



## **Energy Sector Group**

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### **Energy Sector Operations Guiding Principles**

Increased deployment of renewable energy, energy efficiency

Integration of advanced technologies/ innovative business models and financing instruments

Creating and enabling regulatory framework for effective markets/sector development

SDG 7 (Universal Energy Access)

Global Climate
Goals/NDCs

ADB Strategy 2030 (7 Operational Priorities)





### **Energy Sector Contributions to S2030**

### **7 Operational Priorities**

Increased access to clean energy help meet basic needs, facilitate SME development and job creation

OP 1: Addressing remaining poverty and reducing inequalities

Job creation and skills development for women in RE; productive use of women's time for income generation

OP2: Accelerating progress in gender equality

Climate change mitigation and adaptation, air quality improvement, energy water nexus

OP3: Tackling climate change, building disaster resilience

Supporting energy smart buildings, electric vehicles, microgrids, waste-to-energy, and demand-side energy efficiency

OP4: Making cities more livable

Distributed renewable energy applications in irrigation and agriculture (e.g. solar pumping), biomass-to-energy

OP5: Promoting rural development and food security

Promoting energy sector reforms and enabling clean energy development

OP 6: Strengthening governance and institutional capacity

Promoting energy connectivity, cross-border clean energy trade, and knowledge exchange

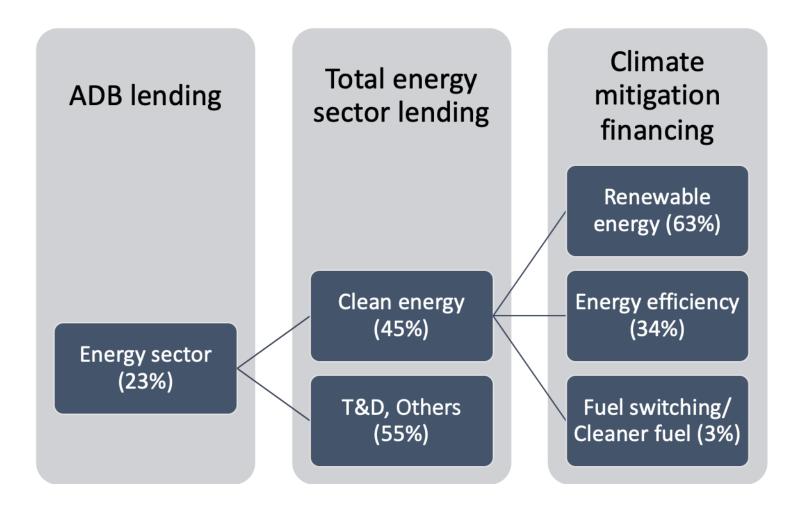
OP 7: Fostering regional cooperation and integration





### **Energy Sector Lending, 2009-2019**

(annual average share, in %)



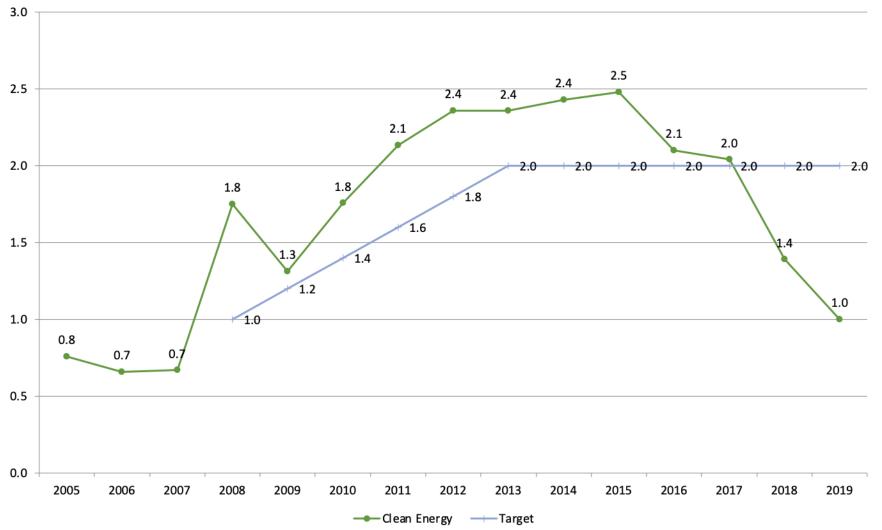






### **Energy Sector Clean Energy Finance 2009-2019**

(in \$ billion)

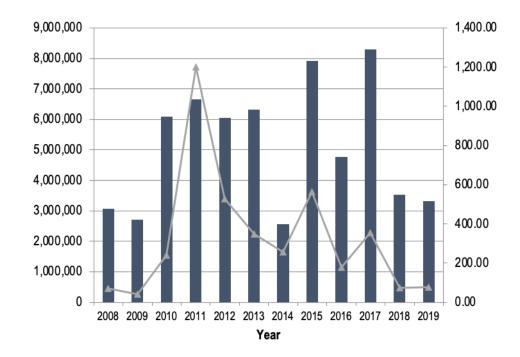




### **Outcomes from Operations:**

### **Progress in Energy Access**





 ADB has invested a total of \$ 9.5 billion in energy access from 2008 to 2019

Energy Access Investment (in million \$)

 And provided energy access (electricity, clean cooking) to 25 million households cumulatively in the same period



Number of HHs ——ADB investment (in B\$)



### **Outcomes from Operations:**

### **Progress in Clean Energy Indicators**

Indicator	Unit	2011	2012	2013	2014	2015	2016	2017	2018	2019
Additional RE capacity installed	GW	0.9	2.5	1.4	2.1	0.6	2.1	1.6	0.6	4.0
CO <sub>2</sub> emission reduction	million tons/ year- equivalent	13.7	16.0	7.1	9.0	21.8	13.5	11.8	10.7	6.7
Electricity savings	TWh/ year	3.3	0.9	2.0	0.1	4.5	4.7	0.7	4.0	1.1
RE electricity generation	TWh/ year	3.3	4.9	5.2	5.9	1.5	4.6	4.8	2.4	8.3







### **Energy Sector Lending in 2019**

- Total approvals in the Energy Sector in 2019 amounted to \$2.4 billion including \$0.40 billion from PSOD (17% of total energy sector lending)
- Total climate mitigation finance approved 2019 amounted \$1.0 billion including \$333.7 million from PSOD (or 32% of the total climate mitigation finance)
- Transmission and distribution projects without energy efficiency improvement and fossil fuel-based projects are not considered climate finance. It accounted for 52% of energy lending approved in 2019

Amount	CWRD	EARD	PARD	PSOD	SARD	SERD	Total
Total	460.0	460.0	85.2	403.7	1,001.0	7.6	2,417.5
Climate Finance	200.0	87.3	85.2	333.7	452.6	7.6	1,166.4
- Mitigation	189.8	78.4	77.6	333.7	357.4	6.5	1,043.4
- Adaptation	10.2	8.9	7.6	0.0	95.2	1.2	123.0
T & D, Others	260.0	372.7	0.0	70.0	548.4	0.0	1,251.1



#### **Contributions to S2030**

#### **Number of projects by Operational Priority tagged**

S2030 Operational Priority	Number of projects
Addressing remaining poverty and reducing inequalities	8
Accelerating progress in gender equality	9
Tackling climate change, building disaster resilience	24
Making cities more livable	3
Promoting rural development and food security	1
Strengthening governance and institutional capacity	8
Fostering regional cooperation and integration	4





#### **Projected Energy Sector Leading in 2020-2022**

- In 2020, energy sector sovereign lending approval program is \$6 billion\*:
  - Clean Energy: \$2.4 billion, i.e. 40%
  - Transmission & distribution: \$2.6 billion, i.e. 43%
  - Others (sector project, gas): \$ 1 billion, 17%
- In 2021-2022, the projected average lending will be \$5 billion/year, with clean energy representing about 40-50% of the lending.



<sup>\*</sup>Based on data from the WPBF 2020-2022



### The way forward to the energy sector

- Increase clean energy investments
  - Help develop and demonstrate viability of new renewables beyond solar PV and onshore wind in ADB DMCs
  - Develop projects with other sectors to reap scale and scope economies in energy efficiency
- Support ADB developing member countries in transforming their energy systems to be more flexible, resilient and smarter
  - Support the deployment of ICT, digital applications, and energy storage in the T&D subsector
- Strengthening Multi-sectoral Approach







### **Indicative Clean Energy Projects for 2020**

- UZB: Promoting Distributed Solar Photovoltaic Power for Enhanced Energy Access to Energy
- AFG: Developing Income Opportunities for Afghan Women with Off Grid Solar Strengthening Multi-sectoral Approach
- KGZ: Promotion of Zero-Emission Electric Public Transport System in Bishkek
- PRC/MON: Second Northeast Asia Power Interconnection
- REG: Clean Energy for Mobility Initiative
- REG: Marine Aquaculture, Renewable Energy and Ecotourism for Ecosystem Services
- IND: Support for Installation of Solar-Battery Mini Grids to Provide Stable Electricity to Health Centers in Remote Villages in Tripura to Help Treatment of COVID-19 in Rural Areas
- INO: Energy Efficiency PPPs: Structuring City-wide Energy Efficiency Interventions for Private Sector Intervention





# THANK YOU!

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