# World Bank Response to the TFC—Approval by mail: Ukraine: District Heating Energy Efficiency - IBRD (CTF) - extension of deadline

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	World Bank's team response
USA	thanks
The United States strongly supports the objectives of this project which has been developed in close coordination with USAID programs in Ukraine. Rehabilitation of district heating systems will have a direct impact on Ukrainian municipalities and households. In particular, we appreciate the use of CTF resources for metering. This will enable consumption-based billing which will help consumers be more aware of their consumption habits – an important step towards reducing residential energy intensity.	
Abby Demopulos U.S. Treasury	
Germany  But as the analysis provided in part I. of the proposal seems very realistic, and especially taking the current political situation into account, this needs to be carefully considered before approving CTF funding for the project.	Thank you very much for commending the team on well-designed and thought through project. The project will directly benefit many ordinary Ukrainians. It would improve efficiency, reliability and quality of service of 10 DH companies that cover about 30% of Ukrainian heat market. Because of installation of building-level heat substations and building-level heat
GoU is in charge of approving / setting the tariffs for DH / gas supplied to DH utilities.	meters, the transparency and governance of the sector would improve. Moreover,

promoting consumption-based billing, the

efficiency. Since the project would improve

the quality of the services, it would help

reduce social tension in the long run.

project would provide incentives to

households to improve their energy

If one follows the recent GoU statements

recovering tariff will be achieved by 2017.

It would have to start gradually in 2014 -

well before the election. This is the key

on a possible gas price hike for residential, it appears extremely unlikely that a cost

point deciding on success / failure of the entire project and IBRD is right in qualifying the risk as "substantial" itself.

We are convinced that the investments will improve physically the energy efficiency of the DH utilities. But given the CTF criteria, especially transformational impact, demonstration effects etc. - and such indicators will crucially depend on GoU willingness and ability to raise tariffs -, this does not appear to be sufficient for project approval. If the communal DH companies are not provided with the opportunity to service their debt achieving the results of the project is highly questionable.

As a consequence, we do not feel comfortable to give our go ahead to the project at present.

We would suggest instead that further discussions/consideration are required: these could possibly entail the question of postponement of the project until a reasonably stable political situation would make the necessary regulatory decisions more likely, possibly triggers for tabling the project proposal again, incentives and phasing, appropriate risk mitigation instruments etc.

We would welcome a conference call after the holiday season to discuss all this.

Warm regards Annette

#### UK

# <u>Implementation Potential</u>

Please can you set out what (if any) measures will be taken to protect the poor as heating charges rise? How will these measures be implemented?

This project will be implemented locally, in 10 different municipalities. Because of the local level of implementation, the project would not be directly impacted by the current political situation. The participating companies and municipalities demonstrated high level of commitment to the project. The participating companies have already established project implementation arrangements; all the necessary documents have been disclosed and the process of public consultations of those is ongoing. The companies participate in the training on the Bank procedures and have been extremely correlative during the preparation of the feasibility studies.

The project by itself is not enough to push tariff reforms forward -- in order to facilitate the necessary energy pricing reforms, the Bank jointly the IMF and other donors is having an ongoing policy dialogue with the Government. However, the project would create conducive environment for tariff increases in 10 municipalities. The project legal agreements will include a so-called "break-even covenant" that requires participating companies to generate revenues equal or higher than their operating costs (including debt service) within 3 years after the project commencement.

We suggest having a conference call on January 9th to discuss the way forward.

The immediate effect of increasing heating tariffs to current financial cost recovery levels could be mitigated through using existing Housing and Utility Subsidy /HUS/ program. HUS program provides monthly non-cash transfers based on the percentage of household income spent on housing and utility expenditures. According

to the analysis done by the Bank, HUS could soften the initial effect of heating tariff increases: with HUS program, the share of income that a household in the poorest quintile (that uses both heat and gas) pays for utilities and housing would increase by 0.7 % (from 7.1% to 7.8 %), while without HUS this share would increase by 1.3% (from 8.2 to 9.5%). To have this mitigation effect, the cost of HUS program would have to increase substantially. However, increasing district heating tariffs to financial cost recovery levels would generate savings to the budget because direct subsidies to DH companies would not be needed; these funds could be used to cover increased needs of the HUS program. Despite being able to soften the impact of tariff increases immediately, in its current form and design HUS will not cover all of the poor. HUS should be reformed to improve its targeting and efficiency.

The additional protection to the poor could come from expanding GMI program. GMI is a means-tested program for low-income families. Over 2007-2012, the share of GMI benefits reaching the poorest quintile (targeting accuracy) has fluctuated between 72 and 81 percent. However, GMI remains a very small program in terms of coverage. The Government of Ukraine is considering expanding the GMI program so that it increases its coverage from 0.3 to over 1.5 million households between 2012 and 2019. The World Bank working with the Government to help them with implementation of this reform through its Social Safety Nets Modernization Project currently under preparation (expected Board date is June 2014). However, more drastic reforms of social assistance are necessary in order to protect the Ukrainian poor from the tariff increases. The Bank is continuing its

dialogue with the Government on more drastic social protection reforms needed.

Improving efficiency of district heating systems in participating companies and transforming them from supply- to demand-driven would generate significant savings in operating costs for the participating companies, thus potentially decreasing cost-recovery residential heating tariffs in medium-term.

The team will add an annex of the tariff reforms, their impact and mitigation measures to the PAD.

Apart from service surveys what ongoing action will be taken to engage with consumers, monitor their reactions to the new systems and adapt the customer service accordingly? Will the customers have access to official complaints procedures if they fail to come to a resolution within the provider's own processes? What are they doing to ensure billing is transparent to customers?

As it is mentioned in the PAD, all participating district heating companies have a good understanding of the importance of proper management of their relations with their customers, both institutional and individual. Every company has at least one telephone number functioning 24/7 to dispatch service to cope with physical break-downs and to register grievances. In all cases, calls to the dispatcher's line are registered and analyzed; analysis of the calls forms the basis for planning works, coordinating with municipal services, etc. All companies have an information line for users to get information on any or at least some aspects of customer relations. The capacity-building component of the project will therefore include training to build DH companies' capacity to: (i) understand and react to customers' concerns based on user satisfaction surveys; and (ii) hold meaningful public consultations and engage with CSOs and citizen groups. Specific support will be provided to the selected DH companies to develop websites to proactively share information and reinforce customer relations.

Because of the selection process design,

participating district heating companies have better governance and transparency structures. All of them have gas meters at boiler houses, almost all of which have heat production meters: those boiler houses that do not have meters are expected to get them by the end of the 2013-2014 heating season. Most commercial consumers of the participating companies are metered. Each participating company already bills a share of its residential consumption according to building-level heat meters (e.g., Miskteplovodenerhiya (Kamyanets-Podilskyi) 76%; Ivano-Frankivskteplokomunenerho (Ivano-Frankivsk) 85%; Kharkivski teplovi merezhi (Kharkiv) 25%; Vinnytsiamiskteploenerho (Vinnytsia) 46% etc). In order to ensure increased transparency of billing, each participating company will install buildinglevel heat meters as a part of their investment programs financed by the Project. Kharkivski teplovi merezhi (Kharkiv), the biggest company participating in the Project, will install the largest number of building-level heat meters (1,300 units).

Will consumers receive any education regarding how to use their new heating controls?

Installation of building-level meter per se will not give the residents control of their heat consumption. Installation of individual heat substations together with the building-level heat meters, as suggested by the project, would allow the building to consume heat according to a pre-set thermostat on a substation.

Installation of individual heat substations and building-level heat meters is a technical pre-requisite for installation of the apartment level control device. Because of the way most of the older Ukrainian buildings are built, it is impossible to install an apartment-level meter. The metering and control devices are to be installed on

every radiator in the apartment. These radiator-level devices are to be installed after the building-level meters are installed. In ECA experience, households receive most of the benefits from installation of individual heat substations and building-level heat meters. Radiator valves (e.g., controls on each radiator in each apartment) bring additional 5-10% of savings to households and have long payback period (15-17 years). Usually, the latter are installed by the residents or housing associations (condominiums) themselves and not by district heating companies, since radiator valves are located in the apartments and are the property of the apartment owners, not companies. Hence these investments cannot be included in tariffs. Individual heat substations and building level are a prerequisite for any apartment-level heat metering and regulation. In other ECA countries residents then either install individual devices or adopt other heat allocation and consumption control measures.

Public consultations held by the Bank in 2011 showed that installation of a building-level heat meter is important to the consumers: they want to connect their heat consumption to their bill. When consumers know exactly what they are paying for, they would start implementing energy efficiency measures.

Dissemination of information about building-level heat substations will be a part of the communications campaign in each participating municipality. The communication strategies are currently being developed with the support of the CTF project preparation grant.

## **Transformational Change**

The proposal does not make clear how

The Technical Assistance component will include sector-side learning events; the team will make it clear in the PAD. The

capacity can be improved in the other weaker DH operators (who arguably require it more). There only appears to be lesson learning component between the 10 DH companies included in the programme. How will the programme ensure that the lessons are shared and capacities of the district heating companies that aren't included in the proposal will be built to ensure that the transformational potential of this project can be realised?

team is also working with USAID to facilitate capacity building and knowledge-sharing between different district heating companies in the sector as a part of USAID's energy project that commenced in October 2013.

Moreover, as a part of the SIDA-WB technical assistance and USAID technical assistance to the regulator, there will be trainings to all the district heating in the sector. These trainings would provide a good platform to share the Project experience as well.

### **Cost effectiveness calculation**

This calculation is not in line with the what had been asked of the MDBs at the recent Trust Fund Committee meetings. Please can you provide a reference to marginal abatement cost, either a credible source that suggests it is below \$100/t CO2e or is the IBRD able to conduct the relevant analysis itself?

According to the CTF committee decision from October 2013 meeting " A threshold for CTF eligibility may be established at the marginal abatement cost of USD 200 per ton of CO2-equivalent reduced. Since the technologies supported by the CTF are typically far below that threshold, it is suggested that instead of requiring every project/program to undertake marginal abatement cost analysis, the country is requested to provide information on the estimated marginal abatement cost only for projects/programs for which the marginal abatement cost is likely to exceed USD 100 per ton of CO2equivalent. "

Since the cost of reducing a ton of CO2 the project cost effectiveness- is \$9, one can assume that MAC, which is calculated as net incremental cost of reducing CO2, is less than \$9.

#### Risk

As the DH implementers do not have any experience with working with WB and would need substantial training, what mechanisms are being put in place to ensure any risks of fraud or corruption will be mitigated?

The line ministry, Ministry of Regional Development, Construction, Housing and Communal Services, is managing several IFI-funded projects and is familiar with IFI monitoring requirements. Participating companies will get necessary training and support by the Bank team. The first 2 trainings took place on October 15 and 31, 2013. The next in-depth training will take place in late January -early February 2014. Headquarters- and field-based staff will

closely supervise the Central Project
Management Unit at the line Ministry and
local Project Implementation Units (PIUs)
to ensure proper implementation,
coordination and governance. Moreover,
the Bank is working closely with USAID to
secure necessary implementation support
for the local PIUs to help them to prepare
bidding documents and conduct
procurement acconfing to eth WOrld Bank
rules.

The procurement will be done according to the World Bank guidelines. The following agreed procurement mitigation measures will be completed by loan effectiveness to ensure the timely launch of procurement procedures: (i) the project operational manual (POM) will be prepared by the Central Project Management Unit and approved by each participating company. Its procurement section will provide, in particular, for delegation of approval authorities; internal guidelines for recordkeeping of procurement documents; anticorruption guidelines and provisions related to disclosure of conflicts of interest: and a code of ethics for the evaluation committee members. It will also outline the arrangements for close collaboration between procurement and FM specialists on planning expenditures, the responsibilities of the companies' technical experts in preparation of the technical requirements of the bidding documents, evaluation of bids and acceptance of the goods and works; and (ii) the bidding documents for at least the first six months of project implementation will be prepared by each company. The following agreed mitigation measures will be carried