



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 investment target 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 since 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:
 - 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
- 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

- 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 Operations in the New Electricity Market
 - Accreditation and Certification
- Capacity building activities - study tours, trainings, delivering ad-hoc advice and methodological materials for key stakeholders

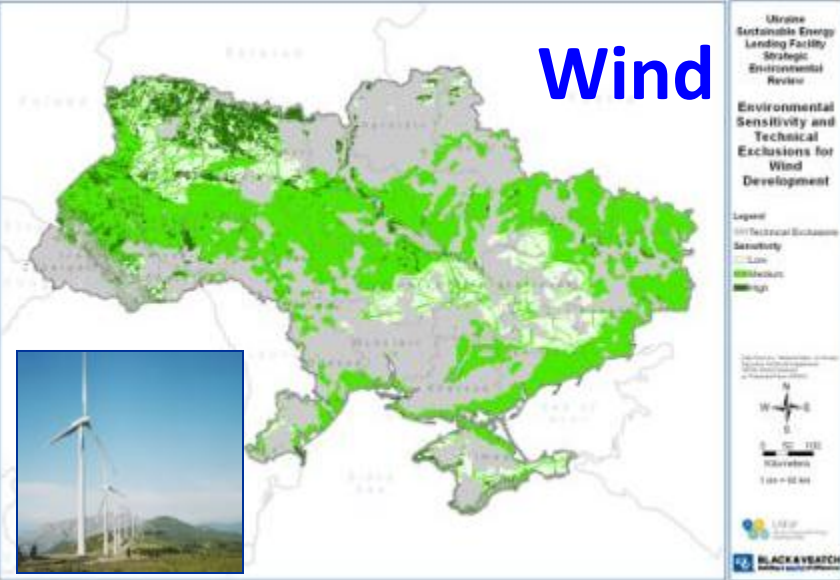


Strategic Environmental Review

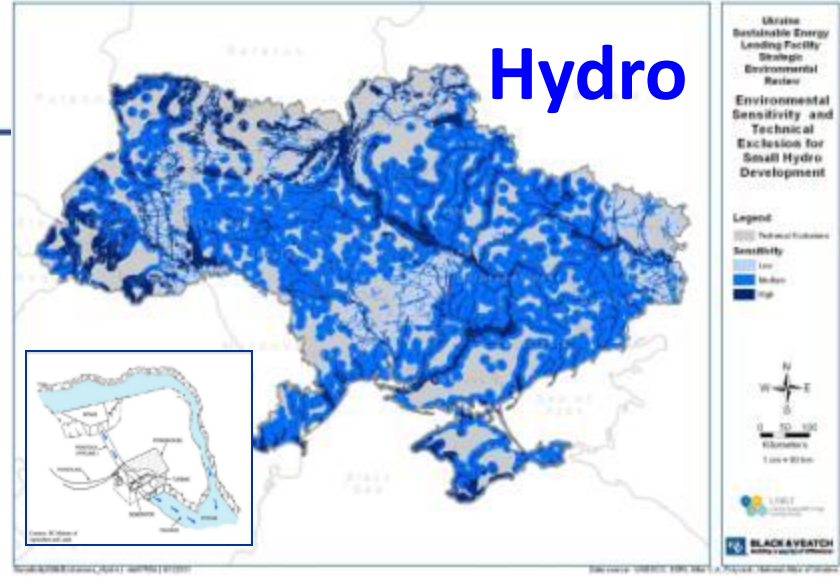
- Strategic Environmental Review focuses on wind, small hydro and solar technologies in selected areas of Ukraine
- SER report disclosed and available for public and expert community: www.uself-ser.com
- Public meetings and capacity building for local experts, authorities and developers: workshops in 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)



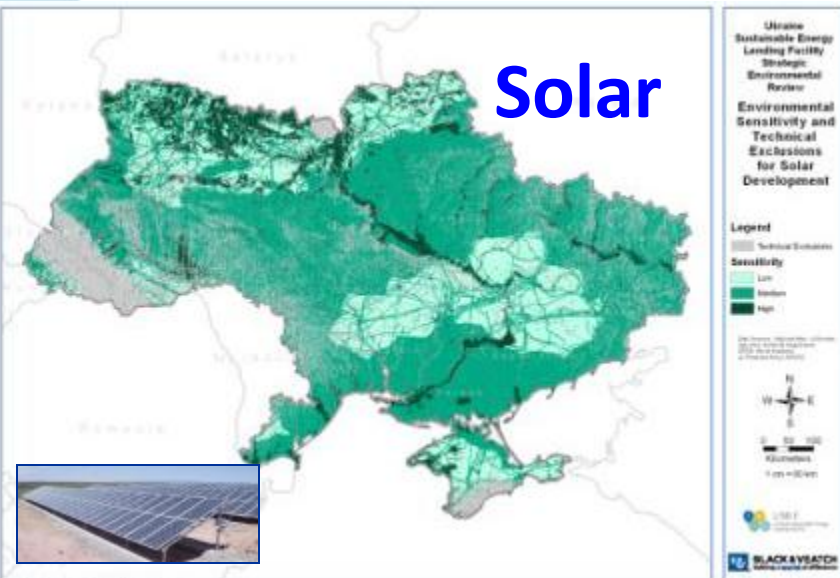
Wind



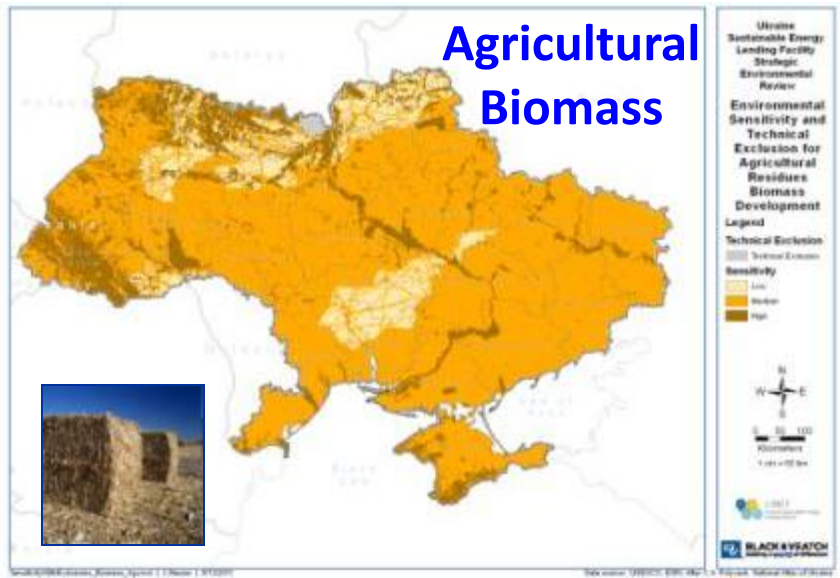
Hydro



Solar



Agricultural Biomass



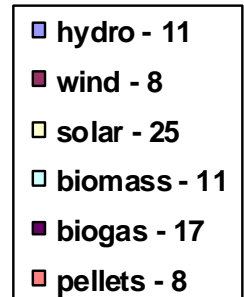
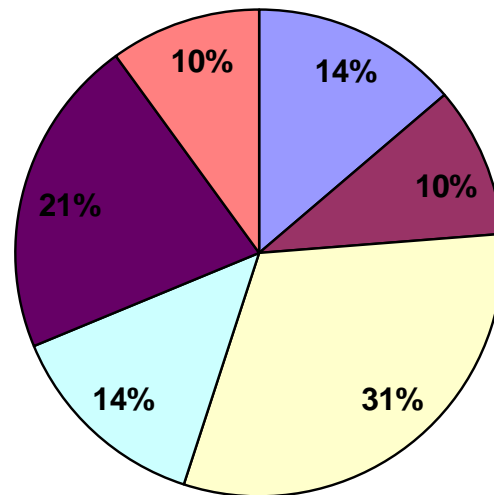
What is USELF?

- Direct lending facility operated by the EBRD with help of consultants
- For small and medium-sized renewable energy projects – wind, solar, small hydro, biogas, biomass (<10MW)
- EBRD can provide up to 40% of total project costs or max €10 million; CTF provides up to 20%; and balance 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/enquiries
- 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 a few are foreign investors
- Most developers have insufficient equity (<40%), 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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