



# 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

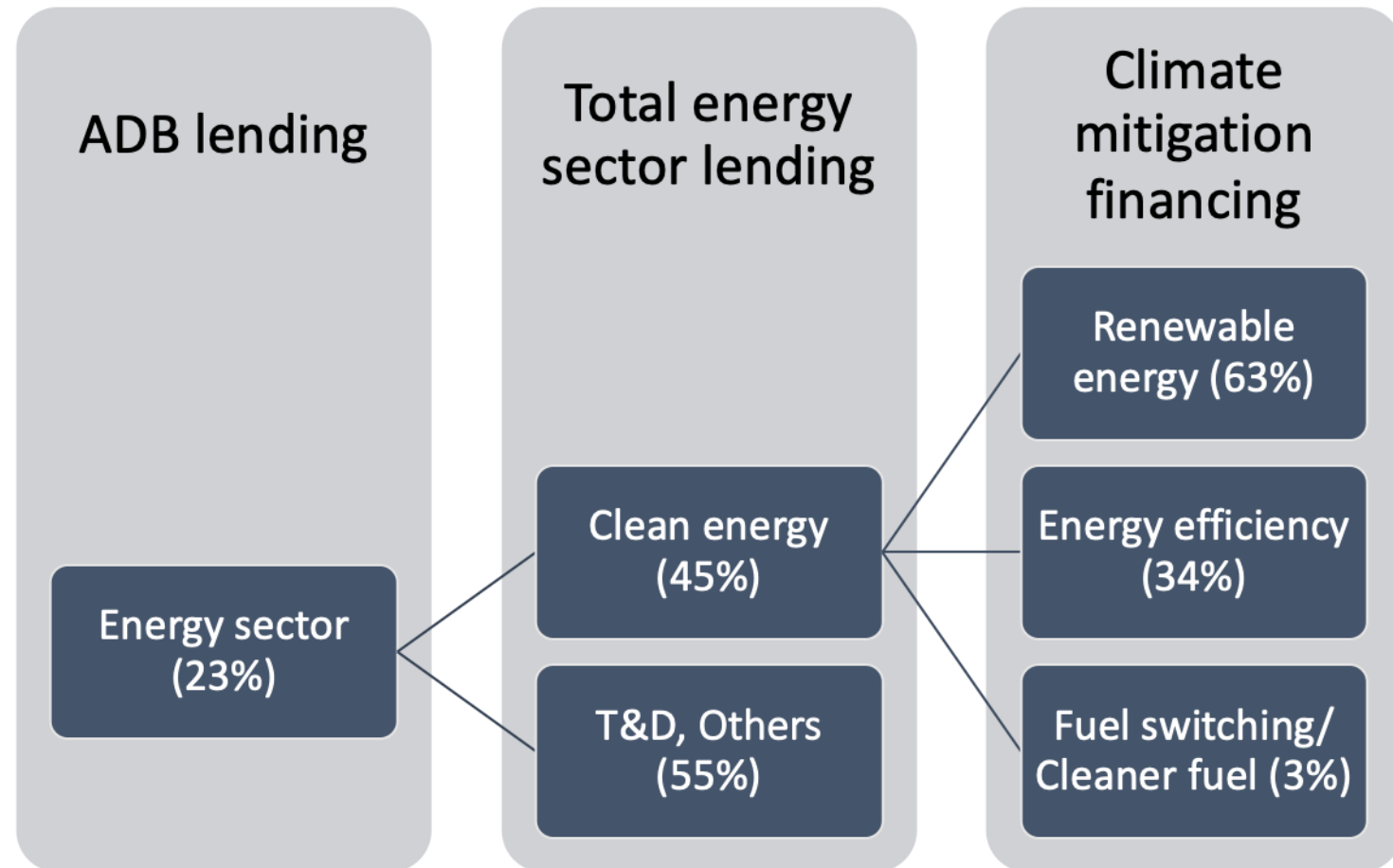
Promoting energy sector reforms and enabling clean energy development

OP 6: Strengthening governance and institutional capacity

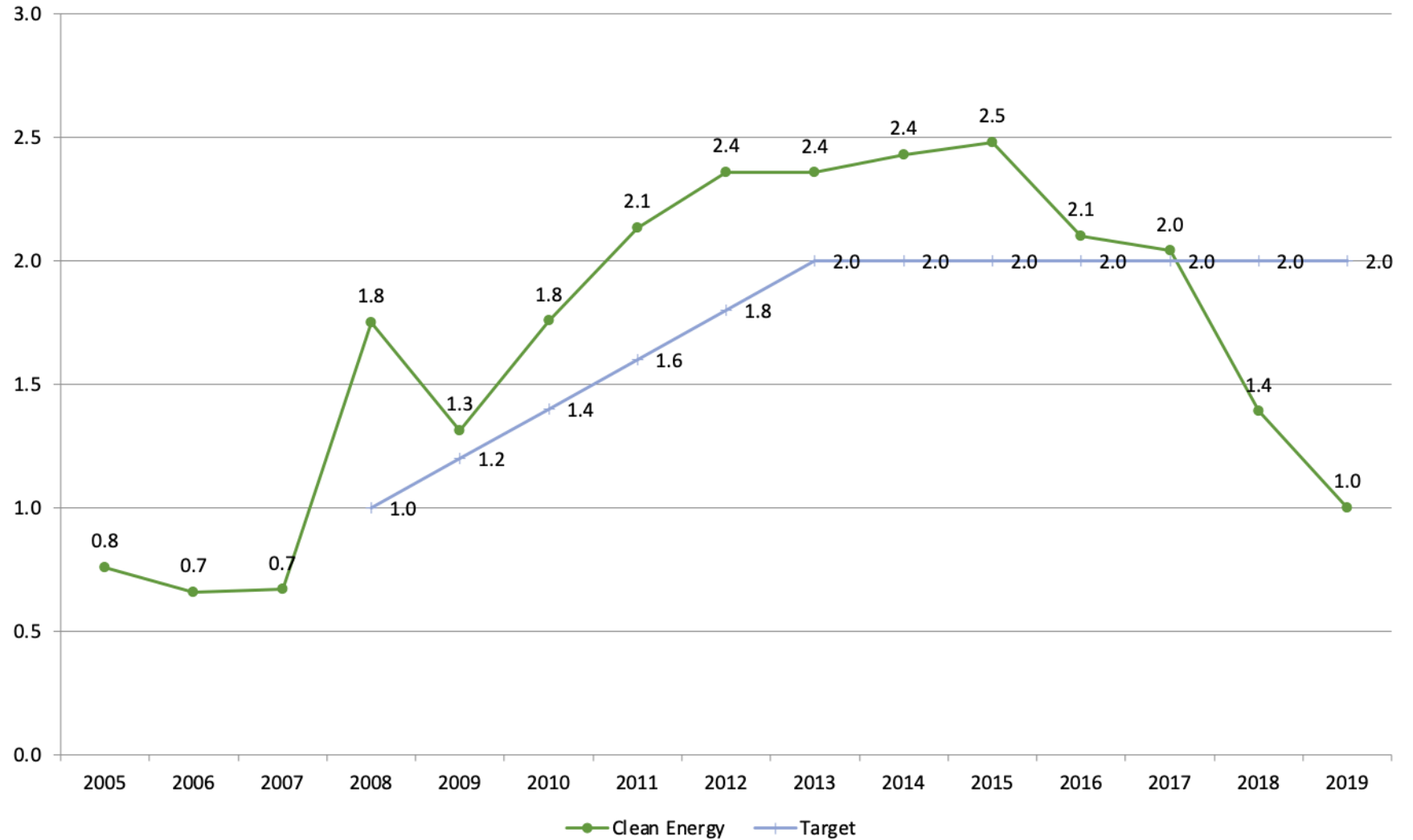
Promoting energy connectivity, cross-border clean energy trade, and knowledge exchange

OP 7: Fostering regional cooperation and integration

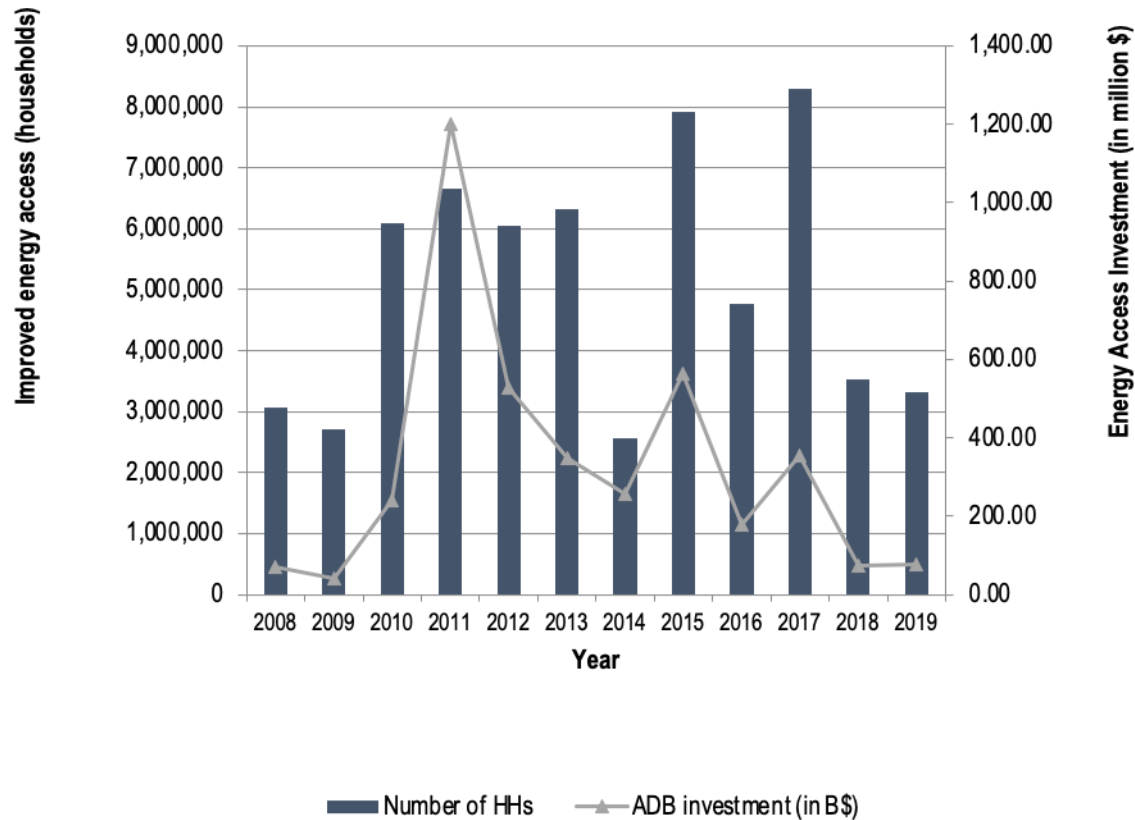
# Energy Sector Lending, 2009-2019 (annual average share, in %)



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

# Outcomes from Operations:

## Progress in Clean Energy Indicators

Indicator	Unit	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Additional RE capacity installed</b>	GW	0.9	2.5	1.4	2.1	0.6	2.1	1.6	0.6	4.0
<b>CO<sub>2</sub> emission reduction</b>	million tons/ year-equivalent	13.7	16.0	7.1	9.0	21.8	13.5	11.8	10.7	6.7
<b>Electricity savings</b>	TWh/ year	3.3	0.9	2.0	0.1	4.5	4.7	0.7	4.0	1.1
<b>RE electricity generation</b>	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
<b>Total</b>	<b>460.0</b>	<b>460.0</b>	<b>85.2</b>	<b>403.7</b>	<b>1,001.0</b>	<b>7.6</b>	<b>2,417.5</b>
<b>Climate Finance</b>	200.0	87.3	85.2	333.7	452.6	7.6	1,166.4
- <b>Mitigation</b>	189.8	78.4	77.6	333.7	357.4	6.5	1,043.4
- <b>Adaptation</b>	10.2	8.9	7.6	0.0	95.2	1.2	123.0
<b>T &amp; D, Others</b>	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.

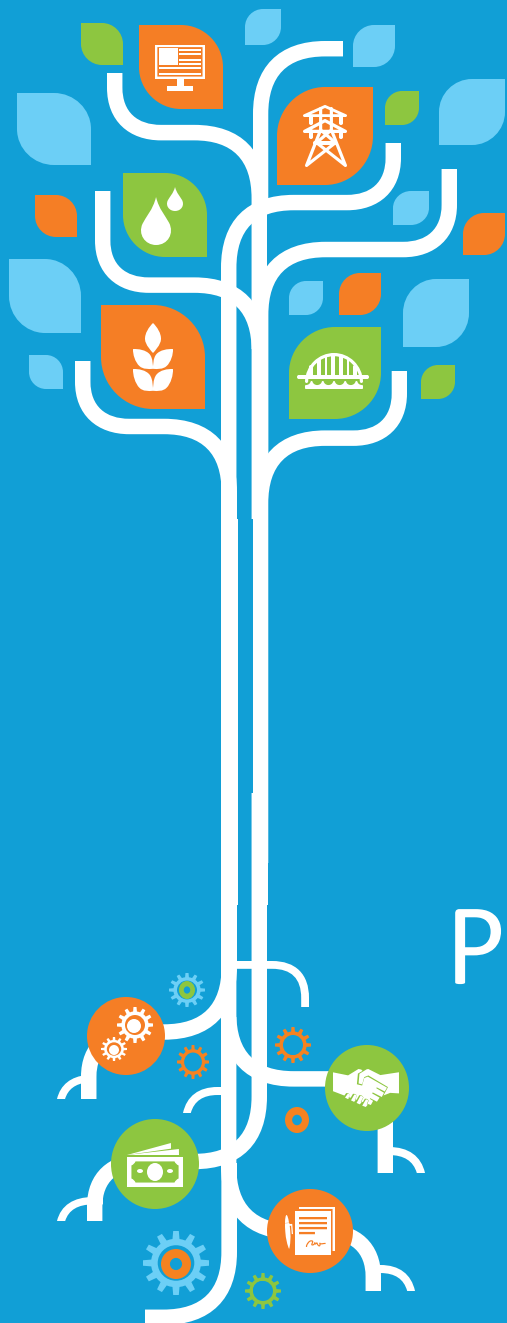
*\*Based on data from the WPBF 2020-2022*

# 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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