

# **Working with EBRD on Renewable Energy: Experience and Opportunities**

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# EBRD – a largest financial investor in Ukraine

- International financial institution with highest investment rating (AAA)
- Focus on private sector - 75% of portfolio
- In Ukraine over €8 billion (320 projects) committed, including €1 billion in 2011
- “Sustainable Energy Initiative - Phase 3” – €4-6 billion in 2012-2014
- Strategy for Ukraine 2011-2014 – energy efficiency and renewable energy are key priorities of the EBRD
- Focus on renewable energy in Ukraine from 2007



# EBRD involvement in renewables

- Technical Assistance (TA) to the Government and the NERC:
  - Market and regulatory framework assessment, recommendations for the feed-in tariff primary legislation
  - Programme to assist the NERC with development of secondary legislation and workable framework for support of renewable energy development in Ukraine
- USELF – Ukraine Sustainable Energy Lending Facility – preparation started in 2008:
  - Global Environmental Facility grant of \$8.5m for TA component
  - Project preparation grant to establish projects pipeline
  - Clean Technology Fund concessional co-financing (€20m)
  - EBRD internal approval of €50m loan facility



# USELF Project Support Unit

- USELF was launched in October 2010 [www.uself.com.ua](http://www.uself.com.ua)
- Project Support Unit (Fichtner/Imepower) is fully operational with a project office in Kiev providing financial, commercial, legal, technical, and environmental advice to project developers
- Marketing strategy and Training needs assessment prepared
- 5 training workshops for project developers, local engineers and consultants (in total 200 participants)
- Developer's Manual for RE projects preparation is under way



# Regulatory assistance

- The main tasks include assistance to the NERC on:
  - Monitoring and reporting
  - Forecasting and Impact Assessment
  - Assessment and Possible Adaptation of Green Tariff Concept
  - Compensation mechanism for connection costs
  - Renewable Energy Operation in the New Electricity Market
  - Report on impacts assessment of the green tariff levels
  - Accreditation and Certification
- Capacity building activities - study tours, trainings, delivering ad-hoc advice and methodological materials



# Strategic Environmental Review

- Strategic Environmental Review focuses on wind, mini-hydro and solar technologies in selected areas of Ukraine
- SER report disclosed and available for public and expert community: [www.uself-ser.com](http://www.uself-ser.com)
- Public meetings and capacity building for local experts, authorities and developers: workshops in 3 regions of Ukraine
- SER will result in facilitating national EIA (OVOS) procedure for RE projects; preventing or mitigating potential negative environmental and social impacts of the RE projects; and tools for individual projects screening and due diligence
- Identification of potential environmental, social, economic, and technical constrains for RES projects in Ukraine (next slide)

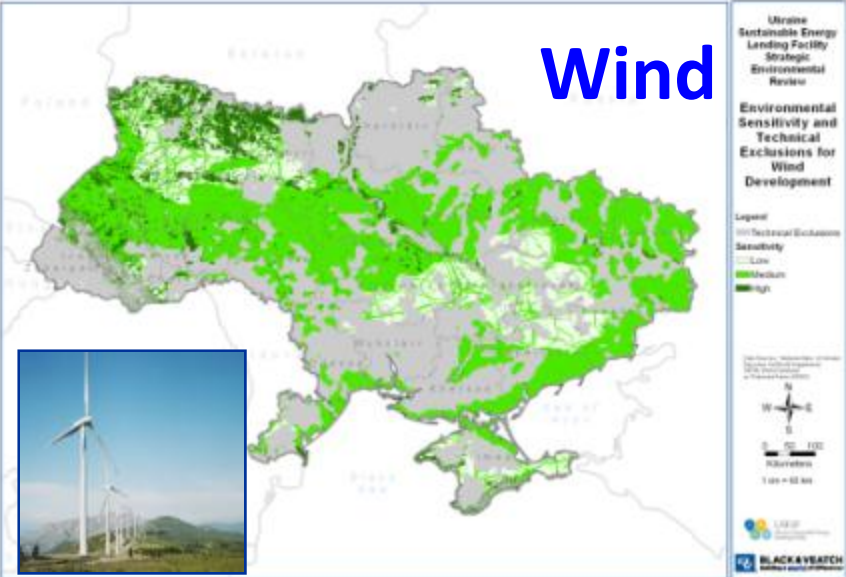




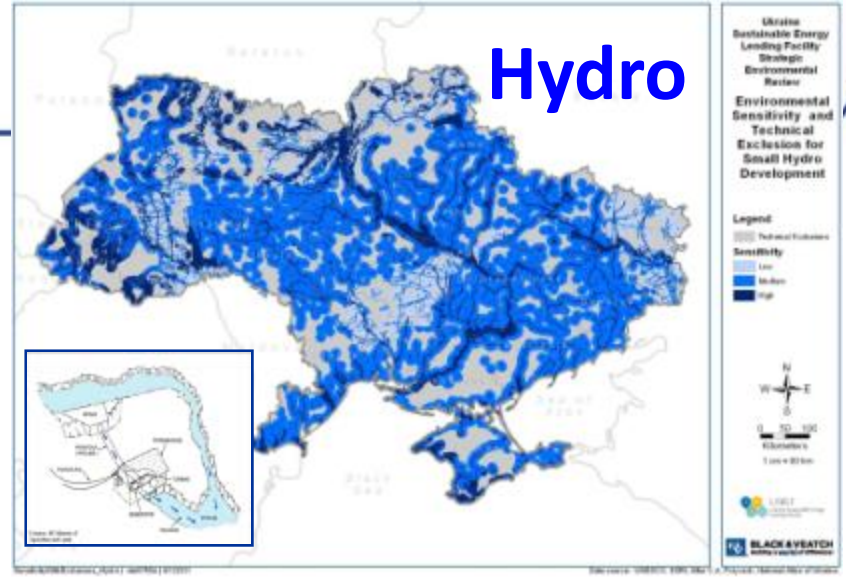
# Ukraine Sustainable Energy Lending Facility Strategic Environmental Review

## Стратегічний екологічний аналіз Програми фінансування альтернативної енергетики в Україні

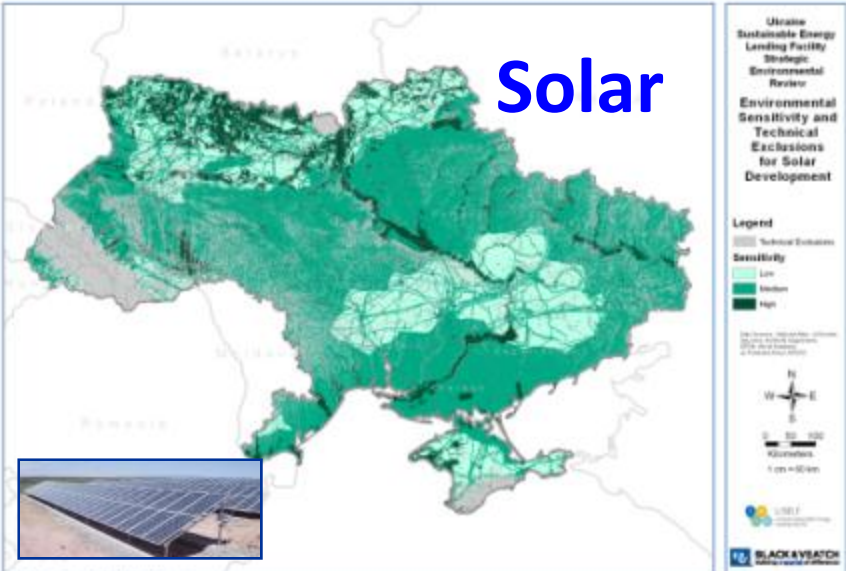
### Wind



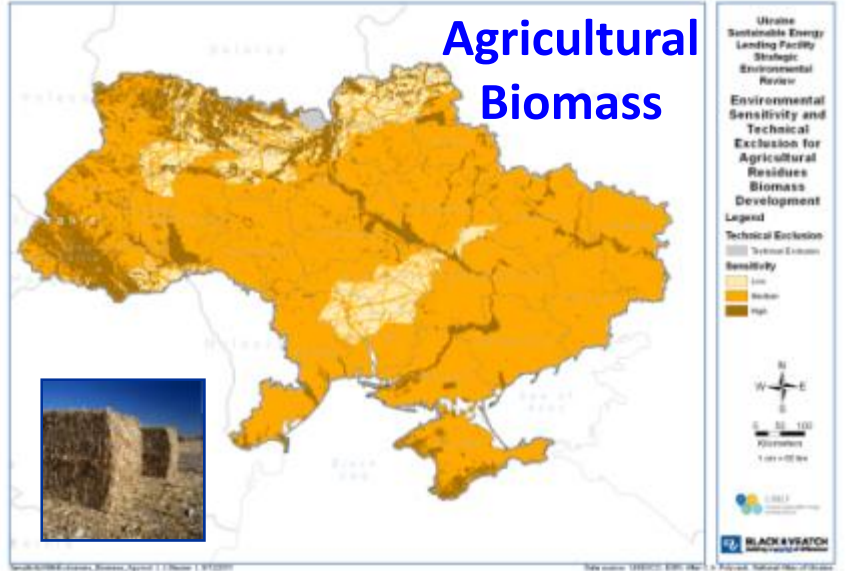
### Hydro



### Solar



### Agricultural Biomass



# What is USELF?

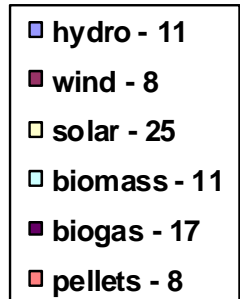
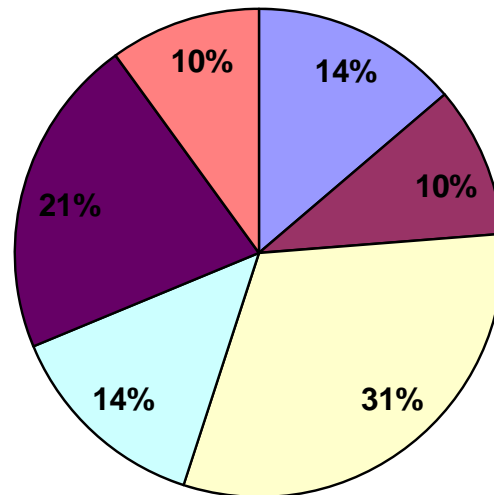
- Direct lending facility operated by the EBRD
- For small and medium-sized renewable energy projects
- EBRD can provide up to 40% of total project costs or max €10 million; CTF provides up to 20% and balance of financing to be provided by developer's equity (minimum 40%)
- Tenor up to 12 years, hard currency (€), margin based on project assessment and market conditions
- Expected number of projects – 8-12





# USELF sub-projects

- USELF received total 80 applications
- Out of them only 25-30 projects are feasible and most of them require substantial additional preparation work



# Projects approved and under preparation

- 2 projects are fully approved with signed loan agreements:
  - Eco-Optima Wind Farm (12.5MW) – €9.5m from EBRD and €3.8m from CTF
  - Porogi Solar Project (4.5MW) – €4.1m from EBRD and €1.6m from CTF
- 3 more projects under preparation in the EBRD
  - Ecoprod biogas (2.8MW) – waiting for biogas tariff
  - One small hydropower project
  - One solar power project
- 4 more good candidates at the screening stage :
  - 3 solar projects
  - 1 biomass project



# USELF: lessons learned

- Most projects have Ukrainian sponsors – only 2 are foreign investors
- Most developers have insufficient equity (<30%), financially weak and reluctant to look for an equity partner
- Many developers have limited resources for project preparation up to the required standards (wind measurement, feasibility studies, biomass availability assessment etc)
- Lack of experience working with the foreign banks and IFIs requires more time for project preparation
- Many good biogas and landfill gas projects are on hold waiting for the Green Tariff Law amendment (vetoed by President)
- Difficult process of land titles registration delays all other permits and project preparation
- Many regulatory issues such as local share content requirement, connection to the network, compensation for connection costs still remain key barriers



# Thank you!

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