

March 14, 2012

**Comments from EBRD on the Approval by mail: Ukraine:
Novoazovsk Wind Project**

Dear Zhihong

Please find attached our responses to the questions received from the donors, and a slightly revised version of the proposal which corrects the two errors pointed out by Germany.

We look forward to hearing from you.

With kind regards

Andreas

EBRD CTF Project Proposal – Novozaovsk Wind Farm

Answers to questions raised by the CTF Trust Fund Committee Members

14 March 2012

Contact: Andreas Biermann – CTF Focal Point in the EBRD (biermana@ebrd.com)

Committee Member Questions:

U.S.A.

U.S. has no objections to this proposal. We have one question. The document says that the Client will be required to comply with EBRD procurement rules for public sector operations. My understanding is the client is private. Will the client differently than a regular EBRD private client?

EBRD

This is a typo. The client will not have to comply with these procurement rules.

Germany

Germany welcomes this proposal, in principle. It provides for the construction of 32.5 MW – the second phase of a wind park with total capacity of 57.5 MW – in South-East Ukraine. The Project is located in Donetsk oblast adjacent to an existing state owned Wind Park. Ukraine has been dubbed “the Saudi Arabia in renewable energies”, in terms of its vast underutilized potential. This is true especially for non-hydro renewables, for which the Government has established a target of 1.6 GW capacity to be installed by 2020. This would be up from 96 MW as of January 2011 representing 0.2% of the installed capacity in Ukraine. The project is the first large wind project in Ukraine implemented with substantial private engagement and with funding from EBRD (33.3 million EUR).

The proposal, however, leaves unaddressed a number of serious constraints stemming from the regulatory framework in Ukraine which inhibit the development particularly of wind power plants by private entrepreneurs. This refers specifically to the very restrictive Land Zoning Law, the intricate process of having granted a construction permit and the strings of local procurement attached to the Green Tariff. While these apparently do not play a role in the present project, except potentially for ICB under Green Tariff regulations, they do so for ordinary investors not benefiting from EBRD/CTF involvement. The constraints are well known to the commercial banks providing a disincentive to providing long term loans. Therefore, the character of a pilot project triggering further loans and private activity should be deemphasized. Instead, technical assistance should be provided in addressing the regulatory constraints.

EBRD

The proposed project is part of a significant effort by the EBRD to transform the sector, which has been under way for several years already. Technical assistance to the regulator is continued by EBRD under a GEF Project, which also supports the CTF-financed USELF Renewable Energy Direct Lending Facility, for smaller projects.

Despite the barriers, we believe that this transaction will be a landmark due to its financial structure and would trigger further renewable projects. Despite some barriers, the EBRD has a strong pipeline of future projects, of which Novozaovsk is the leader.

Germany

These aspects (land zoning law and local procurement rules) should be addressed more thoroughly and presented with approaches by the government of the Ukraine to change these framework circumstances in a way the project can develop its full potential as a pilot project. It is questionable whether the objectives for local content can be reached in 2013 and 2014 and if this would not constitute a potential bottleneck for swift project implementation and further development of the wind market in the Ukraine.

EBRD

We agree with the need for further improvements to the regulatory and legal frameworks, and have begun to develop a technical assistance programme to address these matters.

Germany

Otherwise, the proposal is generally in line with the CTF investment criteria and would justify the use of low-cost funds from the CTF.

Core information on the financing terms (range of interest rate) is missing.

EBRD

Due to the public nature of this proposal and client confidentiality requirements, it is not possible to make the range of interest rate for either EBRD or CTF public. We can share this with those members of the Committee who signed an NDA with us.

Germany

Comments on the Project Proposal

Technically, the concept appears useful and supportable. The Project will help complete the 57.5 MW Novozaovski Wind Park, out of which phase I of 25 MW has been fully financed by the project developer's own funds and which has been operational since July 2011. Under the project, 32.5 MW of capacity will be added to this wind park. The project is in line with the Government's plans to promote the increasing use of renewable energies, even though the Government itself doubts whether the target of installing capacities of 1,600 MW by 2020 can be reached.

The structural impact of the project seems to be greatly overstated, though:

This is not a pilot project. For "ordinary" investors, not benefitting from CTF/EBRD involvement, there are formidable hindrances in the regulatory system prevailing in Ukraine: E.g., only land belonging to the state and designated as "land on energy use" may be used. Use of private property with agricultural designation, in contrast, is prohibited. Further complications arise from the intricate process of obtaining a construction permit.

EBRD

Private developers are allowed to enter into long-term land lease agreements and where appropriate to change status of land designation. However, the procedure is difficult and brings extra risks to project development. We are looking into the possibility to offer technical assistance to address this.

Germany

The Banks are aware of this constraint and reluctant to lend to private entrepreneurs. N.B: This is the first private out six Wind Power schemes (the others are sponsored by the state).

EBRD

The private nature of this proposal is what makes it a landmark in our view.

Germany

As mentioned in the Proposal, to be eligible for the Green Tariff, from January 2013 onwards, the Ukrainian proportion of raw materials, supplies, fixed assets, works and services in the total construction cost of a renewable generating facility should be at least 30%. From January 2014 onwards, this proportion will be raised to at least 50%. This raises the question of procurement. ICB is hardly possible under this constraint. Even if project completion is earlier, private entrepreneurs will definitely be affected.

EBRD

EBRD is in discussion with the government on this matter, and prepared to offer technical assistance to address it.

Germany

Technical discrepancies: Programme Indicators` on p.8 (Other emissions avoided by the programme). 69t NOx instead of 69kt NOx

EBRD

Thank you for catching this. We have corrected the error.

Germany

It is, therefore, recommended

- to scale down the level of expectation of this Project, and
- to provide funds for technical assistance to address the mentioned, deep rooted, structural deficiencies.

EBRD

On point 1, we never intended to give the impression that this one project would address all the issues in the market. It needs to be seen in the context of other activities outlined above, which include technical assistance to government authorities, and investments.

On point 2, this is in early stages of development. We normally proceed with policy dialogue and investment operations in parallel, where possible, to enhance the impact of the operations.

Germany*Comments on the Financing Terms*

The intended terms of the CTF loan are unclear in the proposal: There seems to be a contradiction in the respective paragraph, which on the one hand lays out that “CTF loans are expected to have an identical maturity of up to 14 years, with grace on the principal up to 1 years”, but in the following table summarises a 20 year tenor with 5 years grace period.

EBRD

Thank you for catching this. 20 year with 5 years grace on the principal repayments is correct, and we have corrected the error.

Germany*Comments on the Financing Terms*

In addition, the range of financing terms, particularly the range of interest for the CTF loan, is not mentioned. This core information should be provided.

EBRD

Due to the public nature of this proposal and client confidentiality requirements, it is not possible to make the range of interest rate for either EBRD or CTF public. We can share this with those members of the Committee who signed an NDA with us.

Germany*On Cost-Effectiveness:*

The cost of each ton of CO₂ saved related to the CTF support (EUR 15.5m) has been calculated at approximately 7.3 EUR or 0.13 tCO_{2e}/EUR invested from CTF resources. These figures cannot be verified but seem to indicate, if correct, a very high cost-effectiveness.

EBRD

This is due to the relatively restricted share of CTF funding (maximum 20% of a project, in this case 16%), and the high CO2 content in Ukraine's electricity mix.

Germany*Implementation Potential:*

EBRD conducts a due diligence regarding environmental impact and, among others, the legal and financial aspects. It should focus on the mentioned weaknesses in the regulatory framework and ways to overcome them, in the longer term. Special attention should be given to the sponsors' limited experience in wind power which is "a new line of business for them, which they started two years ago". Even though an integrity analysis has been conducted by EBRD: what are the specific risks associated with the lack of experience? Very little is mentioned about the sponsors, but experience in Ukraine suggests that they are close to the Government.

EBRD

The integrity analysis focuses on the sponsor's links to government, general standing, etc. EBRD is conducting very stringent integrity checks, and the sponsors have passed these with no red flags being raised.

A separate risk analysis looks at the sponsor's implementation capacity. This has shown that despite the limited experience, the sponsors will be able to undertake the project without technical assistance.

United Kingdom**EBRD – General Comment**

Concessionality - it is important to note that this project is likely to see very limited concessionality in terms of cost of funding. The loan is likely to be very profitable to the Clean Technology Fund, and the concessionality is rather (i) the availability of the loan in a constrained funding environment, and (ii) the tenor of the loan, which is matched to the project lifetime, reducing the need for re-financing. This needs to be kept in mind when considering the responses below.

UK

The proposal does not make a convincing case for the use of CTF funding. If anything, it suggests that a large wind farm sector is already gathering momentum independently of the need for concessional funding. This is evidenced by the fact that the first phase of the project was financed through a shareholders loan by the investor as well as the pipeline of wind projects.

EBRD

A pipeline is not the same as a list of viable projects. Novoazovsk Wind Project is the single most advanced large wind farm project in Ukraine. Its construction has proceeded due to involvement of expensive short-term lending. Initial results of financial due diligence of the EBRD demonstrate that

without long-term financial support from CTF, the project would not be able to cope with its liabilities in case of pessimistic wind speed scenario. The long-term finance to be provided to this project is expected to be crucial in establishing the ability of the project sponsor to continue to work through the pipeline. Without part of the shareholder loan and a part of short-term bridge funding being converted to commercial debt finance, it is unlikely that the sponsor will have the long-term financial resources to continue to work on the pipeline. The CTF loan therefore plays a critical role in enabling the sponsor to move forward with their intentions in developing wind power in Ukraine.

UK

The CTF portion of the finance is modest and is only 16% of the project costs. The proposal does mention that CTF funding is required to cover the gap due to limited availability of long-term commercial lending. However, this doesn't square with extensive pipeline of projects.

EBRD

We do not understand this concern. CTF contribution of 16% for project funding is crucial in terms of long-term funding support for this project and is not modest in this context. Regarding the pipeline, it would never materialise unless the Sponsor is able to attract the long-term funding support to enable investment of sponsor equity in the future projects.

UK

The total of wind projects in preparation includes 8 projects from companies that have already concluded connection contracts for over 4GW out of a total of some 7GW in the pipeline (see Annex A). This seems to indicate both a confidence in the market and the prospect of an adequate return from the perspective of investors and entrepreneurs. None of these appear to be reliant on concessional finance.

EBRD

This is not a correct interpretation of the situation. We should clarify the text of the ANNEX A that the connection documentation available for 4GW of wind project is processed in a form of Technical Conditions issuance for future connection to the grid. Availability of these documents can't be used as an indicator for the viability of a project, since in Ukraine they come quite early in the project cycle, are not expensive to conclude, and do not represent the final contracts for grid connection. The actual development of the projects will ultimately depend on the availability of other important project components, including funding availability for further project development as well as for project implementation. The fact that so few projects are going forward shows that there is a need for additional finance to bridge the equity gap, and to provide longer-term tenors not available in the market.

UK

It is not clear why the Due Diligence will be conducted at this stage of the project, rather than having been done already. We would have expected these to have been completed already, prior to the finance being raised.

EBRD

We are following the normal EBRD project cycle in this regard, and try to move in parallel as much as possible in order to achieve the donor requirement for speeding up disbursement. Currently, the project is undergoing EBRD due diligence. Availability of CTF finance is a key element in the project bankability, and we can not move ahead in engaging with the sponsor more closely without the confirmation of funding.

UK

It appears that this project is going to be claiming Joint Implementation Credits and is waiting for these to be approved. Please can you ask EBRD what the project sponsor intends to do with these credits as, like CDM, selling these for compliance will result in net zero direct GHG savings. The CTF investment criteria suggest that projects that would be normally funded by CDM carbon credits will not normally be funded by CTF. We imagine the same logic should apply to JI projects as well although this isn't specifically mentioned in the CTF investment criteria.

EBRD

There are two key issues raised by the point on JI.

Environmental Integrity

The key consideration here is about the actual concessionality of the CTF finance, which, as explained above, is practically zero in financial terms. This means that there will not be double-funding, since the value of the CTF contribution is not in the concessional interest rate, but rather in the tenor, and indeed in its availability.

Furthermore, CTF is an input to the financing of the project, whereas Joint-Implementation relates to carbon credits that are being generated on the basis of the project's electricity generation, and are therefore not directly related. CTF serves a different role in this project; it is not buying down cost, but rather making available finance, so the focus here is on assisting the project's realisation. The JI carbon credits will encourage the long term sustainability of envisaged projects by accessing more markets than the electricity market as such.

We also note that unlike CDM, JI does reduce greenhouse gas emissions even if they are sold, as these JI credits in Ukraine are subject to the national Kyoto cap, whereas CDM does not have such feature (taking place in countries without a cap). To clarify by exporting a JI credit Ukraine is lowering its cap by one credit. The transfers and related double entry bookkeeping is similar to the transfer of EU allowances in the EU Emissions Trading Scheme. So JI should be preferred above CDM, from an environmental integrity point of view, and the two should not be treated as analogous.

Regulatory and Market Uncertainty

We note that there is considerable regulatory uncertainty regarding JI in Ukraine, only recently (9 March 2012) Ukraine resumed full eligibility under the Kyoto Protocol after 5 months of suspension. Like other countries with an emissions cap, Ukraine is subject to a strict emissions inventory review by the UNFCCC, which again underlines the environmental integrity rigor of JI over

CDM.

Furthermore, the value of Ukrainian JI ERUs post 2012 will remain uncertain, and even at present, their value is quite low, given the depressed prices in the EU ETS, the main market for such carbon credits.¹ Assuming carbon credit values remain unchanged after 2012, a project the size of Novozaovsk (about 100,000 carbon credits a year), is estimated to between EUR 0.2 million and 0.5 million a year before any transaction cost.

In light of mentioned market and regulatory uncertainties they should not be considered in the project finance as a bankable cash flow. Still EBRD supports very much the development of projects that contribute to a JI development, as these market based approaches assist in the long term sustainable development by rewarding emission reductions that have been realised.

¹ See e.g.

<http://www.mondaq.com/unitedstates/x/152736/Climate+Change/Three+Central+And+Eastern+European+Countries+Suspended+From+Kyoto+Protocol+Carbon+Trading> for some detail on the situation.