

February 3, 2012

**European Bank for Reconstruction & Development (EBRD)
Clean Technology Fund (CTF) Private Sector Proposal**

**Ukraine Novoazovsk Wind Farm Project
Independent Review Letter**

1. Endorsement. I have reviewed the EBRD CTF private sector proposal for the Ukraine Novoazovsk Wind (the “Project”). On the basis of this review, I support and endorse this CTF proposal for the reasons summarized below. My review covers: overall strategy and justification for direct lending, summary project description and development status, project finance structure and use of CTF funds, and risks and conclusions.
2. Overall Strategy & Consistency with CTF Goals. Ukraine has a large but relatively underdeveloped potential for renewable energy (RE) including large wind resources. The CTF Investment Plan for Ukraine has established a target to increase non-hydro renewable energy power generation capacity from about 0.1 MW to 1.6 GW by 2020, mostly from wind.¹ These projects face significant barriers to financing due to lack of track-record in this market and lack of experience with RE project lending and lack of medium-to-long term funding resources amongst local financial institutions. The Project will make a significant contribution toward this goal. EBRD also operates, with CTF supplemental funding, its Ukraine Renewable Energy Direct Lending Facility (UREDLF) focused on support and financing for small scale RE projects. No technical assistance funding is requested for this Project; a small (€100,000) budget for knowledge management is requested from CTF with this Project to support development of knowledge, including lessons learned from this Project, and capacities of wind/RE project developers, industry and lenders in Ukraine.

Direct financing of large-scale private sector renewable energy projects is also a stated priority for the CTF to reduce risk and overall costs of investing in renewable in Ukraine, create access to long-term project financing, support initial commercial scale projects and demonstrate project financing methods which will build renewable energy project development capacities and aim to private sector investors and lenders.² This Project is too large for the UREDLF and of sufficient size to be treated on a stand-alone project finance basis. EBRD expects the Project will be the first large wind project in Ukraine financed on a non-recourse basis. EBRD will be the primary lender for the Project, but one external non-EBRD lender will participate. Thus, the Project will have important demonstration value for development of the renewable energy project finance business in Ukraine, consistent with CTF goals.

3. Summary Project Description and Project Development Status. The Project consists in expansion of existing newly constructed Novoazovskiy Wind Park located in the Donetsk oblast to 57.5 MW. The first phase of 25 MW has been operational since July, 2011 and was fully financed (40 million Euro) from the Project sponsor’s own funds via a shareholder loan. The construction of additional 32.5 MW will constitute the second phase of an existing wind farm. The strength and experience of the Project sponsor and existence of the first phase of the wind farm, already operational, are major factors which mitigate Project risks, including ability to successfully complete Project development. The EBRD team will conduct complete due diligence on the Project, including legal, technical, financial, procurement, environmental and insurance matters. EBRD’s due diligence will be supported by the outside legal counsel, independent lenders’ engineer, external environmental consultant and an

¹ Clean Technology Fund: Investment Plan for Ukraine, dated January 19, 2010 and adopted at Meeting of the CTF Trust Fund Committee, Manila, March 15, 2010, p.14

² *ibid*, pp 22-23.

insurance advisor. The current status of the Project development, covering main elements of wind project due diligence, is summarized as follows.

- The wind resource is well known due to the existing wind farm and data which has been collected for more than two years. The Project is being developed based on an independent feasibility study performed in 2010.
 - The power purchase agreement (PPA) will be completed on terms similar to those in effect for the first phase, which is at a tariff of 0.113 €/kWh. This is an energy-only tariff, appropriate for intermittent wind projects. The tariff and PPA terms are based on the new Ukraine Green Tariff law, adopted April, 2009. The tariff is indexed monthly to the Hrynvia/Euro exchange rate, mitigating foreign exchange risk. As with the first phase of the wind farm, the power purchaser is State Enterprise Energorynok, which is the government approved monopoly operator of the wholesale electricity market in Ukraine, 100% owned by the State. During the last 8 years payment performance rate on power purchase agreements by Energorynok has been close to 100% with no defaults. As per the law, purchase of all power produced at the Green Tariff rate and consistent within the supply/capacity limits of the PPA is guaranteed with full and timely payments by the Government of Ukraine until January, 2030.
 - The long-term site lease is secured. Interconnection authorization with the Donetskoblergo for 50 MW has been obtained; expansion to 57.5 MW is expected soon. Additional interconnection capacity is available, with currently ongoing upgrades to the nearest existing substation.
 - The same wind turbines (2.5 MW per unit) and supplier, Führländer GmbH, used for the first phase will be used for the second phase. Führländer will have an operations and maintenance contract for this Project for the loan maturity; this contract is being negotiated. A fixed rate per MW installed capacity is envisioned by future O&M contract. This arrangement stabilizes operating costs and reduces operating cost risks.
 - The Project sponsors are known to EBRD already as shareholders in an existing EBRD project. The sponsors have a strong commitment to wind energy project development in Ukraine and have an estimated 900 MW of new wind energy projects in their pipeline.³
 - Multiple contractors including local civil and electrical contractors together with Führländer are being used for construction of the wind farm. Führländer, the key contractor and turbine manufacturer, has been heavily involved during the design of the Project, as well, approving the site layout and providing installation management services and is committed corporately to the Ukrainian wind sector. The EBRD financing will disburse after construction is complete and accepted, so construction risk will be borne by the Project sponsors. The wind farm is expected to be fully operational by March 2012.
4. Financing Structure & Use of CTF Funds. EBRD direct lending is justified based on the large size of the Project and is consistent with CTF policies. There is a need for direct lending from the international development finance institutions due to lack of medium-to-long term financial resources available and lack of project finance expertise and credit appetite amongst local FIs.

³ The Sponsors are Mr. Maxim Yefimov and Mr. Sergei Bliznyuk. Mr. Yefimov and Mr. Bliznyuk own 99% of LLC Novoazovskiy Wind Park, a company incorporated under Ukrainian Law, through KME Air Green Energy while KUA Ukrmashinvest owns 1%. KUA Ukrmashinvest is 100% owned by Mr. Sergei Bliznyuk.

Total Project investment cost is estimated at €95.2 million (€1.65/MW). The Project financing plan calls for a 70/30 ratio of debt/equity in the Project sources of funds. The ability of Project sponsors to provide the necessary equity (€29 million) has been confirmed by EBRD. EBRD and CTF loans will constitute 51% of total Project sources of funds. CTF funds will be combined with EBRD's own funds to make a senior secured loan to the Project company, LLC Novoazovskiy Wind Park, as the borrower. A balance of senior loan financing (€17.4 million) will be arranged on parity with the EBRD loan; this additional senior loan remains already in place. The funding structure constitutes one of the demonstration values of this Project, contributing to overall development of the Ukrainian wind sector.

Security for the EBRD loan will be the typical project financing security including a first security interest in all Project assets, assignment of all the borrowers' Project contract rights and first pledge on Project revenues. The EBRD loan will be in Euro and interest rate pricing will be variable based on a spread over EURIBOR; final pricing will be negotiated following further due diligence. Fixed rate pricing will be explored. The CTF component of the EBRD loan could be priced on a fixed rate basis; this approach is recommended because (a) it is consistent with CTF investment methods, and (b) it will benefit the Project by providing greater certainty of debt service expenses and reduce risk exposure to future interest rate changes. EBRD will test the sensitivity of Project debt service coverage to changes in market interest rates as part of its Project financial analysis due diligence. The CTF financing request of €15.5 million represents 32% of EBRD's sources of funds. Thus, CTF funds are deployed on parity with EBRD funds. The lower rate on the concessionally priced CTF funds will be passed through to the borrower. The lower rate, extended term and grace period associated with CTF funds will improve Project economics, improve debt service coverage ratios and provide additional incentives to the Project sponsors.

5. Risks and Conclusions. This remains a moderate risk project because of the macro-economic conditions, country legal conditions and the early stage of the RE market development in Ukraine, risks which are well known to EBRD. EBRD has a deep and long track-record in Ukraine of developing and funding energy projects and working with the financial sector and promoting renewable energy policy framework and market development.

The building blocks of a successful project financing are in place. Main risks associated with power sales, creditworthiness of power purchaser, project sponsor capacities, wind resources, technology, and project construction and operations are well on the way to being addressed, allocated and mitigated. EBRD is requesting CTF financing commitments before the Project's development is complete. The risks associated with development completion also appear to be manageable and relatively low given that the Project's development is well advanced and the Project constitutes the second phase of an existing wind farm. This Project will have important demonstration values to develop the Ukrainian wind sector, consistent with CTF goals: it will be the first non-recourse wind project financing in Ukraine and engage new lenders in this market.

Respectfully submitted,



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