

*The views expressed in this presentation are the views of the author/s and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy of the data included in this presentation and accepts no responsibility for any consequence of their use. The countries listed in this presentation do not imply any view on ADB's part as to sovereignty or independent status or necessarily conform to ADB's terminology.*

ADB

# ADB BUSINESS OPPORTUNITIES SEMINAR

## ADB's Energy Sector Operations

15 April 2025

Presented by Keiju Mitsuhashi  
Director, Energy,  
Sectors Department 1

BUSINESS  
OPPORTUNITIES





# ENERGY SECTOR

- **OPERATIONAL FOCUS**

- Low-carbon energy transition
- Just energy transition
- Advanced clean energy technologies, demand-side energy efficiency
- Digitalization, smart power systems
- Leveraging commercial financing

# ENERGY SECTOR

## CHALLENGES

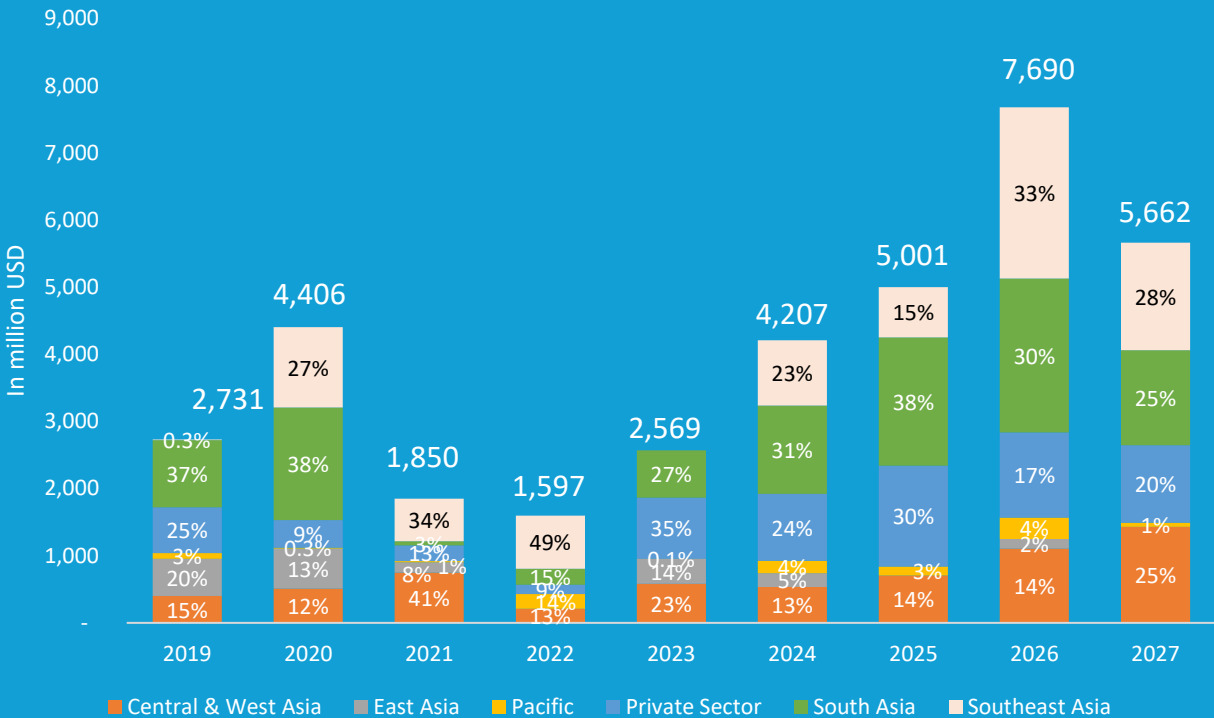
- Energy access, energy security
- Regressive & outdated sector governance
- Mistargeted subsidies & financial incentives
- Involving private sector to meet massive investment requirements



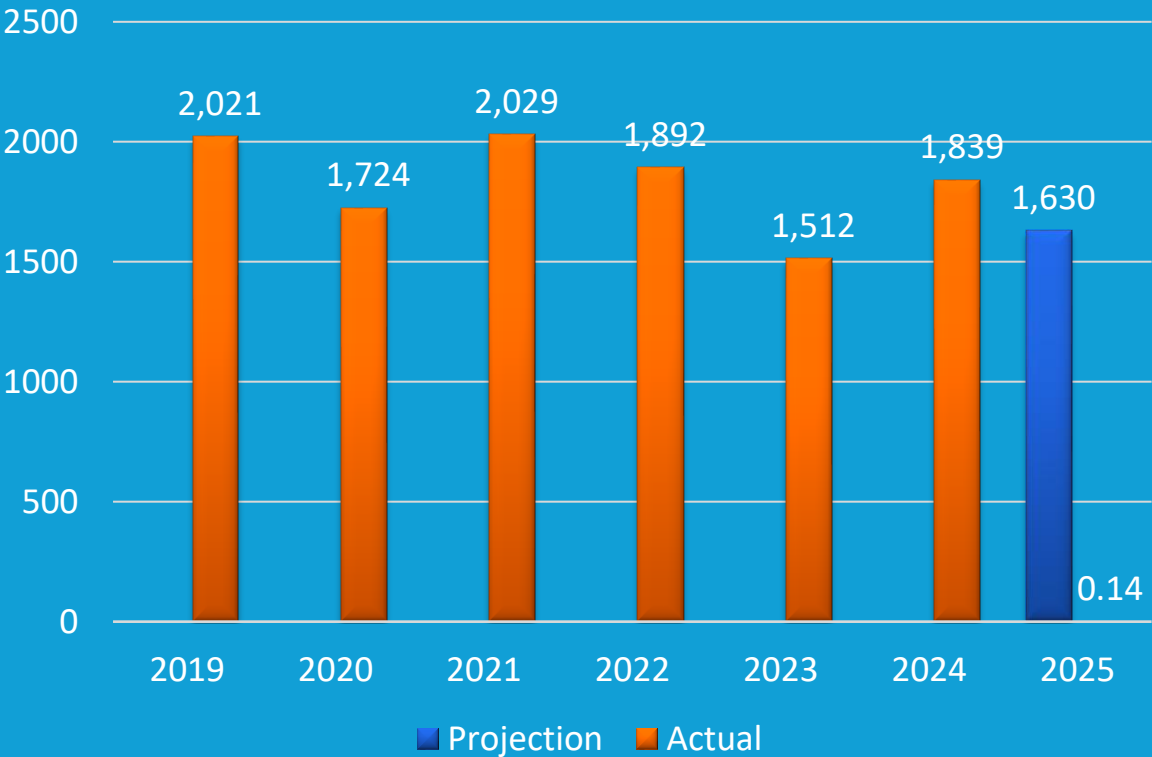
# ENERGY SECTOR

## COMMITMENTS

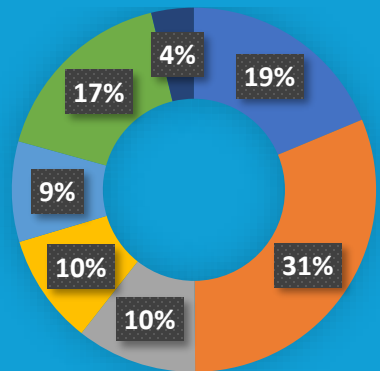
(Actual 2019-2024 & Projections 2025-2027)



## DISBURSEMENTS (Sovereign Only) (Actual 2019-2024 & Projection 2025)



## CLIMATE FINANCE 2024



- AFNR Agriculture, food, and natural resources
- Energy
- Finance
- PSM Public sector management
- Transport
- WUD Water and urban development
- Others

# Expected Business Opportunities

## Indicative project pipeline (2025)

No.	DMC	Project Name	Amount * (\$ million)
1	CAM	Grid Expansion Project	53
2	CAM	Energy Transition Sector Development Program, Subprogram 2	83
3	INO	Geothermal Power Generation Project (additional financing 2)	180
4	INO	Accelerated Indonesia's Clean Energy Transition Program	1,181
5	PAL	Power Reliability Improvement and Storage Management Project	19
6	PNG	Sustainable Energy Sector Development Program	100
7	SOL	Tina River Hydropower Project (additional financing)	25
		<b>Total</b>	<b>1,640</b>

\* Including cofinancing

CAM=Cambodia, DMC=development member countries, INO=Indonesia, PNG=Papua New Guinea, PHI=Philippines, SOL=Solomon Islands



# Expected Business Opportunities

## Indicative project pipeline (2026)

No.	DMC	Project Name	Amount * (\$ million)
1	INO	Affordable and Sustainable Energy Transition Program, Subprogram 2	1,000
2	INO	Green Energy Corridor Sulawesi Project	700
3	PHI	Geothermal Resources Derisking Facility	250
4	PHI	National Total Electrification Support Program	461
5	PHI	Energy Efficiency in Public Building	500
6	PHI	Climate Change Action Program, Subprogram 3	650
7	FIJ	Viti Levu Green Circuit Project	50
8	SOL	Disaster Resilient Clean Energy Financing	3
9	TON	Nuku'alofa Network Upgrading Project Area 4	5
10	VAN	Disaster Resilient Renewable Energy Development Project	10
		<b>Total</b>	<b>3,629</b>

\* Including cofinancing

DMC=development member countries, FIJ=Fiji, INO=Indonesia, PHI=Philippines, SOL=Solomon Islands, TON=Tonga, VAN=Vanuatu

# Expected Business Opportunities

## Indicative project pipeline (2027)

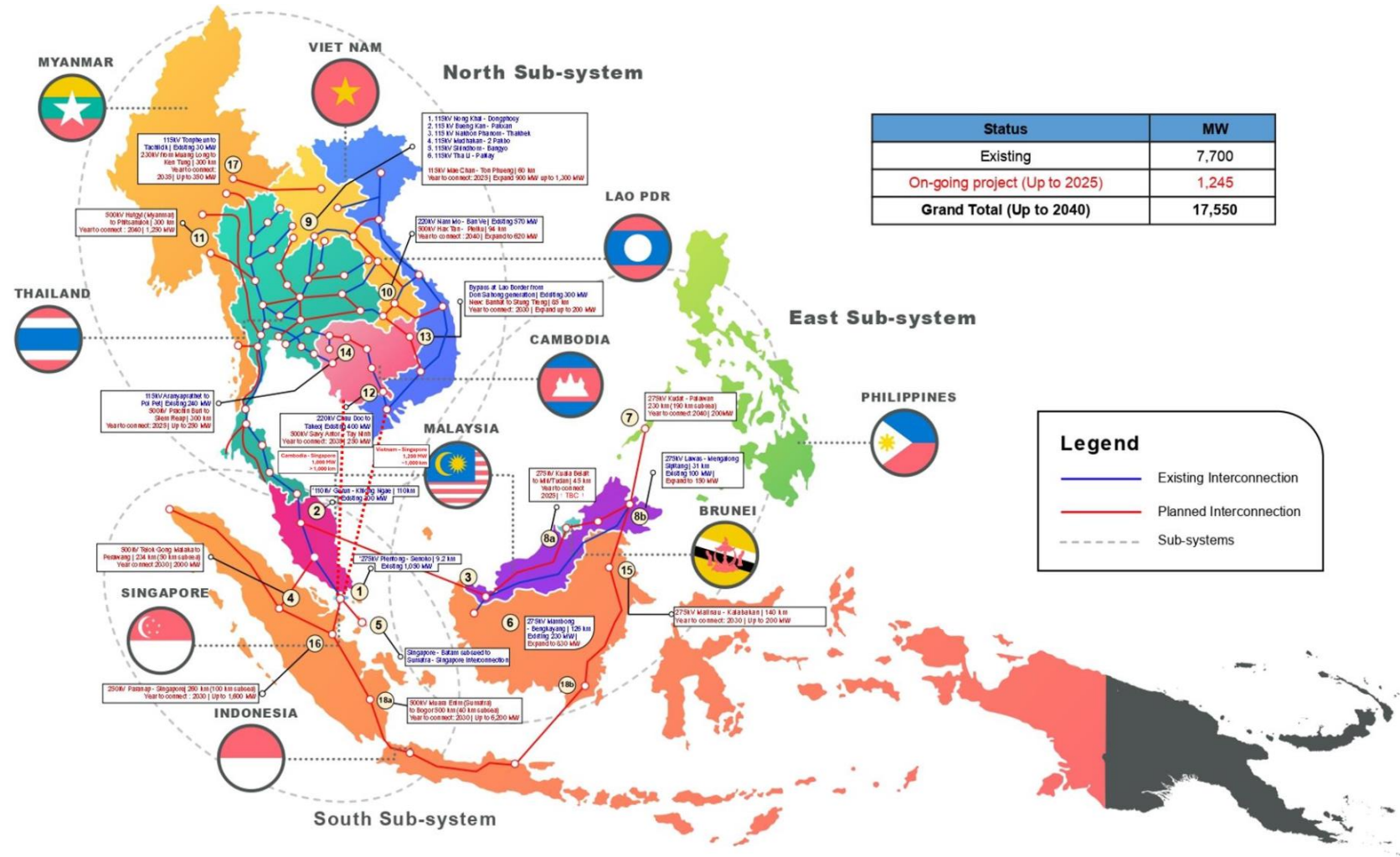
No.	DMC	Project Name	Amount * (\$ million)
1	CAM	Energy Transition Sector Development Program, Subprogram 3	50
2	CAM	National Project on Energy Storage for Utility-scale Solar Plants	40
3	INO	Geothermal Power Expansion Project	650
4	INO	Green Energy Corridor Project Sulawesi (Southeast)	950
5	INO	Scaling Hydropower Sector Project	500
6	INO	Geothermal projects (Guning Tigal, Lahendong 7 & 8, Lumut Balai Ext A Bunbun (unit3))	444
7	FSM	Climate Resilient Energy and Water Sector Project, Phase 2	10
8	PNG	Sustainable Energy Sector Development Program, Subprogram 2	200
9	SAM	Grid Upgrading Project	10
10	SOL	Renewable Energy Development Project, Phase 2	15
		<b>Total</b>	<b>2,869</b>

\* Including cofinancing

CAM=Cambodia, DMC=development member countries, FSM=Federated States of Micronesia, INO=Indonesia, PHI=Philippines, PNG=Papua New Guinea, SAM=Samoa, SOL=Solomon Islands,

# ASEAN has set a vision for an integrated regional grid by 2045 under joint plans which are still evolving

1. ASEAN Interconnection Masterplan Study (AIMS) III identified **18 priority interconnection projects**—to more than double interconnection capacity today from **7.7 GW** to **17.6 GW** by 2040
2. Of the 18 identified interconnections, **9 are existing** but may require upgrades, mostly with bilateral arrangements.
3. The 18 interconnection investment projects alone need **\$16 billion** by 2040 (on NPV basis) but many additional projects are already under consideration:
  - Cambodia–Singapore
  - Indonesia–Singapore
  - Viet Nam–Singapore
  - Sarawak–Singapore
4. Total transmission investments in ASEAN (cross-border and domestic) will likely require over **\$100 billion** by 2045.



Source based: Updated Power Development Plan (PDP) scenario under AIMS III, 2022



# Critical Minerals and Clean Energy Technology Manufacturing Supply Chains



## Corporate Activities

**Draft Approach Paper** on the *“Enabling the Development of Diverse, Responsible, and Sustainable Critical Minerals to Clean Energy Technology (CM2CET) Manufacturing Value Chain”* for Informal Board Session this month

### Stakeholder Partnership

Bilateral donors  
Geological services  
Private sector

### Knowledge Work

**India:** Report on manufacturing supply chains.  
Workshop with Ministry of Mines

### Engagements

Developing priorities with the new government of Indonesia

## Project Pipelines

- ❖ PAK: Project Green – Private Sector Operations Department
- ❖ MON: Captive wind energy plant for copper mine
- ❖ IND: Battery manufacturing project – Private Sector Operations Department
- ❖ Cook Island: Policy-Based Loan
- ❖ INO: Policy-Based Loan

# Decarbonization of Hard-to-Abate Sectors and A Whole-of-Economy Approach



Corporate Activities

Project Pipelines

**Carbon Capture & Storage**  
Technical Assistance in India and Indonesia

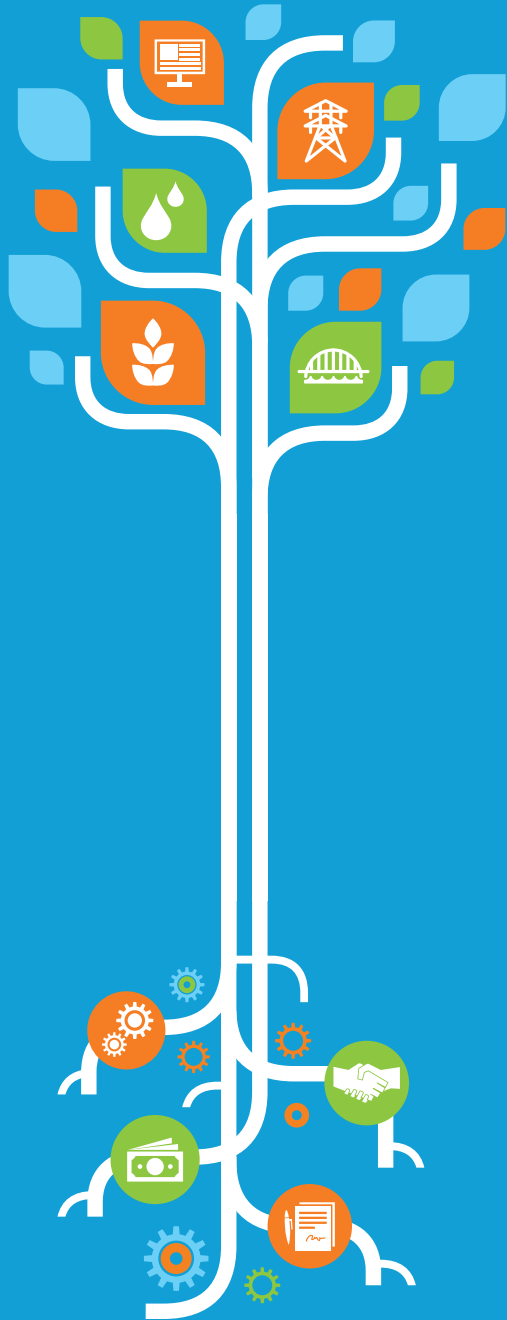
**Green Hydrogen**  
Private Sectors Operations Department (PSOD) project support; sovereign support for standards, regulations, and GH hubs for India

**Maritime Decarbonization**  
Technical Assistance in India and the Philippines

**Industrial Decarbonization**  
Green Steel: Ongoing work in India and the Philippines  
Technical Assistance in India and the Philippines  
CIF: EOI submitted to 7 countries  
Key Partnership (AZEC with METI and ERIA)

**Methane Emissions Reduction**  
Technical Assistance in Turkmenistan and Azerbaijan

- ❖ IND: FI loan for green fuels development (300M for 2025-2026)
- ❖ PHI: Asia Green Steel, Private Sector Operations Department
- ❖ IND: Green Ammonia Project
- ❖ Potential Partnership with GEAPP
- ❖ Industrial Decarbonization Focus (TBF)
- ❖ Climate Investment Funds (CIF)



# THANK YOU!

Keiju Mitsuhashi (三橋 慶樹)

Director, Energy

[kmitsuhashi@adb.org](mailto:kmitsuhashi@adb.org)



# Appendix

Consulting Services

and

Procurement Opportunities by Country



# Pacific Countries

Country	Project Title	Scope	Services	Estimated Value (\$ million)	Advertisement Date
SOL	Renewable Energy Development Project	Supply and Installation of Solar Panels, Inverters and Batteries	EPC	31.1	Q2 2025
TUV	Increasing Access to Renewable Energy Project Phase 2 AF (IAREP 2)	150 KWp Solar PV, 2.25 MWp BESS, and grid upgrade in 3 outer islands	EPC	5.8	Q3 2025
TON	Grid Enhancement for Sustainable Energy Transition	Design, supply and installation of 33 kV lines and 11kV feeder upgrade.	EPC	7.1	2025
FIJ	Rural Electrification Support Project	Expansion and upgrading of the Buca mini-hydropower facility at Buca Village, Fiji (Design, Supply and Installation)	EPC	1.1	Q4 2025
FIJ	Rural Electrification Support Project	100kW Solar PV- (Mini Grid) with Battery Energy Storage System at Tiliva Village, Fiji (Design, Supply, and Installation and Commissioning)	EPC	0.9	Q4 2025
PNG	Power Sector Development Project	Design, Supply, Installation and Commissioning of Distribution Works and Household Connections in Ramu, Port Moresby and West New Britain	EPC	78.6	Q3 2025



# Pacific Countries (continued)

Country	Project Title	Scope	Services	Estimated Value (\$ million)	Advertisement Date
FSM	Climate Resilient Energy and Water Sector Project	Design, Supply, and Installation of MV Distribution Grid and Productive Uses of Energy (PUE) Equipment with PUE O&M Services	EPC	3.5	Q2 2025
FSM	Climate Resilient Energy and Water Sector Project	Project Implementation Consultants for CREWS	Consulting	0.8	Q2 2025
RMI	Energy Transition Project	Design, supply, and installation of distribution substation, SCADA and other equipment for Majuro with O&M services	EPC	6.9	Q2 2025
RMI	Energy Transition Project	Supplemental Management and Operations Consultant	Consulting	2.0	Q2 2025
PAL	Power Reliability Improvement and Storage Management Project	Project Implementation Consultants	Consulting	1.0	Q2 2025
		Battery energy storage, energy management system, protection equipment	EPC	10.0	Q3 2025
		Vehicle to grid pilot (charging stations and vehicles)	EPC	2.5	Q3 2025

# Cambodia

Project Title	Scope	Services	Estimated Value (\$ million)	Advertisement Date
Grid Reinforcement Project	Design, Supply, Installation and Commissioning of 230kV and 115kV Overhead and Underground Transmission Lines	EPC	28.0	Q2 2025
Grid Reinforcement Project	Battery Energy Storage System	EPC	6.7	Q2 2025
Energy Transition Sector Development Program	Battery Energy Storage System	EPC	19.3	Q2 2025
Grid Expansion Project	Design, Supply and Installation of 55 km HV transmission line	EPC	19.2	Q2 2025
Grid Expansion Project	Design, Supply and Installation of 9 substations	EPC	24.1	Q2 2025
Grid Expansion Project	Project Implementation Consultants	Consulting Services/Firm	2.2	Q2 2025

# Indonesia

Project Title	Scope	Services	Estimated Value (\$ million)	Advertisement Date
Geothermal Power Generation Project	Project Management Consultant	Consulting services	10.0	Q2 2025

# Philippines

Project Title	Scope	Services	Estimated Value (\$ million)	Advertisement Date
Geothermal Derisking Facility	Facility design and operation support	Consulting Services (Firms/ Individuals)	0.50	Q3 2025
Offshore Wind Port Development	Due Diligence	Consulting Services (Firms/ Individuals)	0.50	Q4 2025
Feasibility Study on Use of Ammonia and Hydrogen for Thermal Power Generation	Due Diligence, Feasibility	Consulting Services (Firm)	0.80	Q2 2025