact





2021 ENERGY POLICY: Key Policy Directions

- **No Coal or Oil (2021):** 2021 Energy Policy ended financing of new coal power, coal mining, oil extraction or refining.
- **Transitional Gas Only:** Gas funded only in narrow cases (energy access, fuel switching) under net-zero pathways.
- **Clean Technologies:** CCUS in hard-to-abate sectors, green hydrogen, and battery storage supported from 2021.
- **Just & Inclusive:** Worker and community support integrated; strong ESG safeguards across all projects.



THE 2025 ENERGY POLICY REVIEW

Addressing Emerging Needs

Approved on 24 November 2025, the Energy Policy Review introduced updates to match modern technology portfolios and emerging global focused areas.

- Enables support for diversified and responsible critical mineral value chains
- Supports methane emission and routine flaring reduction initiatives in existing upstream oil and gas projects
- Enables use of depleted gas and oil wells for CCUS storage

Expanding scope for Nuclear Power

The updated review marks a strategic shift by removing the prohibition on financing nuclear power investments.

- Addresses critical decarbonization needs
- Positions nuclear power within the energy security and transition mix.
- Contingent on rigorous safety and non-proliferation compliance, among others



OPERATIONAL FOCUS

- Low-carbon just energy transition
- Advanced clean energy technologies, demand-side energy efficiency
- Digitalization, smart power systems
- Subregional, regional, and interregional grid system
- Industry decarbonization
- Critical minerals and clean energy manufacturing
- Leveraging commercial financing



EMERGING ENERGY DRIVERS IN DMCs



Baseload Alternatives

DMCs seek dependable, low-carbon alternatives to replace aging coal-fired power plants. Nuclear power is recognized as a dispatchable zero-emission baseload solution.



National Revisions

Since 2021, DMCs—including Kazakhstan, Uzbekistan, Viet Nam, and the Philippines—have actively updated national energy strategies to include nuclear power.



Next-Gen Reactors

New generation of conventional reactors and advancement of Small Modular Reactors (SMRs) have catalyzed the resurgence. SMRs offer flexible and scalable solutions—particularly appealing to DMCs with limited grid capacity or space for conventional nuclear plants.

Part II: Developing Partnerships to Govern Safety, Standards, and Cofinancing

THE ADB-IAEA STRATEGIC COOPERATION

- Signed on 25 November 2025, immediately following the approval of revisions to the ADB's 2021 Energy Policy, the MOU between ADB and IAEA formalizes deep cooperation on safety, capacity, and standards.
- Strengthening regulatory institutions, safety frameworks, and technical capacity.
- Developing a comprehensive joint Work Program for 2026-2027.
- Providing rigorous tools for integrated energy system analysis.





THE JOINT IFI/MDB PLATFORM ON NUCLEAR ENERGY

- Recognizing the capital-intensive nature of civil nuclear projects, leading MDBs are forming a centralized platform to pool expertise and coordinate international actions.
 - **Participating Institutions:** European Bank for Reconstruction and Development (EBRD), World Bank Group (WB), Asian Development Bank (ADB), European Investment Bank (EIB), others.
 - Directly aligns with tripling global capacity by 2050.
 - Soft launch in April 2026.
 - **Aim:** enhance cooperation, coordination, and knowledge sharing, align approaches to policy dialogue and investment support, and explore co-financing with key partners.

DEEPENING BILATERAL SYNERGY (MOU w/ METI)

- ADB is preparing a new MOU with Japan's Ministry of Economy, Trade, and Industry (METI) to directly support emerging nuclear power in Asia-Pacific.
- **Primary Areas of Cooperation:**
 - Capacity building in anticipation of infrastructure development.
 - Feasibility studies, stakeholder engagement, and technical training.

Part III: Safety, Readiness, and Capacity

THE IAEA 19 NUCLEAR INFRASTRUCTURE ISSUES



National position



Nuclear safety



Management



Funding and financing



Legal framework



Safeguards



Regulatory framework



Radiation protection



Electrical grid



Human resource development



Stakeholder engagement



Site and supporting facilities



Environmental protection



Emergency planning



Nuclear security



Nuclear fuel cycle



Radioactive waste management



Industrial involvement



Procurement



CAPACITY BUILDING AND OPERATIONALIZATION



2023

Southeast Asia & Central Asia

- MESSAGE training workshops for DMCs conducted in Jakarta and Tashkent.

2025

Policy Change & MOU

- Advanced modeling workshop in Bangkok, followed by 2025 Energy Policy Approval and the IAEA MOU in November.

2024

South Asia & Pacific

- Subregional modeling workshops in Dhaka and Fiji using long-term planning tools.

2026

Operationalization

- Colombo MAED workshop, IAEA Vienna engagements, and establishing an internal / ADB Core Working Group.



NUCLEAR POWER

STEERING COMMITTEE AND WORKING GROUP

Core Strategic Objectives

These groups establish a structured, safe, and collaborative pathway for ADB's civil nuclear power interventions.

- ❑ **Framework:** Develop a systematic framework for ADB's nuclear power engagement
- ❑ **Standards:** Ensure strict adherence to global safety, environmental and social safeguards and non-proliferation
- ❑ **Technical Assistance:** Facilitate capacity building and advisory support to embarking DMCs.
- ❑ **Global Alignment:** Harmonize activities with the IFI Platform and the IAEA Milestone Approach.

Scope of Operations

Targeted actions are taken in close coordination with the IAEA to build long-term institutional readiness

- ❑ **Policy and Strategy:** Advise on ADB's approach to integrating nuclear energy into its energy operations.
- ❑ **Technical and Feasibility:** Assess the financial/economic viability, grid readiness, safety, environmental protection and waste management of nuclear power facilities.
- ❑ **Regulatory Reform:** Facilitate the peer review and harmonization of safety standards across DMCs and regions.
- ❑ **Partnerships:** Engage stakeholders including governments, industry and civil society.



RIGOROUS ENVIRONMENTAL SAFEGUARDS

The ADB Office of Safeguards (OSFG) Role

The OSFG will integrate strict, high-level compliance directly into civil nuclear evaluations.

Primary Milestones:

- ❖ Strategic Environmental Assessment (SEA): Training alongside IAEA to identify and evaluate environmental and social impacts early in national strategy development.
- ❖ MFI Working Group: Setting robust, unified Environmental and Social Standards (ESS) for complex low-carbon infrastructure.

STRATEGIC FINANCING FRAMEWORK

Financing

- Initially ADB will provide financing for human resource and institutional capacity development
- Appropriate TA funds
- Ordinary capital resources

Underlying Constraints and Rules

- Subject to rigorous readiness assessments and full compliance with the IAEA 19 Infrastructure Issues.
- Aims to develop donor funding for nuclear power-specific technical assistance



Thank you.

