

EBRD investments in renewable energy in Kazakhstan

June, 2019



European Bank
for Reconstruction and Development

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Introduction to EBRD

Who we are



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for Reconstruction and Development

Introduction to EBRD

EBRD Kazakhstan Track Record

EBRD Investments in renewables

EBRD Promotes transition to market economies whilst fostering sustainable development and inclusive growth.

67 countries and two EU bodies.

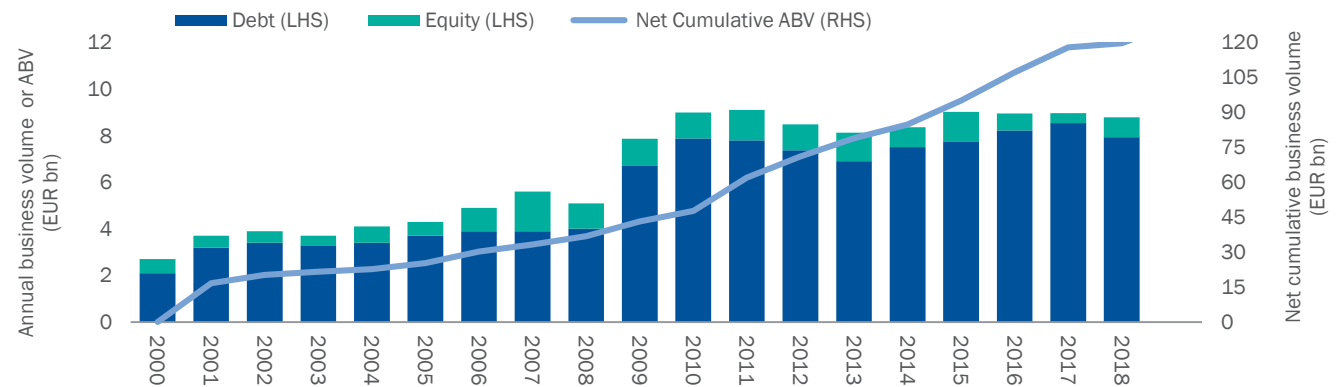
EUR >130bn invested since 1991

>5,000 projects since 1991

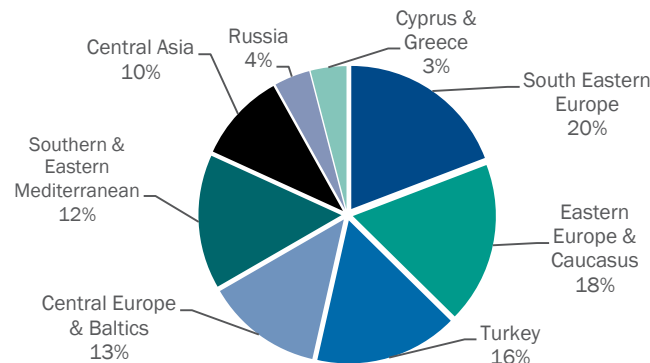
EUR 9.5bn across 395 projects, 79% private sector and 91% debt in 2018.

China became the shareholder of the Bank in 2016 and **India** in 2018

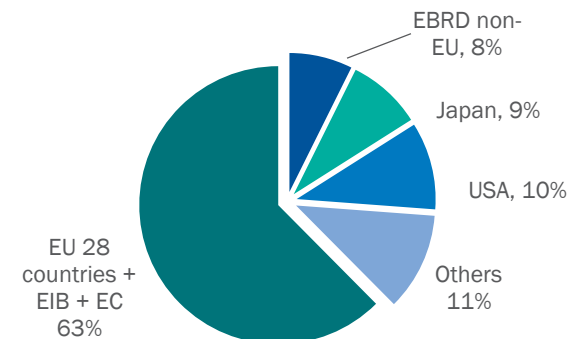
Cumulative Business Volume (excluding Guarantees)



Country Group Portfolio Distribution



Shareholding Structure



Introduction to EBRD

Benefits of working with EBRD



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EBRD Kazakhstan Track Record

EBRD Investments in renewables

Capital Mobilisation A catalyst for equity, debt and trade finance, EBRD works closely with other providers of capital to fill “market gaps”.

Label of Quality High corporate governance and Environmental & Social standards.

Long Tenors The investment horizon of EBRD’s financing typically extends beyond the market.

Local Presence Extensive knowledge of the local economy, business environment and practices and close relationship with governments and key stakeholders.

Business partner Shares risks (including political) supported by EBRD’s unique mandate and shareholder structure.

AAA rating EUR 30bn capital base and Preferred Creditor Status.



EBRD Kazakhstan Track Record

A key investor outside extractive industries sector



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EBRD Investments in renewables

253

equity and debt projects

EUR 7.7bn

investment since 1991

EUR 2.4bn

debt and equity portfolio

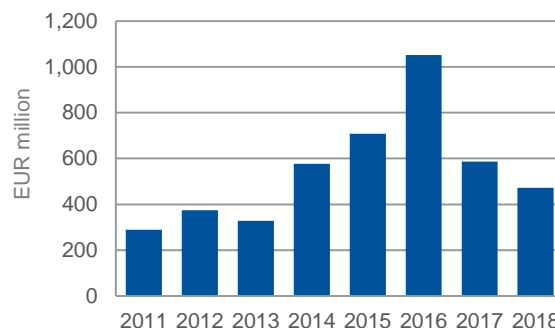
Energy Eurasia team **30+**

bankers in London, Istanbul, Nur-Sultan, Almaty, Moscow, Tbilisi, Tashkent, Ulaanbaatar. In-house engineering expertise.

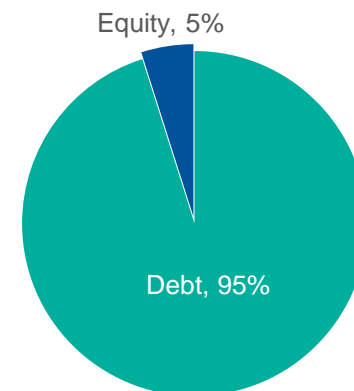
Key Sectors

- Natural Gas
- Renewables
- Power Generation
- Power Distribution
- Power Transmission

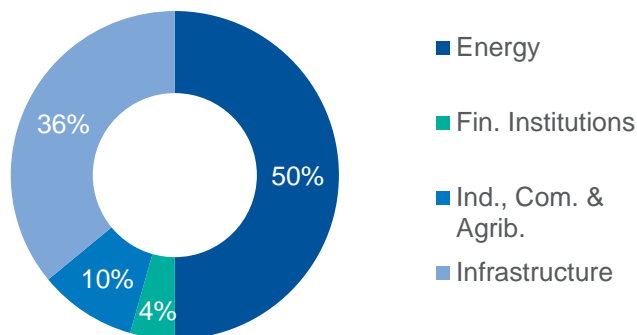
Signed business volume



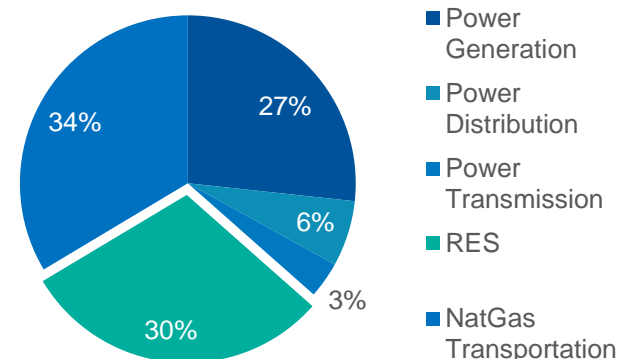
Operating assets by instrument



Operating assets by sub-sector



Energy Portfolio as of December 31, 2018



EBRD Kazakhstan Track Record

Green Economy Transition Approach (GET)

- The EBRD has been engaged in sustainable energy finance since its establishment.
- In 2006, the EBRD launched the **Sustainable Energy Initiative** to address the twin challenges of energy efficiency and climate change.
- The EBRD was the first MDB with a dedicated pool of technical experts in-house.
- In 2009, the EBRD became the first MDB to set itself a carbon emissions target.
- In 2013, the **Sustainable Resource Initiative** was launched which expands the focus from energy to include water and materials.
- In 2015, the **Green Economy Transition** approach was launched under which the EBRD's green financing is to reach 40% of total annual business volume by 2020.

The EBRD's engagement in the context of its countries of operations:

- high share of heavy industry
- ageing infrastructure
- high energy intensity
- a lack of market-based pricing for energy

GET Investments in Kazakhstan

€2.072 billion

GET finance since 2006

97 projects

GET projects since 2006

7,343 ktonnes / year

Total CO2 emissions reductions

EBRD Investments in renewables

Central Asia

Introduction to EBRD

EBRD Kazakhstan Track Record

EBRD Investments in renewables

What we do: EBRD Investments in Central Asia

- As of end of 2018, EBRD power & energy portfolio in Central Asia is **€948 million** and includes **35 projects**
- More than 72% of the portfolio consists of private sector projects
- In 2018, the team invested in projects worth over **€266 million**
- A wide array of sponsors from the UK, France, China, and Germany were attracted

Supporting sustainable energy in the region

- The EBRD is the pioneer in supporting sustainable energy projects in the Region
- Through investments, the Bank aims to support sector reforms that increase competition and liberalization of the market, strengthen frameworks for regionalization and energy security, prioritize energy efficiency and use of renewable energy

What is required to unlock the potential?

- The region needs stronger macroeconomic policies and clear, independent and predictable sector regulation
- Long term regulatory certainty/predictability is key
- Bankable transactions attracting other lenders and third party finance
- Reliable, financially stable shareholders (sponsors)
- Strong Power Purchase Agreement / creditworthy off-taker

Starting point

- **Exceptional resource potential** (especially wind, solar, hydro) for developing renewables
- Aged existing infrastructure
- Strong but pragmatic **political will**
- Strong **support from international financial institutions** and other donors
- Developing legislative and regulatory regimes

Opportunities

- Attracting reputable foreign and local investors
- Attracting “know-how” and the best available technology on the market
- Diversification of the economy relevant for the energy sector
- Carbon footprint and emission reduction
- Supply of carbon credits to the carbon credit market currently being launched (Kazakhstan)

Challenges

- **Intermittent and unpredictable nature** of wind and solar power, **seasonality** of hydro
- Growing **competitiveness of technologies**
- **Impact of large power volumes** interfering with system stability because of priority of dispatch (no balancing market)
- **Low existing tariffs / affordability issue**

EBRD Investments in renewables

Promoting Green Economy Transition in Kazakhstan

Introduction to EBRD

EBRD Kazakhstan Track Record

EBRD Investments in renewables

LEGISLATION

2009

- Introduction of **feed-in tariff system with uniform structure**

2011-2013

- Launch of **operational legal framework** with a set of rules and norms on renewable energy
- Introduction of (i) **fixed** feed-in tariffs, (ii) development of **the Financial Settlement Centre** off-taking energy via (iii) development of **Power Purchase Agreements** agreement

2013

- Introduction **Law on supporting the use of Renewable Energy**

2014

- Introduction of **full indexation of feed-in tariffs against inflation**

2015-2016

- Introduction of the **Green Economy Law** which provides further supports to the development and operation of **renewable energy projects**

2018

- Introduction of **auction scheme** for RES development.
- **858MW** of solar, wind, hydro and biomass capacity was auctioned.

POLICY DIALOGUE ACTIVITIES

- Assisting for drafting of secondary legislation implementing the renewable energy law (2009)

- Advice to the Government of Kazakhstan on Developing FiTs for Renewable Energy Sources (2010)
- Advising on improvement renewable energy primary legislation (2011)
- Advising on a renewable energy sources allocation (2013)

- Modelling the social impact of renewable energy feed-in tariffs (2013)

- Assisting in the final stage of developing renewable energy legislation (2014)

- Assisting Ministry of Energy on establishing a bankable regulatory and legal framework (2015-2016)
- Strategic Environmental Review (SER) of RES development in Kazakhstan (2015-2016)

- Assisting in the review of the PPA bankability (2018)

EBRD Investments in renewables

GCF – EBRD Kazakhstan Renewables Framework

GCF – EBRD Kazakhstan Renewables Framework

Supporting the construction of 8 to 11 renewable energy projects in Kazakhstan, with a total capacity of 330 MW. Helping Kazakhstan to achieve ~18% of its 2020 renewable energy goals.

Framework Components

1. Scaling up renewable energy investments, by blending EBRD and GCF financing and leveraging additional debt financing from international and development financial institutions and in the future from commercial banks, as well as private sector investments

2. Enhancing renewable energy integration, policies and planning through a comprehensive technical assistance and policy dialogue



Financial Structure

| | |
|--------------------------|------------------------|
| Total finance | US\$557 million |
| GCF Funds | US\$110 million |
| <i>of which grant</i> | <i>US\$4 million</i> |
| <i>concessional loan</i> | <i>US\$106 million</i> |
| EBRD loan | US\$214 million |
| EBRD grant | US\$3 million |
| Other lenders | US\$93 million |
| Sponsors equity | US\$137 million |



EBRD Investments in renewables

2014 – 2019



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EBRD Investments in renewables

Burnoye 1 & 2 SPP

100 MW solar
EBRD: USD 124m
TPV: USD 204m

Nomad SPP

28 MW solar
EBRD: USD 26m
TPV: USD 35m

Baikonur SPP

50 MW solar
EBRD: USD 30m
TPV: USD 72m

Shardara Hydro Power

100 MW hydro
EBRD: USD 121m
TPV: USD 147m

Risen SPP

40 MW solar
EBRD: USD 22m
TPV: USD 45m

Saran SPP

100 MW solar
EBRD: USD 54m
TPV: USD 105m

Zadarya SPP

14 MW solar
EBRD: USD 9m
TPV: USD 19m

Chulakkurgan SPP

63 MW solar
EBRD: USD 45m
TPV: USD 77m

Zhangiz SPP

30 MW solar
EBRD: USD 12m
TPV: USD 25m

M-KAT Green SPP

100 MW solar
EBRD: USD 58m
TPV: USD 122m

Qairokkum Hydro Power

126 MW hydro
EBRD: USD 88m
TPV: USD 205m

Salkhit Wind Park

50 MW wind
EBRD: USD 43m
TPV: USD 115m

Tseitsii Windfarm

50 MW wind
EBRD: USD 25m
TPV: USD 127m

Sainshad Wind

55 MW wind
EBRD: USD 30m
TPV: USD 120m

Desert SPP

30 MW solar
EBRD: USD 10m
TPV: USD 48m

- ✓ 16 projects
- ✓ 936 MW of renewable capacity
- ✓ USD 684 million of EBRD investment
- ✓ USD 1466million total project value

Contacts



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