Sustainable Energy Scale-Up

Basic Information

GEF ID
10152

Countries
Belarus

Project Title
Sustainable Energy Scale-Up

GEF Agency(ies)
World Bank

Agency ID
World Bank: P165651

GEF Focal Area(s)
Climate Change

Program Manager
Ming Yang
PIF

art I – Project Information

Focal area elements

1. Is the project/program aligned with the relevant GEF focal area elements in Table A, as defined by the GEF 7 Programming Directions?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY
Yes, it is aligned with GEF7 CCM-1-3 to promote energy efficiency and renewable energy investments.

Agency Response

Indicative project/program description summary

2. Are the components in Table B and as described in the PIF sound, appropriate, and sufficiently clear to achieve the project/program objectives and the core indicators?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY
Not completed at this time.

Please indicate how the $1 million of GEF fund will be used in capital investment in the second component (Thermal Renovation of Multi-
apartment Buildings) with the $60 million loan co-financing.

4/8/2019 MY:

Not at this time.

GEF grant should be used to benefit all people equally in Belarus, NOT only for a small group of people to reduce their costs for installation of new technologies. The way of using GEF grant in not sustainable nor unbiased. Please revise the following paragraphs in the Concept Note document:

"it was determined that the GEF grant will be used in one selected residential settlement supplied by the same district heating system.[1] The GEF grant will be disbursed per participating building, covering a portion of the costs required for HCA-based billing. [2] The eligible costs would include installed costs of TRVs, by-pass pipes, HCAs, other necessary changes and adjustments of the building internal heating system (such as replacement of corroded pipes, hydraulic balancing, etc.), as well as billing data collection and relay equipment and bill processing."

[1] A residential settlement in the town of Slonim in Grodno Oblast has been identified. The settlement has a total of 135 multiapartment buildings totaling 460,500 m$^2$. All buildings are supplied by the same district heating system which will receive new woodchip-fired boilers and other upgrades to be financed under Component 1. This overlapping investment of Components 1 and 2 would constitute a good example for achieving low-carbon space heating through both supply- and demand-side interventions.

[2] The exact portion, or GEF grant amount per square meter, was determined based on a balance between the needs for maximizing participation and sufficient financial contribution by households. Based on analysis done during project preparation, when the US$1 million grant is evenly distributed for the total floor area of 460,500 m$^2$ (at about US$2.17/m$^2$), the grant incentive would cover about 40 percent of the estimated cost for implementing HCA-based heat billing. Such amount of grant support is deemed reasonable based on focus group discussions conducted in Belarus, as well as experiences in Croatia and Hungary where similar level of financial incentives were provided in government programs for apartment-level consumption-based billing.

Please think over a new way to use the $1 million GEF grant. It should avoid direct subsidies, because subsidies may cause a problem to sustainability to the project. It should benefit all citizens in Belarus not only those who are living in the multi-apartments.

4/11/2019 MY:

Comments were addressed and issues were cleared.

Agency Response

The GEF grant will finance the demonstration of apartment-level consumption-based heat billing.
As noted in the project document, paras 33 and 44, the GEF grant will be used as a financial incentive for households to participate in apartment-level consumption-based heat billing. For the purpose of demonstration at scale, efficient implementation, monitoring and evaluation, it was determined that the GEF grant will be used in one selected residential settlement supplied by the same district heating system. The identified settlement has a total of 135 multiapartment buildings totaling 460,500 m². The GEF grant will be disbursed per participating building, covering a portion of the costs required for consumption-based billing. The eligible costs would include installed costs of TRVs, by-pass pipes, heat cost allocators, other necessary changes and adjustments of the building internal heating system (such as replacement of corroded pipes, hydraulic balancing, etc.), as well as billing data collection and relay equipment and bill processing. The GEF grant is expected to cover up to 40 percent of the eligible cost while the rest will be covered by the local co-financing.

Portal table B has also been updated to show that the apartment-level consumption-based heat billing is financed by the GEF grant.

Response 4/9:

Given the limited resources available, the demonstration can only be implemented among a limited number of buildings and will generate direct benefits for a limited number of households. This is an unavoidable choice for any pilot which is meant to provide lessons learned for the design of a broad-based national program that will benefit all households served by district heating. Given the relative small number of households involved in the demonstration compared with the general population, the risk of distorting the incentive for the broad population is very small. Rather, the capital grant subsidy provided to the households participating in the demonstration is essentially a risk mitigation measure for encouraging participation because (1) the technology is new and unproven to the households and (2) households still have to pay most of the investment cost. As the government moves from demonstration to broad-based national program it may decide to scale down the needed capital grant or make it more targeted, both of which will depend on the outcome of the demonstration. Thus, the demonstration not only provides the critical empirical evidence on the costs and benefits of apartment-level consumption based billing but also serves the purpose of facilitating a more sensible and equitable national policy making.

With respect to sustainability, the $1m GEF grant will not affect the sustainability of the EE market for buildings/district heating as a whole, but it will affect the decision by households whether to participate in apartment-based, consumption-based billing by building confidence that the benefits outweigh the costs, and will influence the decision of the government on whether to expand apartment-based, consumption-based billing through a wide-reaching policy in the future.

Co-financing

3. Are the indicative expected amounts, sources and types of co-financing adequately documented and consistent with the requirements of the Co-Financing Policy and Guidelines, with a description on how the breakdown of co-financing was...
identified and meets the definition of investment mobilized?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY

Yes. The indicate $200 million co-financing from the World Bank and the European Investment Bank is adequately documented and consistent with the requirements of the Co-Financing Policy and Guidelines of the GEF.

Agency Response

GEF Resource Availability

4. Is the proposed GEF financing in Table D (including the Agency fee) in line with GEF policies and guidelines? Are they within the resources available from (mark all that apply):

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY

Yes. The proposed $200 million co-financing in Table D is in line with the requirements of the Co-Financing Policy and Guidelines of the GEF.

Agency Response

The STAR allocation?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY

Yes, Belarus has a total allocation of $8.64 million STAR, which as not been used as of April 1, 2019.

Agency Response

The focal area allocation?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY

Yes, Belarus has a total allocation of $5.64 million in CCM allocation which has not been used yet as of April 1, 2019.

Agency Response

The LDCF under the principle of equitable access

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY

N/A

Agency Response

The SCCF (Adaptation or Technology Transfer)?
The SCCF (Adaptation or Technology Transfer)?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY
N/A

Agency Response

Focal area set-aside?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY
N/A

Agency Response

Impact Program Incentive?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY
N/A

Agency Response
Project Preparation Grant

5. Is PPG requested in Table E within the allowable cap? Has an exception (e.g. for regional projects) been sufficiently substantiated? (not applicable to PFD)

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY
The Agency does not ask any PPG grant.

Agency Response

Core indicators

6. Are the identified core indicators in Table F calculated using the methodology included in the correspondent Guidelines? (GEF/C.54/11/Rev.01)

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY
Yes.
But in the GEF7 Core Indicator Sheet, please fill the cells of Indicators 6.3 and 6.4.

Agency Response The core indicator table in the Portal and the worksheet have been updated to include targets for indicators 6.3 and 6.4.
Project/Program taxonomy

7. Is the project/program properly tagged with the appropriate keywords as requested in Table G?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY
Yes. The taxonomy sheet is filled and attached.

Agency Response

art II – Project Justification

1. Has the project/program described the global environmental/adaptation problems, including the root causes and barriers that need to be addressed?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY
Yes. The project is justified in the PCN in the format and language of the World Bank.

Agency Response

2. Is the baseline scenario or any associated baseline projects appropriately described?
Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY
Yes. The project baseline scenario is described in the PCN in the format and language of the World Bank.

Agency Response

3. Does the proposed alternative scenario describe the expected outcomes and components of the project/program?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY
Yes. The project alternative scenario is described in the PCN in the format and language of the World Bank.

Agency Response

4. Is the project/program aligned with focal area and/or Impact Program strategies?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY
Yes. The project is well aligned with GEF CCM focal area.

Agency Response
5. Is the incremental / additional cost reasoning properly described as per the Guidelines provided in GEF/C.31/12?

Secretariat Comment at PIF/Work Program Inclusion

4/1/2019 MY

Not completed at this time.

Please describe the incremental / additional cost reasoning properly as per the Guidelines provided in GEF/C.31/12, which can be downloaded from the following link: https://www.google.com/search?q=GEF%2FC.31%2F12&rlz=1C1GGRV_enUS811US811&oq=GEF%2FC.31%2F12&aqs=chrome..69i57j69i58.399j0j8&sourceid=chrome&ie=UTF-8

For example, please describe why the Agency needs $1 million GEF fund to invest in the Second Component with $60 million loans. What is the additional global environment benefits (GEBs) of the GEF $1 million investment on the top of the $60 million co-financing.

4/8/2019 MY:

Not completed at this time.

Justification on the use of $1 million grant on the top of the $60 million co-financing is not convincing.

Please see comments in Box 2 above (2. Are the components in Table B and as described in the PIF sound, appropriate, and sufficiently clear to achieve the project/program objectives and the core indicators?) as well. GEF grant should not be used to directly subsidize a small group of people. Please find a better way to use the $1 million of GEF grant for investment in the project.

4/11/2019 MY:

Comments were addressed and issues were cleared.

Agency Response

An incremental cost analysis table has been added as Annex 4 of the project document.

4/9 Response:
6. Are the project’s/program’s indicative targeted contributions to global environmental benefits (measured through core indicators) reasonable and achievable? Or for adaptation benefits?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY
Yes. the targeted GEBs are reasonable to achieve.

Agency Response

7. Is there potential for innovation, sustainability and scaling up in this project?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY
Not completed.
In the PCN or in the GEF Data Sheet, please write one paragraph for each of the following topics: innovation, sustainability and scaling up.

4/8/2019 MY:
Yes, comments were addressed and issues were cleared.

Agency Response Apartment-level consumption-based heat billing is an innovation that will be introduced through the GEF grant (component 2 - piloting investment and component 3 - outreach and capacity building) as such a system is not currently in use in MABs in Belarus. The project document addresses sustainability in paras 58-59 and addresses scaling up in paras 14-21.
**Project/Program Map and Coordinates**

**Is there a preliminary geo-reference to the project’s/program’s intended location?**

**Secretariat Comment at PIF/Work Program Inclusion**

4/1/2019 MY

Not yet.

The GEF SEC appreciates it if the Agency can provide preliminary information on the locations of the investments of the project, including the participating district heating companies and households.

4/8/2019 MY:

Yes, comments were addressed and issues were cleared.

**Agency Response** The GEF grant co-financing for investment is proposed to be used for a residential settlement in the City of Slonim in Grodno Region, as shown in the map provided in Annex A of the Portal/datasheet, which includes coordinates. The GEF grant co-financing for technical assistance is national and will benefit all regions of Belarus.

**Stakeholders**

Does the PIF/PFD include indicative information on Stakeholders engagement to date? If not, is the justification provided appropriate? Does the PIF/PFD include information about the proposed means of future engagement?
Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY

Yes, these stakeholders include: the Government, Indigenous Peoples and Local Communities; Civil Society Organizations; and Private Sector Entities. It is stated in the datasheet.

Agency Response

Gender Equality and Women's Empowerment

Is the articulation of gender context and indicative information on the importance and need to promote gender equality and the empowerment of women, adequate?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY

Yes. This project will improve women’s participation and decision-making; and generate socio-economic benefits or services for women. It is indicated on page 5 of the datasheet.

Agency Response

Private Sector Engagement

Is the case made for private sector engagement consistent with the proposed approach?
Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY

Yes.

The project will support private sector participation. All contracts will be competitively tendered out. Private contractors will be encouraged to participate in the bidding

Agency Response

Risks

Does the project/program consider potential major risks, including the consequences of climate change, that might prevent the project objectives from being achieved or may be resulting from project/program implementation, and propose measures that address these risks to be further developed during the project design?

Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY

Not completed at this time.

In the PCN, please address the risk of climate change on this project and provide measures to mitigate the risk.
4/8/2019 MY:

Yes, comments were addressed and issues were cleared.

Agency Response
As noted in para 106 of the project document, the proposed project has been screened for climate and disaster risks. The main climate risk is the potential long-term impact on forest productivity due to increased frequency and severity of insect invasion. The main disaster risk includes flooding in urban areas which could damage renovated buildings. Buildings using polystyrene foam-based panels for thermal insulation tend to have a higher fire risk than those without. But the risk can be mitigated through fire safety design features and awareness raising, or by using more fire-retardant insulation materials. Belarus is not known for seismic activities. Thermal renovation in general does not interfere with a building’s seismic design features.

The World Bank has been deeply engaged in sustainable forestry in Belarus and has an on-going forestry management project for which mitigating climate related risks are included.

**Coordination**

**Is the institutional arrangement for project/program coordination including management, monitoring and evaluation outlined?** Is there a description of possible coordination with relevant GEF-financed projects/programs and other bilateral/multilateral initiatives in the project/program area?

**Secretariat Comment at PIF/Work Program Inclusion**

4/1/2019 MY

Not completed at this time.

The information in Annex A is not enough to show the institutional arrangement for project/program coordination. Please describe in detail of possible coordination with relevant GEF-financed projects/programs and other bilateral/multilateral initiatives in the project/program area.

4/8/2019 MY:

Yes, comments were addressed and issues were cleared.

**Agency Response** Para 45 of the project document has been updated to note that the proposed project will also forge closer collaboration with the Bank's forest management operations in Belarus, including the GEF-supported Forestry Development Project, particularly on efforts...
Consistency with National Priorities

Has the project/program cited alignment with any of the recipient country’s national strategies and plans or reports and assessments under relevant conventions?

Secretariat Comment at PIF/Work Program Inclusion

4/1/2019 MY

Not completed at this time.

Please describe how the project is aligned with Belarus’ national strategies and plans under the UNFCCC, such as NDCs etc.

4/8/2019 MY:

Yes, comments were addressed and issues were cleared.

Agency Response As explained in para 13 of the project document, the project contributes to Belarus’s long-term energy sector development strategy as outlined in the third edition of the Concept of Energy Security of the Republic of Belarus, which focuses on nine areas of support, including energy independence, diversification of energy resources and suppliers, reliability of energy supply, end-use EE, modernization of energy infrastructures, energy affordability, international integration and corporation, reform and development of the power market, and technological innovations. Scaling up the use of indigenous and renewable wood biomass fuel (to replace imported natural gas) and improve energy efficiency of space heating contribute significantly towards national energy sector objectives. The residential sector is the largest energy end-user in Belarus and 70 percent of residential energy use is for space heating and service water heating, which are mostly supplied through district heating systems. The project supports Belarus’s NDC, which focuses on energy efficiency and renewables to reduce GHG emissions.
Knowledge Management

Is the proposed “knowledge management (KM) approach” in line with GEF requirements to foster learning and sharing from relevant projects/programs, initiatives and evaluations; and contribute to the project’s/program’s overall impact and sustainability?

Secretariat Comment at PIF/Work Program Inclusion

4/1/2019 MY

Not completed at this time.

In the PCN or the GEF datasheet, please describe how the knowledge to be generated from this project can be shared with all stakeholders of the project and with others who are undertaking similar projects in Belarus.

4/8/2019 MY:

Yes, comments were addressed and issues were cleared.

Agency Response As noted in various locations in the project document (paras 35, 38, 44, 98 and 101), one of the main areas of support by the GEF grant is the design and implementation of an outreach and homeowners consultation program which is essential to ensure the success of the national thermal renovation program. The project itself will be a platform for generating and disseminating the knowledge among key stakeholders, for example, on the costs and benefits of thermal renovation, case studies of successfully implemented thermal renovations financed by the project, and the results and experience of the demonstration of apartment-level consumption-based billing. Outreach materials produced by the project can support future outreach campaigns as the results of the demonstration project are more widely scaled up in Belarus.

art III – Country Endorsements

Has the project/program been endorsed by the country’s GEF Operational Focal Point and has the name and position been checked against the GEF data base?
Secretariat Comment at PIF/Work Program Inclusion
4/1/2019 MY

Yes. The OFP signed letter is loaded onto the GEF Portal.

Agency Response

EFSEC DECISION

RECOMMENDATION

Is the PIF/PFD recommended for technical clearance? Is the PPG (if requested) being recommended for clearance?

Secretariat Comment at PIF/Work Program Inclusion
4/29/2019 MY:

Yes, all comments were addressed and issues were cleared. The PM recommends PIF technical clearance.

ADDITIONAL COMMENTS

Additional recommendations to be considered by Agency at the time of CEO endorsement/approval.

Secretariat Comment at PIF/Work Program Inclusion
CEO Cover Memo:

4/11/2019

Objective: To scale up efficient energy use in space heating of multi-apartment buildings and renewable wood biomass fuel utilization in selected urban localities in Belarus.

Rationale: Belarus is one of the countries in Europe with least energy efficiency and minimum use of renewable energy resources. In its Nationally Determined Contributions (NDCs) to the UNFCCC, the country has identified that improving energy efficiency and promoting renewable energy investment are two key ways for Belarus to achieve its commitments in climate change mitigation. The GEF project will (1) catalyze the investment in indigenous renewable wood biomass fuel for space heating, (2) enable the broad-based outreach and capacity building efforts necessary for the success of the national thermal renovation program, and (3) incentivize households to participate in the demonstration of energy efficiency improvement.

Alignment with GEF7 CCM 1 - 1 & 3: Promote renewable energy and energy efficient technologies and investments.

Four Components: (1) Mobilizing capital investments in renewable wood biomass heating ($138 million); (2) Promoting thermal renovation of multi-apartment buildings ($61 million); and (3) Technical Assistance and Implementation Support ($4.5 million)

Innovation: The project will facilitate innovative energy technologies and business models to Belarus that will enhance national energy security, enlarge the share of renewable energy resources, increase the reliability of domestic energy supply, and increase energy efficiency at end-use of energy resources.

Sustainability and scale up: A co-financing of $200 million from the WB/government loan shows that the project will be sustainable and scaled up. In addition, the use of the $1 million GEF grant in household energy efficiency improvement will not affect the sustainability of the EE market for buildings/district heating. Rather, it will impact decisions by households whether to participate in apartment-based, consumption-based billing by building confidence that the benefits will outweigh the costs. It will influence the decision of the government on whether to expand apartment-based, consumption-based billing through a wide-reaching policy in the future.

Co-financing amounts and sources: The co-financing ($200 million) comes from: (1) the World Bank loan; and (2) the European Investment Bank, with $100 million loan.
**GHG emission reduction**: The global environmental benefit target is to directly reduce 8.4 million tonnes of CO₂ equivalent, including 3.8 million directly and 4.6 million consequently.

### Review Dates

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