

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

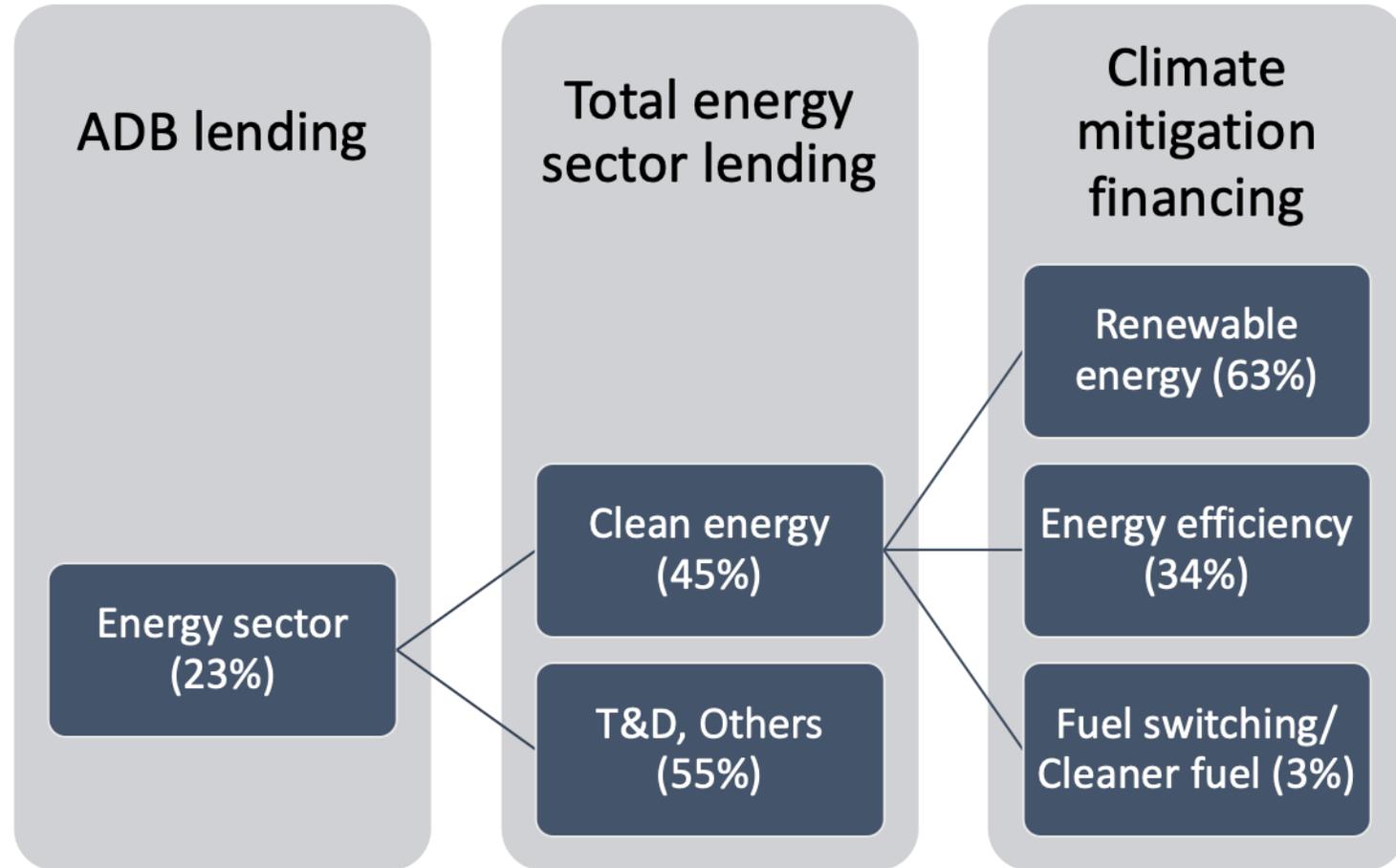
Promoting energy sector reforms and enabling clean energy development

OP 6: Strengthening governance and institutional capacity

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

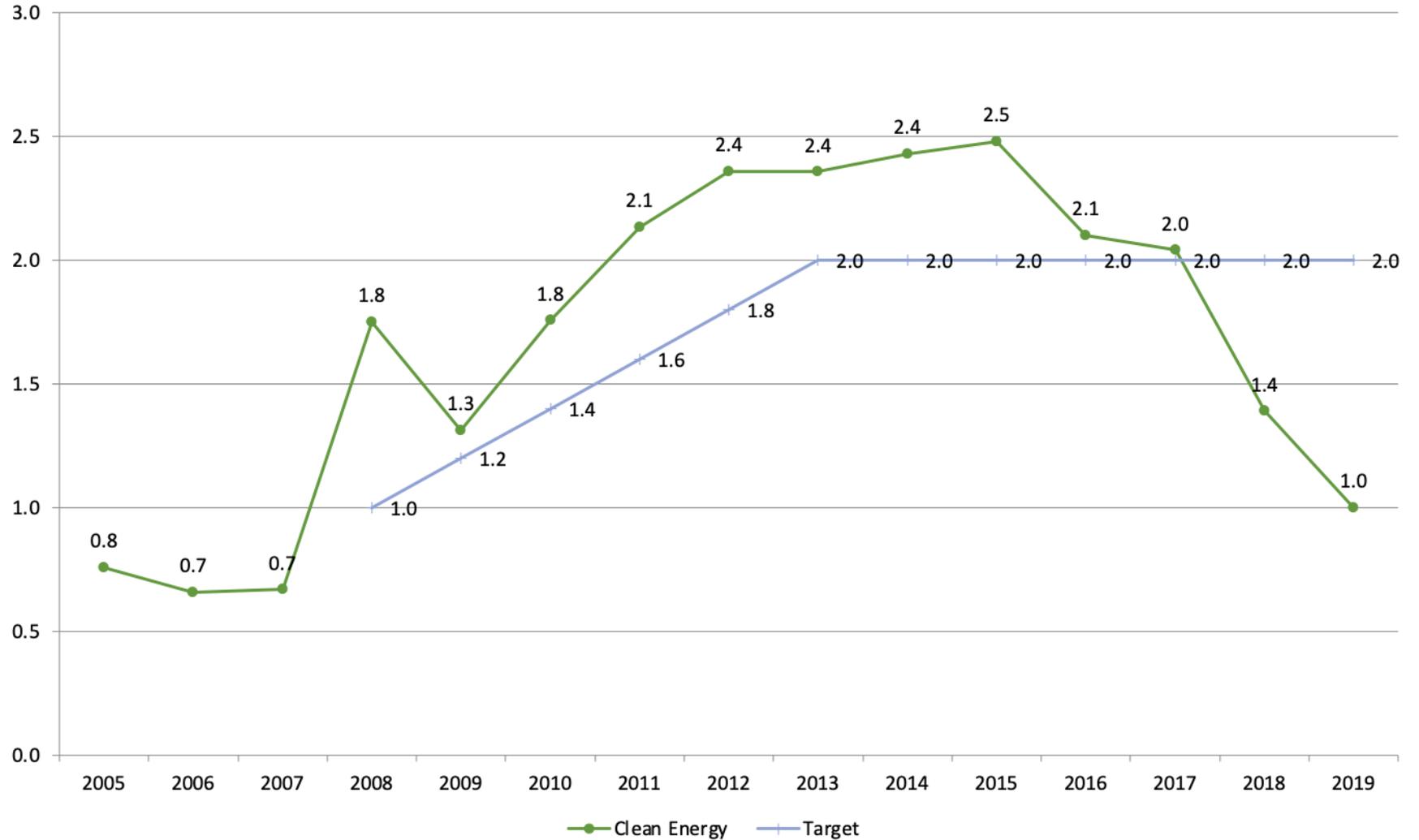
OP 7: Fostering regional cooperation and integration

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

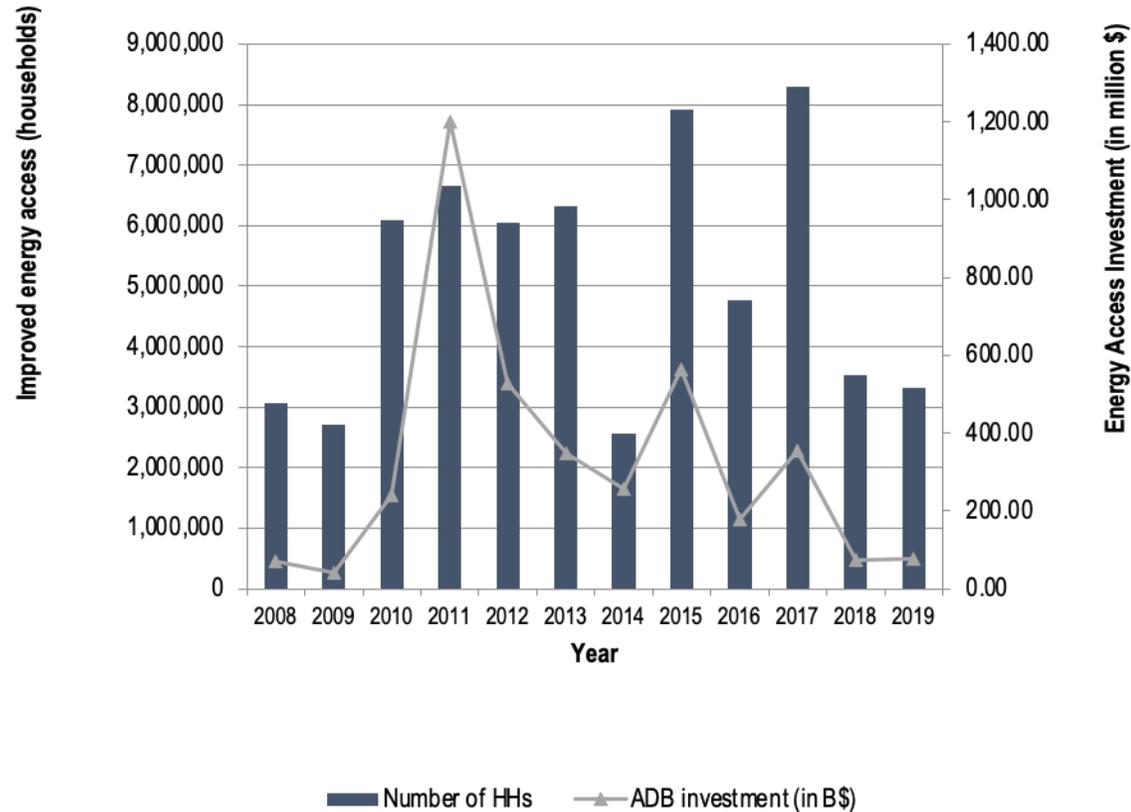


Energy Sector Clean Energy Finance 2009-2019

(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 |
|--|-------------------------------|------|------|------|------|------|------|------|------|------|
| Additional RE capacity installed | GW | 0.9 | 2.5 | 1.4 | 2.1 | 0.6 | 2.1 | 1.6 | 0.6 | 4.0 |
| CO₂ 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.

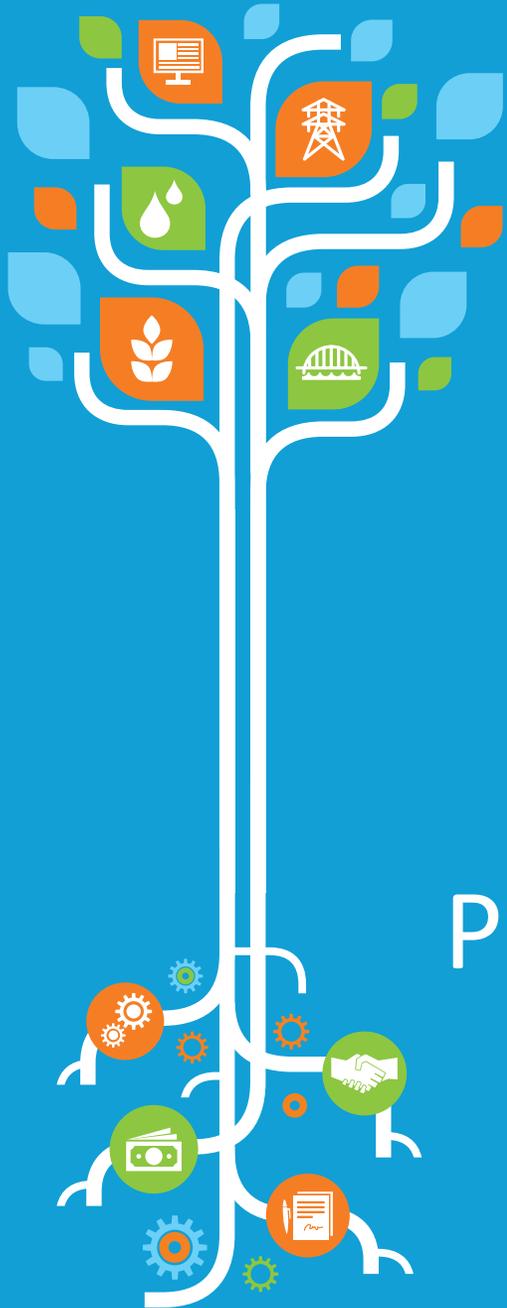
**Based on data from the WPBF 2020-2022*

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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