

October 28, 2011

**Comments from Germany on Approval by mail: Kazakh Railways:
Sustainable Energy Program**

Dear Patricia,

as discussed pls find attached our comments on the KAZ project proposal. We went through them very constructively with EBRD and are confident to find a mutually acceptable solution. EBRD is currently working on a revised version and will send this for distribution to the CIFadmin unit today - deadline could be Monday 31. October 2011.

All the best

Dr. Annette Windmeisser
Klimapolitik und Klimafinanzierung
Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung

Statement regarding the application for Clean Technology Fund (CTF)

Kazakh Railways: Sustainable Energy Programme

Climate Policy and Climate Financing
Federal Ministry for Economic Cooperation and Development

The CTF project “Kazakh Railways: Sustainable energy programme” (KZE) with investments of US\$ 15.262 million is part of an energy efficiency and renewable energy investment program (US\$ 200 million). The KZE programme aims to switch from outdated coal boilers and stoves to ground source heat pumps and solar collectors. This refurbishment should take place in 600 Kazakh railway stations.

Evaluation by GIZ Sector Programme “Technology Cooperation in the Energy Sector”:

The project proposal is not convincing from technical and methodical view. Due to the high relevance of energy efficiency (EE) in the building sector it is asked for a revised proposal. Delimitation and embedding in the \$US200 energy efficiency and renewable energy investment program are not evident. In particular the technology aspects should be reviewed. Also a clear classification between funding and activity areas should be done.

Technology

- Switching from coal boiler/stoves to ground source heat pumps and solar collectors is not possible just like that. The heat demand of an existing building can't be covered by heat pumps without extensive modernisation measures in the whole building.
 - One-sided consideration, because a building is to be understood as an overall system (building fabric, systems engineering, user). If only one part (here installation engineering/heating) is considered and optimised, other parts with high saving potential e.g. thermal insulation remain unconsidered.
 - The use of the solar collectors (space or water heating) is not described.
- Please note, for 100 % generated heat from a heat pump, about 30% are electricity current input (drivers, compressor, etc.). Depending on the energy demand the electricity current can rise up to 100 %. We are not sure, that ground source heat pump is the right technology for Kazakhstan. But it is no 100% renewable, if the electricity current is provided by fossil fuels.

Participation:

- Integration of the target group and also who the target group will be is not described.

Indicators

- Allocation of the indicators seems extremely doubtful. Anticipated GHG reduction are enclosed, however, no Baseline data are available. The achievement of these indicators is very unsafe.

Developing orientation

- It is unclear how to create about 150 new jobs without capacity building measures.
- The project supports only a very specific EE-technology (ground source heat pumps). A broader approach to promote energy efficiency in buildings in general would correspond rather to the German understanding of development cooperation.
- All planned activity fields are only on micro-level (technology demonstration). It should be reviewed whether activities on macro (policy) level regarding to energy efficiency achieves a bigger impact (e.g. developing of energy efficiency standards, roadmaps, etc.)
- Imbedding of energy efficiency measures in the building sector in a renewable energy programme is not coherent.

Harmonization

- Delimitation between other programmes and components is not evident clear.
 - Energy Efficiency and Renewable Energy investment Program (US\$ 200 million).

- „larger corporate EE loan to KZE“ (page 4, last paragraph)
- Technical Assistance Component, 450.000US\$ Bilateral (paragraph 2 page 5)

Provided documents:

- (1) CTF PRIVATE SECTOR PROPOSAL (*CTF Kazakh Railways Submission to TFC Final 290911.doc*)
- (2) Kazakhstan Railways: Sustainable Energy Programme: Independent Review Letter, September 26. 2011 (*EBRD CTF Kazakh Railways Project MacLean Review Letter Sep 26 2011 FINAL.pdf*)