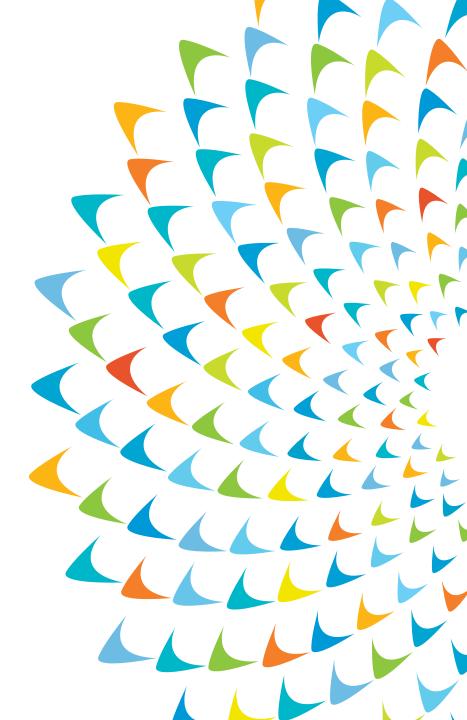


# ADB in Tajikistan Energy Sector





# ADB **ENERGY SECTOR** DIRECTIONAL GUIDE

STRATEGY 2030



# Where we are. Challenges and Needs in Asia

#### **Energy Access**

#### **Energy Security**

the same period

=> 940mio people in Asia and the Pacific still experience frequent interruptions, 350mio people do not enjoy an adequate supply, and 150 million people still have no access to electricity

=> The population increased by **1.7% per** year from 1990 to 2019, and **urbanization** accelerated from 36% in 1990 to **51%** in 2019. **GPD**, in constant prices, grew by an average **6% per year** from 1990 to 2019, while its primary **energy supply** increased by about **4% per year** in

#### Environmental Sustainability

=> In 2019, about 50% of global carbon dioxide (CO2) emissions from fossil fuel (coal, oil, and natural gas) combustion came from Asia and the Pacific

#### Sector Governance

=> Most of the region's electricity market systems and their supporting regulations were developed based on a traditional, centralized system not designed to deal with the supply-side variability that comes from intermittent renewable sources





#### Energy Sector Contributions to Strategy 2030 Operational Priorities

Increased access to clean energy to meet basic needs, income generation through RE employment

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

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

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

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

Promoting energy sector reforms and enabling clean energy development

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

OP1: Addressing remaining poverty and reducing inequalities

OP2: Accelerating progress in gender equality

OP3: Tackling climate change, building disaster resilience, and enhancing environmental sustainability

OP4: Making cities more livable

OP5: Promoting rural development and food security

OP6: Strengthening governance and institutional capacity

OP7: Fostering regional cooperation and integration



# Sector Guiding Principles

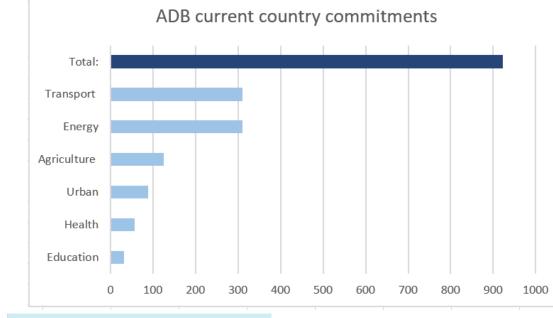
Securing Energy for a Prosperous and Inclusive Asia and the Pacific Building a Sustainable and Resilient Energy Future Supporting Institutions, Private Sector Participation, and Good Governance Promoting Regional Cooperation and Integration Integrated Cross-Sector Operations to Maximum Development Impact

further enhance energy access including clean cooking, heating, and cooling communities with improved climate and disaster resilience energy access including clean cooking, heating, and cooling

financially sustainable energy services integrated solutions with magnified development impacts increased energy security and crossborder access to cleaner energy sources integrated solutions with magnified development impacts



## Tajikistan Project Portfolio



Sector	No. of Active Projects	Amount
Transport	3	310.7
Energy	4	310
Agriculture	3	124.5
Urban	2	89.2
Health	2	57
Education	1	31.5
Total:	15	922.9

#### Cumulative commitment in sector: **\$595M**



#### Rehabilitated HPPs

## Newly built and upgraded SS

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**600km** of new or upgraded power transmission and distribution lines 6



# ADB Ongoing Energy Sector Projects

Power generation

Ongoing: Rehabilitation of 240-MW Golovnaya HPP, **\$136M** 

## Transmission

Ongoing:

Wholesale Metering and Transmission Reinforcement, **\$54M** Reconnection to CAPS (**Regional**), **\$35M** 

### Distribution

#### Ongoing:

Power Sector Development, **\$105M**, EBRD's co-financing \$25M

Pipeline: AF for 240-MW Golovnaya HPP, **\$15M**  Pipeline: AF for RCAPS, **\$15M** 





Interconnections:

6x220kV 4x550kV 6 SS in UZ

### Modern RPA and ECS equipment:

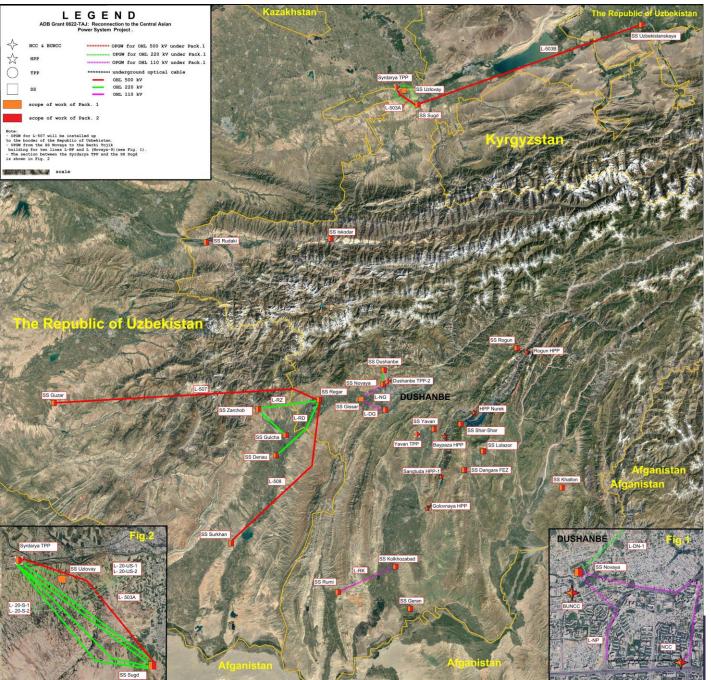
**26 SS** and power generation fac.

### **Outcomes:**

=> Spillage of surplus water in Tajikistan hydropower plants reduced (5 TWh-equivalent);

=> Increased power trade in CAPS;

=> CO2 emissions in Uzbekistan reduced (1.8 million tons);





## Thank you.

