



**Kazakhstan Renewable Energy Financing  
Facility  
(KazREFF)  
13 May 2011**



# Renewable Energy Perspective

- Kazakhstan is an 81 TWh economy (IEA data for 2008)
- Of this, 9% are 'old' renewables, large hydro
- Renewable Energy Goals:
  - 1 TWh of energy from new RE by 2014
  - 2 TWh of energy from new RE by 2020
- Possibility to move beyond these targets depending on cost
- The highest potential for wind and small hydro
- Fast growing interest from the Government and business



# Renewable energy framework (1)

- New Law on support of Renewable Energy was approved in June 2009 with the following provisions:
  - Individual project based tariff approach to be approved by Authorized Body based on Project Feasibility Study
  - Mandatory off-take by the Regional Electricity Companies to offset 50% of network losses and by the Network Operator to purchase remaining electricity produced at renewable energy sources
  - Connection costs to be paid by investor
  - Implementation mechanism should be further developed



# Renewable energy framework (2)

- Main barriers
  - Lack of clear criteria for approving feasibility studies (FS)
  - Lack of experience by authorized body to review complex FS
  - Additional burden on state bodies to review and approve tariffs
  - High sector risks due to uncertainties with tariffs
  - Unclear connection rules
  - Lack of transparency



# Barriers to Development of Renewables Industry in Kazakhstan

- Competitiveness
  - Grid-delivered electricity is very low cost
  - Absence of established supply chain makes initial entry cost very high
- Regulatory Framework
  - Lack of transparency
  - Lack of clarity on rules
- Finance
  - Local developers usually have insufficient equity (<30%)
  - Many developers have limited resources for project preparation up to the required standards (wind measurement, feasibility studies, etc)
  - No availability of long-term finance in Kazakhstan, refinancing risks
- Capacity
  - No presence of major foreign technology suppliers
  - No established after-sales service network
  - Local project developers have limited experience in the field of RE development



# EBRD Support in Kazakhstan

- EBRD started providing TA policy support to the Government in mid-2009:
  - Regulatory framework assessment, recommendations for the feed-in tariff legislation and required support package (2009-2010)
  - TA programme to assist the MINT with development of amendments to primary legislation and development of secondary legislation for support of renewable energy development in Kazakhstan (on-going)
  - EBRD identified renewables as a sector to benefit from Clean Technology Fund (CTF) financial support



# **EBRD: Examples of RES support in other countries**



# EBRD: RES Technical Support Mechanisms in Western Balkans

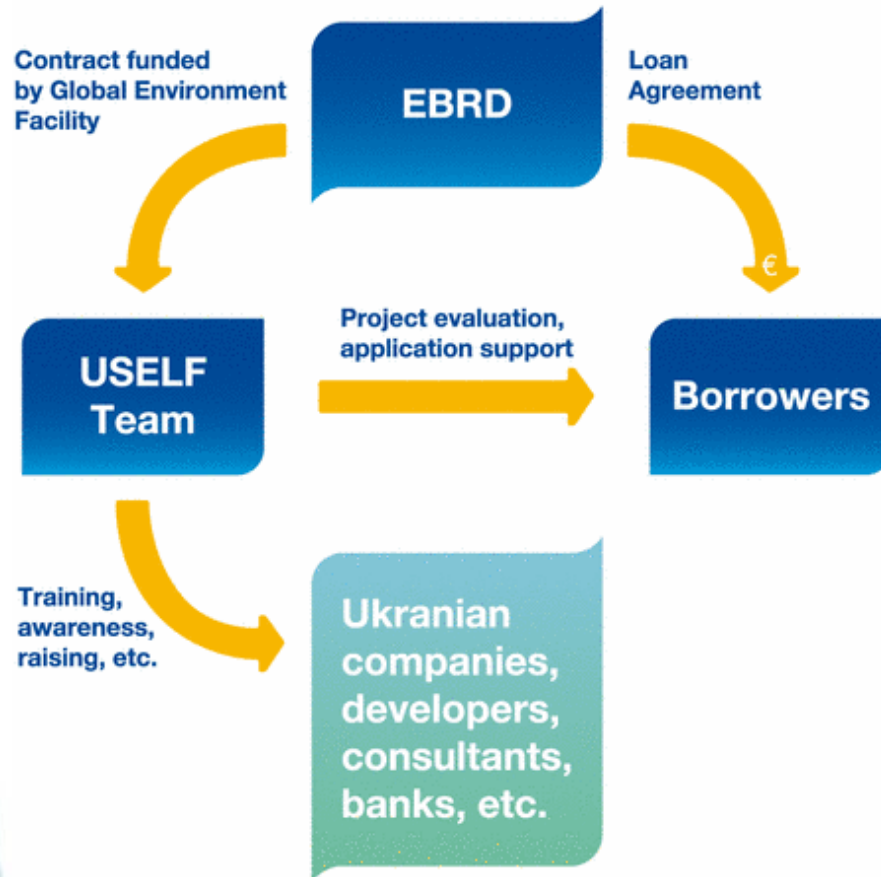
- **Albania (ongoing)**
  - support to the Ministry of Economy in FiT design (methodology, FiT level, affordability, caps)
- **BiH (completed)**
  - Specific support to energy regulators in both entities
- **Montenegro**
  - support to the Ministry of Economy in FiT review including affordability assessment and cap proposal (presentation on 8 December in Podgorica)
- **Serbia**
  - support to the Ministry of Mining and Energy – support mechanisms for RES non-eligible for FiTs (discussion with Ministry in Belgrade on 7 December) – fiscal and financial support





# EBRD: RES Financing Mechanisms

## USELF



- USELF is structured to provide financing directly from the EBRD for small and medium projects with a simplified and rapid approval process, so reducing transaction costs.
- Advantages
  - Loans starting from €1 million
  - Reduced transaction costs
  - Longer term limited recourse finance
  - Technical assistance free of charge



# EBRD: Wind Farms Financed



	Project	Sponsor	EBRD Investment	Debt	Equity
Bulgaria	- St. Nikola 156 MW	- AES	- EUR 70 mln	✓	
	- Suvorovo 60 MW	- Grupo Enhol	- EUR 60 mln	✓	
Estonia	- Raisner OU 130 MW	- Iberdrola Renovables	- EUR 0.9 mln		✓
Hungary	- Wind farm portfolio	- Iberdrola Renovables	- EUR 50 mln		✓
Poland	- Tychowo 50 MW	- Global RPI	- EUR 30 mln (in PLN)	✓	
	- Wind farm portfolio	- Iberdrola Renovables	- EUR 75 mln (in PLN)		✓
Turkey	- Rotor 135 MW	- Zorlu Enerji	- EUR 45 mln	✓	
Regional	- Enercap RE Fund	- Various	- EUR 25 mln		✓
	- FreEnergy	- Nelja Energia	- EUR 19 mln		✓



# EBRD: Hydro Plants Financed



	Project	Sponsor	EBRD Investment	Debt	Equity
Bulgaria	- Vez Svoغه 26 MW	- Petrovilla	- EUR 47 mln	✓	
Russia	- Hydro OGK 10,000 MW	- RusHydro	- EUR 53 mln	✓	
Albania	- Power Sector Reconstruction 800 MW	- KESH	- EUR 30 mln	✓	
Georgia	- Okami and Lopota HPPs (3.5 MW)	- Various	- EUR 0.2 mln	✓	
Armenia	- 20 Various HPPs	- Various	- EUR 5 mln	✓	

# EBRD: Kazakhstan Renewable Energy Financing Framework



# Kazakhstan Renewable Energy Financing Framework (KazREFF)

- KazREFF preparation within CTF program:
  - CTF investment plan preparation for concessional co-financing started **in 2009** - approved in November 2010
  - TA programme (PPG) to establish a project pipeline and identify the main issues hindering industry growth is to be launched **in June 2011**
  - EBRD and CTF approval of first stage of \$100 m KazREFF planned for **end of 2011**



# Project Preparation Grant (PPG)

- To support the Government with any required amendments to primary legislation and the development of secondary legislation, in order to present a workable framework for the support of renewable energy development in Kazakhstan;
- To establish a firm pipeline of renewable energy projects which would be suitable to be financed under the facilities;
- To develop draft commercial agreements and suggested terms for these, which are necessary to enable projects to be connected to the grid and sell their electricity; and
- To identify the institutional measures necessary in order for required commercial agreements to be effectively entered into.



# KazREFF Concept

- Framework facility to provide limited recourse project finance to renewable energy projects in Kazakhstan
- Initial amount \$100m to provide up to 50% of total financing needs of projects up to \$10m
- Total project volume at least US\$200m with balance of financing to be provided by developer's equity (minimum 30% - \$60m) and up to 20% from the Clean Technology Fund (\$40m)
- Tenor up to 15 years, hard currency (\$), margin based on project assessment and market conditions
- Commercial banks will be encouraged and supported to participate as soon as possible
- Supported by up to \$5m grant from the CTF



# KazREFF: expected TA programmes

- Extensive technical assistance programmes funded by the CTF:
  - Project implementation support to developers
  - Regulatory support to MINT, KIRI, AREM, Ministry of Environmental Protection
  - Strategic Environmental Assessment





# Thank you!

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