Global Environmental Facility

RF President's Plenipotentiary Representative Office in the Northwest Federal District

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MID-TERM EVALUATION REPORT

UNDP/GEF PROJECT

BUILDING ENERGY EFFICIENCY IN THE NORTH WEST OF RUSSIA

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LIST OF ACRONYMS

AOEEC	Arkhangelsk Regional Energy Efficiency Center
APR	Annual Project Review
CO	Country Office
EBRD	European Bank for Reconstruction and Development
EE	Energy Efficiency
GEF	Global Environmental Facility
ISO	International Standards Organisation
GHG	Greenhouse gases
kW	kilowatt
kWh	kilowatt-hour
Mt	megatonne
MTE	Mid-term Evaluation
NEFCO	Nordic Environment Finance Corporation
NIB	Nordic Investment Bank
OFP	Operational Focal Point
PIR	Project Implementation Review
PMT	Project Management Team
PSC	Project Steering Committee
SBAA	Standard Basic Assistance Agreement
ToR	Terms of Reference
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organisation
USD	United States Dollar
VSTU	Vologda State Technical University

EXECUTIVE SUMMARY

Brief description of project

The project objective is "to build local capacities for and demonstrate local solutions to improved energy efficiency in new and existing buildings in the North West of Russia: Pskov, Vologda and Arkhangelsk Oblasts". This is envisaged to be achieved through the following three components:

- An enabling environment and enforcement capacities for improved energy efficiency at the provincial and local levels;
- Capacity building and know-how; and
- Demonstration of local energy-efficient solutions and management models.

By this, the project seeks to reduce existing institutional, management, information, technological, investment, financial and knowledge barriers that hamper wide penetration of energy efficient technologies and practices in the construction and building maintenance sectors. The project document also states that GEF financing is not foreseen to be invested directly into renovation or energy efficiency improvements in existing/old buildings, but for leveraging additional private sector funding for facilitating these investments.

A more detailed description about the problems the project seeks to address and the expected and completed activities and results up to date, as reported in the annual project implementation reviews (PIRs), is provided in chapters 2.2 and 2.5 of this MTE.

Context and purpose of the evaluation

This Mid Term Evaluation (MTE), as a standard requirement for all UNDP/GEF projects with a 4-5 year implementation period or longer, has been initiated by UNDP. It aims to provide managers at the Project Implementation Unit, National Implementing Partner, UNDP Russia Project Support Office and UNDP-GEF with strategy and policy options for more effectively and efficiently achieving the project's expected results and for replicating these results.

As outlined in the ToR of the assignment, mid-term evaluations are intended to identify potential project design problems, assess progress towards the achievement of objectives, identify and document lessons learned (including lessons that might improve design and implementation of other UNDP/GEF projects) and to make recommendations regarding specific actions that might be taken to improve the project, including new or revised activities and outputs. It is expected to serve as a means of validating or filling the gaps in the initial assessment of relevance, efficiency and effectiveness obtained from monitoring.

In essence, the MTE is a management tool that can help the project to reach its initially stated targets and support the project implementing partner(s) and/or project management to undertake the required adaptive management measures on time. The MTE provides an opportunity to assess early signs of project success or failure and prompt necessary adjustments. Effective action to rectify any identified issues hindering implementation will be a requirement in prior to determining whether implementation should proceed.

Main conclusions, recommendations and lessons learned

While the "seeds for change" in many areas have been planted, further follow up and fundamental adaptive managements actions are required for most components in order to ensure that they can contribute in a meaningful and sustainable way to the effort of shifting the building sector in North West Russia on a less energy intensive track.

Project design

All the key areas the project is working with are still highly relevant and the project design is addressing all the critical barriers to improving energy efficiency in the building sector. To some extent

the project design fails, however, to transform this into a logical, manageable and coherent chain of outputs, outcomes and objective(s) together with the related indicators and targets, which would guide the project towards reaching its ultimate goal(s) and have a sustainable longer term impact. As such, the project's strategic results framework is suggested to be reviewed, updated and revised at the earliest convenience. While substantial content of the different outcomes can stay close to what they are now, the number of indicators and targets needs to be reduced and redefined with the focus on the main target(s) to be achieved under each outcome with due attention on qualitative and sustainability aspects. After that, all project outputs under each outcome can be reviewed and adjusted to effectively contribute to the revised targets of each outcome.

The weakest elements of the project design are:

- Clearly inadequate risk analysis; and
- Inadequate stocktaking and analysis of the realized or planned results and activities of other past, ongoing and future projects, on which the design of the activities and outputs of the new UNDP/GEF project could have been built, thereby contributing to more efficient and effective implementation of it.

It can be discussed to what extent the impacts of those institutional and operational risks that have materialized during the first half of project implementation could have been avoided by more careful initial design vs. to what extent they should have been addressed at the project inception phase, but nevertheless the level of external project management support, for instance, for a very complex and demanding project like this seems to have been clearly underestimated throughout the design and early implementation phases.

Given above, the rating given for the project design is marginally satisfactory (MS).

Project implementation (Efficiency)

The ongoing administrative reform and institutional changes have created challenges for efficient project implementation. As an example, the main project partner, the Specific Commission on Energy Efficiency under the auspices of the Office of the Plenipotentiary of the President of the Russian Federation in the Northwest Federal District, was dismissed at the end of 2012, which also led to the change of the Project Director at the end of 2013. No Project Steering Committee (PSC) meetings were organized either during this transition period.

Beside the changes in public administration, the problems and capacity constraints with the project management have taken their toll. In the PIR of 2012, the problem about the double role of the National Deputy Director (NDD) was raised, as the NDD was acting at the same time as the project manager. Based on the information provided in the PIR, the problem had been apparent since the project inception workshop, but could not have been sold. Later, a separate project manager was hired and replaced again in summer 2013 with a new project manager, while the former project manager has been continuing since then as the "Project Implementation Coordinator". After all these changes, however, there remains still a fundamental lack of clarity on who is actually managing the project. Most discussions during the project evaluation mission were conducted with the Project Implementation Coordinator, while for any substantial issues, the current project management team is frequently referring to the former NDD as the one, who continues to provide all the substantive advice and leadership for project implementation and, among others, is managing all the discussions with the project partners on any financing related matters. This clearly does not look like an acceptable and cost-effective way of managing projects of this or any kind. Similar concerns exist in relation to the role of the project's regional coordinators, who as opposite to their initially envisaged role to manage all regional project activities with a clear vision on what the project is expected to achieve in their particular region, have been assigned with quite specific and limited tasks only and in some cases were not even aware of some activities to be undertaken in their respective region. The main identified deficiencies and problems to be addressed as it concerns the current project management arrangements are discussed in further detail in chapter 3.2.1

As it concerns the stakeholder involvement, outreach and co-ordination with other related initiatives, the stakeholder analysis made at the project design stage and repeated in the project inception report (Annex 7 of this MTE report) would have provided a very good basis for further consultations and partnership building, but these opportunities have not been effectively followed up. Apart from participation in a few meetings and workshops, there is no evidence about effective coordination and partnership building with other ongoing projects and initiatives dealing with the same substance area, including the two EBRD (one jointly with IFC) projects approved for GEF funding under the same GEF EE umbrella project (see annex 7C of this MTE), the ongoing international cooperation with the St. Petersburg Construction Committee to develop new construction norms there or on the other ongoing research work on EE building design and construction in Saint Petersburg and/or Moscow.

On the positive side, an area where the project clearly seems to have succeeded is the engagement of the regional and city administrations by the establishment of regional working groups to review and discuss the projects results and provide advice for their further development. As examples, the process of developing new construction norms in Vologda and the energy management system in Pskov can be mentioned. This kind of approach can be considered as absolutely essential for ensuring local ownership and thereby the sustainability of project results and is, therefore, definitely worth continuing. This alone, however, is not enough to compensate for the inefficient and unsustainable implementation approaches in other areas. As an example, the local working group established for the review, discussion and adoption of the new construction norms in Vologda is critical, but it does not compensate for those capacity constraints and lack of information that, for instance, the local design institutes at the oblast level still have in incorporating international state of the art approaches and lessons learnt for energy efficiency building design and construction into drafting of those norms. These constraints could have been overcome by more effective use of project resources allocated for capacity building and supporting international expertise (e.g. through the on the job training) and by identifying opportunities for co-operation and partnership building with both international and national expert institutions engaged in similar work in Russia.

For adaptive management, one of the problems is that until now the Project Steering Committee has not been able to fulfil its envisaged role in monitoring and guiding the project implementation. Another thing is that in the annual project implementation reviews (PIRs), much of the focus of reporting the project progress has been on distinct activities rather than measuring the progress towards the actual goals of the project and how the reported results have contributed or will contribute to this in practice. Partly, this can be blamed by inadequate project results framework not having the right indicators and targets to measure such progress and project impact, but not much has been done to correct the situation during the project implementation either.

The reported delivery by the end of 2013 was slightly over USD 1,6 million i.e. about 28% of total approved GEF amount of USD 5,840,000. The project management costs since the project start (excluding the costs of regional co-ordinators, but including the PMT contributions to the actual implementation of activities – not only administrative management) were reported at USD 250,000. With current staffing, the fixed project implementation costs (including the costs of the core project team in Saint Petersburg and three regional co-ordinators) can be estimated at around USD 120,000 – 130,000 per year, which can be considered as reasonable for a project of this size and complexity, if effectively contributing towards meeting the stated project targets. This is not the case yet, however.

For co-financing, the aggregated targets are likely to be met, but in leveraging required co-financing for individual activities such as the planned demo projects in Arkhangelsk, there seems to be major problems, which are currently slowing down the project implementation. It is also questionable to what extent the reported co-financing has been leveraged to directly support the project activities and to what extent it would have happened anyway. For further details, see Annex 8 of this MTE report.

By taking into the account the different aspects discussed above, the project implementation has been rated as marginally unsatisfactory (MU). The identified shortcomings are discussed in further detail in chapter 3.2 of this document.

Project results (Effectiveness)

Based on the observations and review of the results at the mid-point of project implementation, the biggest and most sustainable impact of the project is likely to be made by the educational programs (Outcome 2), subject to more detailed independent expert evaluation of their content and whether in line with international state of the art approaches and good practices on EE building design and construction. This review has not been done yet, but is suggested to be done at earliest.

Another project subcomponent proceeding relatively well and demonstrating some initial elements for sustainability is the energy monitoring and management system developed for and planned to be tested in the Pskov oblast. The concrete implementation plan and value added of the Energy Management system developed by another consultant group for the Arkhangelsk oblast is not completely clear yet and is likely to require some further research and consultations.

The weakest prospects for sustainable project impact are currently with the planned demonstration projects in Arkhangelsk focusing on EE retrofits of existing buildings. At the time of this MTE, no concrete steps had been taken by the project yet to secure financing for these projects and both the regional and the core project team seemed not to be aware that the actual investments are not supposed to be funded by the GEF resources. Furthermore, no adequate cost-efficiency analysis and priorisation of the proposed measures seemed to have been undertaken in the feasibility studies by taking into account the financing resources that realistically can be leveraged for such investments e.g. by relying on existing federal and regional programs, eventual specific purpose lending mechanisms and/or own financing of the building owners. While the annual PIRs have been reporting about reconstruction/renovation of several buildings, no evidence was provided during the project evaluation mission that the project would have facilitated or effectively contributed to this.

Another concern is based on the information received during the project evaluation mission that the elements included in the pilot building design have been used as a basis also for the proposed new construction norms in the Vologda region. The review of the design of the planned pilot building in Vologda at the end of 2013 by an international building energy efficiency expert contracted by the project revealed some significant shortcomings raising a question whether similar shortcomings and suboptimal requirements have remained in the new construction norms.

Thirdly, no activities seem to have been initiated yet to address the enforcement related barriers that were identified already in the project document as a problem and essential elements to be addressed.

The absence of credible business plans and uncertainties in the adequate demand of services for the distant learning centers established under component 2 in Vologda and the EE design office created by the AOEEC in Arkhangelsk are raising questions about their sustainability, especially as their exact role in supporting the other subcomponents of the project dealing with design and training related activities remained unclear. A vision shared by the local stakeholders in the interviews was that the GEF is expected to pay for the first 1-2 years of operation of those centres, after which they should become self-sustaining. There are considerable uncertainties and risks with this approach, however, which may have not been effectively addressed yet.

For many subcomponents, finalised report was seen as an adequate result on its own without really thinking its contribution towards reaching the ultimate goals of the project. This approach, which has been unfortunately common also for many other international technical assistance projects, may leave behind an impressive pile of reports, but may not really produce results for replication, which is raising some concerns about the sustainable project impact in general.

Taking into account the issues above, the given ratings at this mid-point of project implementation for outcome 2 is satisfactory (S), while for component 1 and 3 it is marginally unsatisfactory (MU). For all components, satisfactory or highly satisfactory rating could still be achieved by the end of the project, but this would require some fundamental changes compared to how the project is currently being implemented and managed. Furthermore, a project extension of 1 or 2 years may be required. A more detailed discussion about the suggested prerequisites and measures to be undertaken before granting

such an extension, together with other recommendations to improve the chances to meet the set project targets can be found from section 4 of this MTE report, including:

- revising the project's strategic result's framework for the required parts (in particular project indicators and targets) to emphasize the qualitative and sustainability related aspects;
- reorganising and strengthening the project management arrangements, including engagement of experienced enough international expertise with a longer term commitment to support the project's progress monitoring, planning, partnership building, quality control and related adaptive management;
- capacitating the project's regional co-ordinators to effectively manage all the specific subcomponents in their specific region;
- securing that all the key project stakeholders have a common vision to where the project is and should be heading and what are the required measures to be undertaken to ensure that the project is reaching its envisaged goals;
- securing financing of the planned demo projects for the energy efficiency retrofits in Arkhangelsk from other than GEF resources, including further elaboration of the possible co-operation opportunities with the ongoing IFC and EBRD projects and those provided by the new "Federal Law on Capital Repairs" that entered into force in 2013;
- finalising the criteria for and securing that the construction norms under development and the planned pilot buildings in Vologda represent international state of the art approaches and good practices on energy and cost-efficient building design and construction and take effectively into account the conclusions and recommendations of the international expert reviews made;
- demonstrated progress in effective partnership building and efficient co-operation, coordination and utilisation of the results of other past and ongoing nationally and internationally funded projects, as outlined in further detail in section 4 of the MTE;
- making sure that the required elements for ensuring sustainable financing of the new distant learning centers and EE design offices to be established in Vologda and Arkhangelsk are in place from the very beginning;
- upgrading the project risk analysis and related risk mitigation plan; and
- finalising project exit strategy with due attention on the sustainability and replication of results.

Lessons learnt

The lessons learnt are discussed in further detail in chapter 5 of this MTE report, including:

- the utmost importance of ensuring that the recruited project management has adequate technical capacity and experience to lead the project and that the project implementing partner, GEF implementing agency staff both in the CO and Regional Office and the operational project management share the same vision about the main project targets and how to reach them, can realistically assess the eventual capacity constraints and can jointly agree on a strategy and a set of actions to address those constraints;
- the importance of having the right M&E framework in place from the very beginning and enough staff resources and capacity in the GEF implementing agency concerned to effectively monitor the progress of the project and support adaptive management also during their implementation. If not feasible for the permanent staff, such functions need to be outsourced;
- the importance of realistic and adequate risk analysis and risk mitigation plan, including the operational project management risk together with related mitigation measures to be included as a standard risk element to all UNDP/GEF funded projects;
- the need to rigorously monitor and secure effective co-ordination, co-operation and partnership building with other ongoing projects and building the project implementation on the results of the other past and ongoing projects rather than just mentioning this in the project document without further effective follow up.

1. INTRODUCTION

1.1 Project background

The time of project formulation aligns with the adoption of new federal level energy efficiency policy and legislation in Russia, including the Presidential Decree of 04.06.2008 № 889 "About some measures to improve energy and environmental efficiency of the Russian economy" and a new federal law "On Energy Saving" approved in November 2009 to strengthen, among others, the federal capacity and expand requirements for energy-saving measures in the buildings sector. Article 11 of the new law mandates a periodic review of energy efficiency in buildings, states that occupancy permits should not be granted for buildings that do not meet requirements, and holds the builder responsible for the energy performance of new buildings for the first five years of operations. Article 13 requires that all residential buildings constructed after November 2009 must have flat-level meters for power, gas, and water (and building-level meters for heat, power, and water) installed by the end of 2012. In addition, the federal-level building codes Building regulation 23-02 "Thermal protection of buildings" and Building regulation 31-01-2003 "Residential apartment buildings" were incorporating energy performance into their requirements. ISO EN standards, including ISO 13790, were foreseen to be adopted over time.

The housing construction at the time of project formulation was promoted by a national priority project “Access to Comfortable Housing”. According to the project document, this project spurred a rapid development of new construction projects in the regions and the establishment of corresponding provincial construction development programmes, which are designed to provide co-financing for federal funding. In 2007, the volume of construction works was around USD 80 million (an increase of over 120 % compared to 2006), construction of residential buildings increased by 151% to 49.8 million m^2 and the construction of public buildings increased by 132% to 18.1 million m^2. The corresponding investment in technical building systems in 2007 amounted to more than USD 6 billion.

The project approach of institutionalizing improved energy efficiency through building codes and oblast-level energy efficiency programs contributes to the pursuit of Millennium Goal Number 7: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources. The project formulation also makes a note about the UNDP Country Programme for the Russian Federation in 2008-2010, which included “supporting sustainable use of energy and natural resources in the spirit of the Kyoto Protocol.” The housing sector has been considered as an important entry point for regional action on climate change mitigation. As concluded at the time of project formulation: “sub-national authorities will be able create public consensus in favour of climate change action only, if the recommended measures correspond to the fundamental development problems of the regions and municipalities, like the provision of basic services to the population….” Housing, which is a fundamental social issue across North West Russia, was considered to meet this test.

As outlined in the project document, the choice of project sites in the Russia’s North West was driven by the following factors:

- Dynamic construction sector: In the North West Federal Okrug, the residential construction sector grew by 47.4% in 2007, a rate higher than the federal average;
- Representativeness: The North Western region of Russia is representative of the rest of the country in terms of population numbers and density, household structure (50% urban – 50% rural), and aggregate share of CO_2 emissions.
- GHG reduction potential: Northern climatic conditions have resulted in higher energy demands and an additional burden on energy systems. These conditions have led to an increased drive for improved energy efficiency, and they ensure that effective interventions will generate higher-than-average economic savings and emission reductions.

- Existing foundation for cooperation: The lessons and outputs of an earlier GEF MSP in Russia's North West provided linkages and lessons that will strengthen project implementation. While specific project sites and objectives do not overlap, the new project will utilize the policy and institutional barrier analysis and the educational and management models developed through the earlier MSP project (2003-2006).
- Strong commitment of the regional government to energy efficiency programme.

1.2 Purpose of the evaluation

The Monitoring and Evaluation (M&E) policy at the project level in UNDP/GEF has four objectives: i) to monitor and evaluate results and impacts; ii) to provide a basis for decision making on necessary amendments and improvements; iii) to promote accountability for resource use; and iv) to document, provide feedback on and disseminate lessons learned.

A combination of tools should be used to ensure effective project M&E. These might be applied continuously throughout the lifetime of the project – e.g. periodic monitoring of indicators, or as specific time-bound exercises such as mid-term review, audit reports and independent evaluations. In accordance with the UNDP/GEF M&E policies and procedures, all projects with longer implementation periods are strongly encouraged to conduct mid-term evaluations. In addition to providing an independent in-depth review of implementation progress, this type of evaluation is responsive to GEF Council decisions on transparency and better access to information during implementation.

This Mid Term Evaluation (MTE) has been initiated by UNDP and it aims to provide managers (at the Project Implementation Unit, National Implementing Partner – Ministry of Energy of Russia, UNDP Russia Project Support Office and UNDP-GEF Bratislava Regional Centre and UNDP New York levels) with strategy and policy options for adaptive management to more effectively and efficiently achieve the expected results of the projects and for replicating those results. It also provides a basis for learning and promotes accountability for managers and stakeholders.

1.3 Key issues to be addressed

The evaluation is intended to provide a comprehensive overall assessment of the project progress and the key issues and eventual constraints associated with it. It will provide recommendations for achieving the expected outcomes and meet the objective within the project timeframe.

The key issues to be addressed by the evaluation are summarized in the Terms of Reference of the assignment, as follows:

(i) to assess overall performance against the project objective and outcomes as set out in the Project Document, project's Logical Framework, and other related documents;

(ii) to assess the effectiveness and efficiency of the project;

(iii) to analyze critically the implementation and management arrangements of the project;

(iv) to assess the progress to date towards achievement of the outcomes as defined in the project document;

(v) to review planned strategies and plans for achieving the overall objective of the project within the timeframe;

(vi) to assess the sustainability of the project's interventions meaning that at the end of the project, the capacities in local municipalities targeted by the project are significantly enhanced to implement energy-efficiency projects;

(vii) to list and document initial lessons concerning project design, implementation and management;

(viii) to assess project relevance to national priorities;

(ix) to assess the CO2 savings achieved by the project measured against the targets in the project document

(x) to provide guidance for the future project activities and, if necessary, for the implementation and management arrangements concerning adaptive management;

(xi) to provide lessons learned for the future.

An important part of the assessment will be an analysis of how successful the GEF project has been in leveraging additional funds for energy-efficiency so that there has been significant leveraging.of resources. Since GEF funds will be utilized to build local capacities, regulations and information for effective decision-making and management systems, it will also be important to assess the extent to which the project has contributed towards putting in place sustainable systems at the municipal level for energy management that will continue at the end of the project and to what extent the project has contributed towards strengthened enforcement of energy-efficiency norms and standards.

1.4 The outputs of the evaluation and how will they be used

As outlined in the ToR of the assignment, mid-term evaluations are intended to identify potential project design problems, assess progress towards the achievement of objectives, identify and document lessons learned (including lessons that might improve design and implementation of other UNDP/GEF projects) and to make recommendations regarding specific actions that might be taken to improve the project, including new or revised activities and outputs. It is expected to serve as a means of validating or filling the gaps in the initial assessment of relevance, effectiveness and efficiency obtained from monitoring. The MTE provides an opportunity to assess early signs of project success or failure and prompt necessary adjustments. Effective action to rectify any identified issues hindering implementation will be a requirement prior to determining whether implementation should proceed.

The evaluation is foreseen to play a critical role in the future implementation of the project by providing advice on: (i) how to strengthen the adaptive management and monitoring function of the project; (ii) how to ensure accountability for the achievement of the GEF objective; (iii) how to enhance organizational and development learning; and (iv) how to enable informed decision making."

1.5 Methodology of the evaluation

In line with the UNDP/GEF guidance for conducting evaluations and the ToR of the assignment, the report of the Mid-Term Evaluation shall be a stand-alone document that substantiates its recommendations and conclusions. It is seeking to provide evidence based information that is credible, reliable and useful, easily understood by project partners and applicable to the remaining period of the project. Particular emphasis is made on the current project results and the possibility of achieving the objective and outcomes in the established timeframe, taking into consideration the speed, at which the project is proceeding.

The evaluation methodology recommended in the ToR and which has also been largely followed in preparing this MTE, included the following:

1. Documentation review (desk study), to include Project Document, Inception Report, annual GEF Project Implementation Reports, Minutes of the Steering Committee meeting, GEF quarterly project updates;

2. Interviews with project management team and key project stakeholders, including UNDP Russia Project Support Office, provincial and local Administrations of the Arkhangelsk, Pskov and Vologda Oblasts; provincial legislative bodies; regional energy committees, technical universities and energy efficiency centers. A meeting with the initial Implementing Partner of the project, the Office of the Plenipotentiary Representative of the President of the Russian Federation in the North West Federal Okrug was, however, not included among the meetings organized. The decision for the selection of the Russia Energy Agency as the new project

Implementing Partner was made in the second Project Steering Committee meeting organized in December 16, 2013.

All interviews of the local stakeholders were conducted as a part of the 9 day mission to Saint Petersburg, Arkhangelsk, Vologda and Pskov in November 11-19, 2013 and during a follow-up visit to Moscow in December 16-17, 2013. A complete list of the persons interviewed is presented in Annex 3. A set of complementary questions was sent to and responded by the Project Management Team between the two visits (Annex 4).

Beside the meetings organized during the mission, phone interviews were conducted with the UNDP/GEF Regional Technical Adviser responsible for the UNDP/GEF climate change portfolio in Russia, the lead international consultant, who supported the original project formulation and two other international consultants, who had been contracted by short term contracts to provide advice on the establishment of energy management systems and support energy efficient building design. Furthermore, the evaluator had a phone interview with the EBRD and IFC energy efficiency programme managers in Russia overseeing the implementation of the EBRD/IFC/GEF funded building energy efficiency projects in Russia.

Within the scope of this assignment, it has not been possible to conduct a detailed technical review of all reports and documents produced by the project under tens of different subcontracts and consisting of several hundreds (if not thousands) of pages. Therefore, it should be noted that any comments concerning the content of those reports are based on a very brief desk review only, combined with the interviews conducted with the authors of those reports to the extent that this was possible during the evaluation mission.

In order to evaluate in further detail the content and quality of the technical reports produced by the project as a basis for their further implementation, it is recommended that the most important ones i.e. those influencing the project implementation for its remaining period such as different training materials, feasibility studies of the planned EE retrofits, business plans of the distant learning centers and energy efficiency design offices, suggested municipal and regional energy efficiency programs, documentation of the energy management systems developed in Pskov and Arkhangelsk oblast, result reports of those already realized EE retrofits that according to the PIRs have already been implemented and design, implementation, financing and MRV plans of the planned new demonstration projects (if prepared, as they should) will be made available for a complementary technical peer-review by qualified international expert(s) contracted for this purpose.

The project performance has been measured against the main objective and envisaged outcomes of the project based on the corresponding performance and impact indicators. Suggestions and recommendations to improve and further elaborate those indicators and means of verification for the remaining project implementation period have been made, when applicable.

The different elements and subcomponents of the project pertaining to their relevance, effectiveness and efficiency have been evaluated by using the following six-category rating recommended by the GEF to assess to what extent the project has shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency:

Highly Satisfactory (HS): No shortcomings

Satisfactory (S): Minor shortcomings

Moderately Satisfactory (MS): Moderate shortcomings

Moderately Unsatisfactory (MU): Significant shortcomings

Unsatisfactory (U): Major shortcomings

Highly Unsatisfactory (HU): Severe shortcomings

The sustainability of the project has been evaluated by using the four ratings recommended by GEF to assess the risks that affect each dimension of sustainability to be evaluated (see chapter 3,5):

Likely (L): No or negligible risks

Moderately Likely (ML): Moderate risks

Moderately Unlikely (MU): Significant risks

Unlikely (U): Severe risks

Additional ratings where relevant:

N/A: Not Applicable;

U/A: Unable to Assess

1.6 Structure of the evaluation

Given some discrepancies between the requested items to be evaluated as outlined in sections 2.1 – 2.4 and further by the Project Rating Table (Table 2) of the Terms of Reference and the suggested outline of the mid-term evaluation report (Annex 1 of the ToR), the structure of this mid-term evaluation report is somewhat modified from what was suggested in Annex 1 of the ToR. This is hoped to provide more clarity and transparency for the background and justification of the given ratings.

The Executive Summary starting from page 6 is providing a quick overview on the main project results, ratings, other observations and recommendations for further implementation.

2. THE PROJECT AND ITS DEVELOPMENT CONTEXT

2.1 Project start and its duration

The project document was signed on November 11, 2010 for the expected duration of 5 years i.e. ending in November 2015. The planned revised closing date of the project, as stated in the latest Project Implementation Review (PIR) of 2013, is January 29, 2016.

The project initiation workshop / kick-off seminar took place in St. Petersburg on 20 June, 2011 with the participation of representatives of the executive authorities of the three pilot regions and St. Petersburg, the local UNDP office in Moscow, UNDP/GEF Regional Technical Adviser and other key national and international stakeholders.

The project kick-off meeting was followed by the first Project Steering Committee meeting with the minutes presented as Annex 6 to this MTE. After a long break, the second Project Steering Committee meeting was organized in December 16, 2013.

The project inception report was finalized in February 2012.

2.2 Problems that the project seeks to address

The key problems that the project seeks to address have been defined in the project document as follows:

- Since 2002, Russia's economy has been experiencing stable economic growth accompanied with the growth in energy demand. Compared to industrial sectors that were in decline for over a decade, energy consumption in Russia's communal and housing sector has been continuously growing: from 174 billion kW/h in 1990 to 243 billion kWh in 2006 (an equivalent of 178 Mt CO2/year). Consequently, the share of the housing sector in overall energy consumption has been steadily growing from 13% in 1990 to 34% in 2006. Per capita CO2 emissions related to Russia's construction and housing sector total 10.6 tCO2/yr.
- Energy performance per square meter in residential buildings in the pilot regions averages 29.2 W/m2 (the Russian average is 27.2 W/m^2; in Denmark the corresponding figure is 16 W/m^2). Continuous growth in energy consumption is primarily a result of the high level of heat losses in the housing sector. 64% of all heat produced in the pilot region is used for heating residential and public buildings. In the Vologda oblast, total heat energy consumption for heating and hot water supply reaches 72 kg of oil equivalent per square meter per year (in Scandinavian countries with similar climate conditions, the corresponding figure is 18 kg of oil equivalent/m^2). Up to 70% of heat generated at heat stations doesn't reach end consumer: 40% of losses occur during transportation and 30% at the buildings. One of the causes for high losses is inadequate thermal characteristics of main construction elements. Heat losses in an average apartment building occur through the walls (40%), windows (18%), basement (10%), roof (18%), and ventilation (14%). As a result of the project, compliance with more efficient construction norms was foreseen in the project document to bring 40-50% savings in energy consumption.
- Russia's approaches to building codes and standards and energy efficiency norms are largely similar to European equivalents. Key requirements to building energy efficiency included in the EU directives have been already reflected in the 2003 Russian federal construction codes (with an exception for heating boilers). However, enforcement of these codes at the design, construction and maintenance phases is undermined by the barriers described above. A gap also exists in introducing and communicating the advanced norms to various regions and municipalities and in enforcing them. Enforcement is also perceived as an area where there is little information on quality control even for previous codes. Provincial (oblast) codes and standards have been developed in a number of oblasts, but this process is not harmonized across the Federation. The oblasts in the North West federal region of the Russian Federation

require assistance in developing both provincial and local regulations to implement codes that meet the federal standard. They also require assistance in structuring an enforcement system that will ensure compliance.

- The current standards on the thermal protection of buildings (adopted in 2003 by the State Construction Committee) require that all building design projects should estimate energy performance. Professional training and education in the area of building design and engineering do not integrate, however, energy efficiency principles and incentives. Existing local experiences are replicated through fragmented initiatives with insufficient effectiveness.
- A need to demonstrate energy saving potential of proposed technical and management solutions and provide models for replication and cooperate with a financial institution or institutions active in North West Russia to leverage additional financing for each of the demonstration initiatives in order to ensure that they are of scalable size.

The reasoning behind GEF participation in the project is based on the removal of barriers, enabling the enhanced capacity of sub-federal authorities to implement energy efficiency policies and measures and increasing the ability of energy efficient products and services to enter the construction and housing maintenance sectors. Without GEF participation, regional and local authorities will continue to lack the capacity and information necessary to design and implement energy efficiency policies and measures. Also, without GEF support, awareness of energy-efficient practices in the residential construction and maintenance sectors would remain low. By building capacity at the sub-federal level, GEF funds can put current government investments in the housing sector on a lower carbon trajectory.

2.3 Project objective

The project objective is "to build local capacities for and demonstrate local solutions to improved energy efficiency in new and existing buildings in the North West of Russia: Pskov, Vologda and Arkhangelsk Oblasts. This is envisaged to be achieved through the following three components:

- An enabling environment and enforcement capacities for improved energy efficiency at the provincial and local levels;
- Capacity building and know-how; and
- Demonstration of local energy-efficient solutions and management models.

By this, the project seeks to reduce existing institutional, management, information, technological, investment, financial and knowledge barriers that hamper wide penetration of energy efficient technologies and practices in the construction and building maintenance sectors. The project document also states that GEF financing is not foreseen to be invested directly into renovation or energy efficiency improvements in existing/old buildings, but for leveraging additional private sector funding for facilitating these investments.

2.4 Main stakeholders

A thorough review of and recommendations about the key stakeholders to be engaged in project implementation are presented in Annex I of the project document and for easy reference is also attached to this mid-term evaluation report as Annex 7.

The evaluation of the actually realized level of stakeholder involvement is made in section 3.

2.5 Expected key results and their status of implementation

The expected key results, selected indicators and project's current status of implementation, as reported in the most recent Project Implementation Reviews (PIRs), are presented below reflecting the situation at the end of June 2013. The complementary views and observations of the evaluator based on the outcome of the project evaluation mission can be found from section 3.

Project development objective: Build local capacities for and demonstrate local solutions to improved energy efficiency in construction and maintenance of buildings in the North West of Russia: Pskov, Vologda, and Arkhangelsk Oblasts.

Indicator: CO_2 emissions from energy use in new and renovated buildings in 3 participating oblasts.

Baseline: 85,000 tCO_{2eq} emitted due to space heating in new and renovated buildings during the 5-year project period (2010-2015). 1.7 $MtCO_2eq$ emitted due to space heating in new and renovated buildings during their lifetime (assuming a 20-year lifetime)

Target: Direct reductions of 48,050 tCO_{2eq} as compared to the baseline. Indirect GHG reduction of 599,000 tCO_2eq emitted due to space heating in new and renovated buildings during their lifetime (assuming a 20-year lifetime

Status in 2013: Realization of the initial stage of the project did not presume calculation of CO_2 emissions reduction. By the moment, the necessary data array and design options allowing to carry out these calculations are under formation. Completion of this work was scheduled by the end of 2013.

Outcome 1: Provincial and local policies and regulations ensuring enforcement of energy efficient building norms

Indicator(s): Operational oblast-level legal and regulatory framework for enforcing and monitoring building codes in Vologda oblast; effective implementation of the Pskov Oblast Energy Efficiency Programme; effective implementation of an institutional and management model for EE municipalities in the Pskov Oblast; development of municipal energy efficiency norms in Pskov Oblast.

Baseline: Lack of current, comprehensive program for codes enforcement with systematized, regular on-site inspections; Pskov Oblast Energy Efficiency Programme lacks regulatory framework and institutional capacity for effective operation; lack of a model for EE municipalities in Pskov oblast; absence of municipal energy efficiency norms.

Target: Model system operating in the oblast including an on-site (inspection program) and the program shared with other oblasts; oblast-level system of results-based monitoring operating in Pskov; capacity of the EE Programme increased in at least 3 key areas as stated in the capacity development plan; and good practice disseminated in Russia and abroad; applied model of utility services provision in place and functioning for 2 municipal districts; Municipal EE norms adopted in 2 municipalities in Pskov oblast; norms disseminated to other oblasts.

Reported status in June 2012:

- Regulatory framework relevant to the project was analysed and actualised at federal, regional and local levels;
- EE legislative initiatives were monitored;
- Regional and municipal energy savings and EE legislation best practice was collected and analysed;
- On the basis of the analysis of Pskov Oblast legislation, a plan for establishment of regional and local regulations in Pskov Oblast for 2012-2013 were formed, versions of regulations for Leningrad, Arkhangelsk, Murmansk Oblasts and St.-Petersburg were approbated;
- Regulations in 2 municipalities were analysed;
- In order to provide a common methodological approach, a working group for project implementation and results approbation was established on the basis of Pskov branch of St. Petersburg University of Economics and Services;
- Public and residential buildings for energy audits were identified;
- More than 136 public and residential buildings were reconstructed (4 of them in Ostrovsky District), energy passport were provided.

Reported status in June 2013;

- Reviews of legislation on energy efficiency and energy saving were undertaken
- Proposals on improvements of the legal framework at the federal level developed in cooperation with the Science/Expert Council under a Working Group of the Council of the Federation;
- a Working Group on Energy-Efficiency and Energy Saving under the State Duma Committee on Energy; the Expert Council of the National Union of Energy Saving; a Working Group under the Russian Union of Industrialists and Entrepreneurs; the Expert Council of the RF Association of Managing Companies; the National Association of Construction Developers of Russia; Russian Energy Agency.
- Establishment of several regional working groups to discuss project results, reports and future activities
- Correction of energy saving and energy efficiency improvement programs carried out for 2 municipal and 3 regional programs;
- Approbation of the developed regional methodical instructions is taking place in Vologda Oblast as part of the corresponding working group's activities. These instructions were used as a basis for correcting the design documentation of the pilot construction site in Vologda.
- Regional methodical instructions developed for implementation of a new model of monitoring of building energy efficiency at the regional level
- Collection, analysis, and systematization of data on current energy expenditures;
- Energy surveys carried out in Pskov Oblast in 108 apartment buildings and public houses of Ostrov and Nevel Districts;
- Standard model schemes of heating and water supply and water disposal for the Ostrov and Nevel municipal units of Pskov Oblast developed and are under approbation;
- A municipal information system was established for the Ostrov and Nevel municipal units in Pskov Oblast that will allow quick data collection and coordination of energy consumption in public buildings.
- In the Arkhangelsk Region, the Project developed several models, including one for energy certification of residential houses and public buildings, a model of interaction between energy resource market participants and consumers, and an electronic database on the built-up territories and construction projects. In the nearest future, these developments will provide a basis for implementing sustainable policies of energy saving in the city of Arkhangelsk and Arkhangelsk Oblast.
- A framework agreement about participation in the Project with Administration of Arkhangelsk Oblast and the developer is on the approval stage. Possible EE engineering and technical proposals for the pilot site are being analyzed.
- During the negotiations with Arkhangelsk Oblast Administration about pilot construction sites 2 municipal districts were appointed for project implementation in Arkhangelsk city and Arkhangelsk Oblast. During 1st six months of 2012 circa 90 energy audits of public and social buildings were conducted, energy passports were developed. 8 apartment buildings with an area of 27,2 thousand m^2 were renovated in the frameworks of cooperation with city programme of capital reconstruction. 8 energy passports were developed. In order to develop methodology for residential buildings certification 6 typical buildings have been selected for conducting energy audit.
- On the basis of project recommendations municipal and regional energy savings programmes have been developed, action plan was formulated. A Programme for improving EE of utilities was developed in Pskov Oblast. Due to project proposal EE activities were included into federal programmes of co-financing in Arkhangelsk, Pskov and Vologda Oblast. EE development programme in HCS was formed in Pskov Oblast.

- Experience of foreign countries (Croatia, Latvia, Lithuania, Sweden, Denmark, Finland) in the sphere of energy efficiency improvement at regional and municipal level evaluated; examples of the best practices presented to project partners, including representatives of municipal and regional administrations, in the course of educational visits, seminars and round tables;
- Two international experts in the sphere of energy efficiency and development of energy efficient municipal norms were involved.

Outcome 2: Improved local capacities to leverage and manage investments into energy efficiency

Indicator(s): Development and introduction of capacity-building and professional training modules (Vologda Oblast); development and introduction of EE-related curricula in universities and technical colleges in the three participating oblasts; fully-functioning inter-regional professional training center; access of professionals to a distance learning system for EE topics; level of exchange of best practices and lessons learned

Baseline: Limited exposure to energy- efficiency-related topics at the post-secondary level; absence of programs at other levels of education. Lack of specific, focused EE curriculum in educational institutions in the participating oblasts; no professional training center in the NW Federal Region focusing specifically on continuing education in energy efficiency and energy management; no training units specifically focusing on energy efficiency. No means of capturing or disseminating experiences in EE programs.

Target: Modules introduced in additional schools in each category and disseminated to other oblasts; "know-how," including software, developed and distributed by VSTU; and two kits (curriculum, lecture outlines, exams, texts and workbooks) are produced and in use; branches of a university-based training center established across the NW Federal Region; 22 training units developed and in use at the inter-regional training center and in the Center for Distance Learning; Project lessons/best practices are produced and distributed to target groups and influence target group practices; replication partners are identified and a relationship with them is formalized.

Reported status in June 2012:

- In association with Vologda State Technical University a seminar was conducted for representatives of educational institutes devoted to EE curriculums and educational modules development.
- Target groups for implementation of the modules were identified.
- EE educational modules for elementary, secondary, vocational schools and higher education institutes, PC programmes and video materials are under development.
- Pilot educational institutes for regional EE educational component were identified.

Reported status in June 2013:

- 7 educational modules for elementary and high schools and professional and higher educational institutions were developed. They are currently under the process of developing methodical approaches and pilot approbating.
- Approbation of the developed educational materials is taking place at the sites of partner educational institutions, among which there are St.-Petersburg Technological University of Plant Polymers, Riga Technical University; North Arctic Federal University, the State Academy of Service and Economy, and Vologda State Technological University
- Training seminars and round tables (two in St.-Petersburg and one in Vologda) on personnel training in energy-efficiency carried out;
- A Center of Energy Efficient Design and Distance Learning was established on the basis of the Vologda State Technological University. Its branch offices are under opening at the State

Academy of Service and Economy (Pskov Oblast affiliate) and at the North Arctic Federal University.

- On the base of North Arctic Federal University a concept of an energy efficient design bureau was formulated;
- An international expert on development of educational programs in the sphere of energy efficiency was engaged.
- A seminar dedicated to various aspects of personnel training in energy-efficiency was carried out together with the Vologda Technological University.
- Along with the RF Ministry of Education, a section dedicated to personnel training in energy-efficiency was organized within the framework of the Forum "Standards of Efficiency: Organization of Education and Science.
- To replicate Project's results, along with the St.-Petersburg Technological University of Plant Polymers, the Project takes part in the Program "56 Yes to Energy-Efficiency" jointly held by the RF Ministry of Education and Science and Russian Energy Agency.
- The Project actively spread its experience and expertise at more than 15 big forums, congresses and seminars on EE building and organized 5 thematic seminars in the cities of Vologda, Kaliningrad, St.-Petersburg, and Arkhangelsk.
- Together with the key Project partners, which include the Nordic Council of Ministers, the Danish Embassy in Russia, the RF Ministry of Education and Science, training seminars, work sessions and round tables organized.

Outcome 3: Reduction of GHG emissions demonstrated: 45-76% reduction in energy consumption in construction and maintenance sectors; 10-20% reduction in energy losses in energy networks.

Indicator #1: Reduction in energy consumption in the construction and communal services (utilities) sectors of Vologda oblast.

Baseline: No architectural or civil engineering approach to new, more-efficient residential developments exists in the NW federal region.

Target: Necessary legislation adopted and applicable permits are obtained for a model site in Vologda oblast; Construction is completed, with buildings demonstrating savings of 45-76% over the regional average for thermal performance of buildings and network losses that are lower by 10-20%. The prototype residential development is finalized and replicated.

Reported status in June 2012:

- A framework agreement about participation in the Project with Administration of Arkhangelsk Oblast and the developer is on the approval stage.
- Possible EE engineering and technical proposals for the pilot site are being analyzed.

Reported status in June 2013:

- An agreement was signed with Administration of Vologda Oblast on implementation of a pilot construction project for three apartment buildings with total footage of 21,500 sq.m.
- Correction of P-stage project documentation was developed with the purpose to implement organizational/technical solutions focused on enhancement of energy efficiency and reduction of energy consumption.
- A list of necessary equipment was prepared. An international expert on energy efficiency in construction was involved.

Indicator #2: Use of energy performance certificates in the building stock in Arkhangelsk. Building renovations do not capture the full potential of cost-effective energy measures.

Baseline: Energy performance certificates are not used in the building stock in Arkhangelsk.

Target: At least 579 buildings will receive audits and the corresponding energy performance certificate ("energy passport"), and specific EE measures will be undertaken in six existing buildings in response to information generated from the certification process; results disseminated.

Reported status in June 2012:

- During the negotiations with Arkhangelsk Oblast Administration about pilot construction sites 2 municipal districts were appointed for project implementation in Arkhangelsk city and Arkhangelsk Oblast.
- During 1st six months of 2012, circa 90 energy audits of public and social buildings were conducted, energy passports were developed.
- 8 apartment buildings with an area of 27,2 thousand m^2 were renovated in the frameworks of cooperation with city programme of capital reconstruction[1] 8 energy passports were developed.
- In order to develop methodology for residential buildings certification 6 typical buildings have been selected for conducting energy audit.

Reported status in June 2013:

- A model of energy certification for residential houses and public buildings in Arkhangelsk was developed.
- A model of interaction between energy resource market participants and consumers was developed to enhance transparency of accounting energy resource utilization. Both models are under approbation.
- Energy audits were held in 108 apartment buildings and public houses of Ostrov and Nevel Districts (Pskov Oblast) and 16 apartment buildings in Arkhangelsk.

Indicator #3: Reliable and timely information on EE buildings available for decision-making in municipalities in Arkhangelsk Oblast.

Baseline: No coordinated information available for decision-making; lack of a methodology for EE project management in the housing and communal services sector in Arkhangelsk oblast.

Target: Municipal-level programs for heat supply and water delivery created; energy-efficient design office created at AOEEC, the regional energy efficiency center. Certification system introduced for public and residential buildings based on an electronic database and data management system; power consumption monitored on an ongoing basis. Energy audit program in place for public and residential buildings when they are commissioned; inspections of public and residential buildings carried out. Best practices and lessons learned shared across the NW federal region.

Reported status in June 2012:

- On the basis of project recommendations, municipal and regional energy savings programmes have been developed, action plan was formulated.
- A programme for improving EE of utilities was developed in Pskov Oblast.
- Due to project proposal EE activities were included into federal programmes of co-financing in Arkhangelsk, Pskov and Vologda Oblast. EE development programme in HCS was formed in Pskov Oblast.

[1] Comment: Not possible to verify as no such buildings were presented during the project evaluation mission.

Reported status in June 2013:

- An electronic database on the built-up territories and construction projects in Arkhangelsk developed and enriched with data.
- An "expenditure-income" model for assessing economic and investment benefits from investing in objects of capital construction was developed. On the base of North Arctic Federal University a concept of energy efficient design bureau was formulated.
- In the nearest future, these developments will provide a basis for implementing sustainable policies of energy saving in the city of Arkhangelsk and Arkhangelsk Oblast

2.6 Status of Financial Delivery

The disbursed amount of the project resources financed by the GEF were reported at USD 902,134 (excluding the PPG resources) as of June 30, 2013. By the end of 2013, the disbursements reached USD 1,610,117, which represents about 28% of total approved GEF amount of USD 5,840,000.

The cumulative co-financing that had been disbursed by June 30th, 2013 was assessed by the project team in the PIR at USD 16,669,799 million[2]. An updated co-financing report by UNDP is provided in Annex 9.

[2] The figure above represents co-financing through government programs on improving energy efficiency of the pilot regions.

3. FINDINGS AND CONCLUSIONS OF THE EVALUATION

3.1 Project formulation

A summary of the ratings for project formulation are presented in the table below with further details in chapters 3.1.1 – 3.1.10.

Project relevance (3.1.1)	HS
Project design and implementation approach (3.1.2)	MS
Country ownership/driveness (3.1.3)	S
Stakeholder participation (3.1.4)	S
Replication approach (3.1.5)	MS
Cost-effectiveness (3.1.6)	Not rated
Sustainability (3.1.7)	S
Linkages between the project and other interventions within the sector (3.1.8)	MU
Management arrangements (3.1.9)	MU
Risk Analysis (3.1.10)	U
Project formulation all	**MS**

3.1.1 Project relevance

The original project formulation is still considered as highly relevant addressing the key issues and barriers to improve energy efficiency of both the existing building stock and new construction. The energy efficiency requirements in the Russian construction norms are still far behind those included, for instance, in the neighbouring EU countries, problems remain with the effective enforcement and supervision of the implementation of even the existing energy efficiency norms and many local design institutes and other construction sector professional still lack the adequate knowledge and capacity to effectively promote state of the art energy efficient design and construction practices. As such, by effectively addressing the barriers elaborated in the original project document, the project would be in an excellent position to contribute in a significant way to the effort to improve the energy efficiency of both new construction and the existing building stock. Thus the project relevance can be rated as Highly Satisfactory (HS).

3.1.2 Project design and implementation approach

As stated in the project document under the chapter Replicability: “the project will work specifically at the local and provincial levels in three selected provinces of the North West of Russia. Given Russia’s vast territory, diversity and decentralized governance structure, the proposed regional (sub-federal) approach appeared to be most effective.” Furthermore, it is stated that “the development of long-term municipal energy efficiency programmes and the establishment of regional energy efficiency centres in the most advanced Russian regions have proved to be decisive in the success of energy efficiency projects”. No further information in the project document to support this claim is provided, however.

While for the mentioned reasons the adopted regional approach may indeed be a rational one, the project design has some characteristics that are weakening the effectiveness of this approach, which are discussed in further detail below.

Component 1: The specific outputs to reach the envisaged outcome 1 in general appear comprehensive and well thought with due emphasis on the actual implementation and enforcement of the adopted policies and regulations. What the project presentation fails to explain, however, is that how the several parallel and simultaneously implemented activities in three different oblasts to develop new replicable models for improved regulations, monitoring and enforcement mechanisms will

complement each other and support the overall project objective and implementation strategy in a fully co-ordinated way without overlapping activities.

An alternative approach to initially focus on one oblast only with all the activities dealing with regulatory framework and its effective implementation, monitoring and enforcement could have provided a more easily manageable and cost-effective approach with later replication potential in other oblasts. Now, for instance, the rationality for developing a new monitoring / data management system with related software both in Pskov and Arkhangelsk in parallel by two different consultants is not clear.

Another thing is that support for developing more energy efficient construction norms and enforcement mechanisms had been provided to Russia already in prior to the UNDP/GEF project formulation and similar efforts have continued in parallel to the UNDP/GEF project e.g. in Saint Petersburg. Therefore, a more thorough baseline analysis and consideration of these other projects in the design of the UNDP/GEF project by building on the previous results and identifying co-operation opportunities with other ongoing and/or planned projects would have been useful. The reasons for selecting Vologda as the spearhead for developing new construction norms, enforcement mechanism and energy efficient design of new buildings, and the project strategy and prospects for replication of the results in other oblasts are also not clear in this respect. After all, the main construction activities in the North West Russia at the time of project formulation were and still are in the Saint Petersburg area with some new energy efficient multi-apartment pilot buildings already constructed and with ongoing international co-operation activities with the Saint Petersburg Construction Committee to develop more energy efficient construction norms there.

Component 2: The educational and training activities under component 2 should continue from where the activities of the earlier UNDP/GEF project “Cost Effective Energy Efficiency Measures in Russian Educational Sector” as well as other capacity building and training oriented projects supported, e.g., by the Government of Norway were stopping. The project document does not make, however, these linkages and the incremental value added of the new UNDP/GEF project clear. Therefore, and similar to component 1, a more thorough baseline analysis as it concerns the other already finalized and/or ongoing projects and tying the design of component 2 more closely to this baseline would have been advisable. By and large, however, the component 2 seems to complement relatively well the educational activities of the previous UNDP/GEF project by expanding the scope from secondary schools and training of energy auditors to all different grades starting from the primary school and reaching the university level, professional schools as well as distant learning of those professional that are already employed.

The activities and measures that could have deserved more attention in the design of component 2 relate to:

- quality control of the educational packages developed especially for higher grades (e.g. by international peer review) to ensure that they reflect internationally recognized state of the art approaches and practices to design, implementation and management of different energy efficient measures and construction practices to be promoted by the project; .
- opportunities for on the job training in the context of other project components; and
- opportunities for benefiting from international co-operation and student exchange programs, including the already existing partnership agreements between Russian and foreign universities,

Component 3: In general, the project approach with demonstration projects highlighting the needs for co-operation with different financing entities and leveraging co-financing for them from the very beginning is correct and reflects the lessons learnt from other donor supported initiatives. Pure technical demonstrations without considering and demonstrating their financial sustainability and replicability rarely works. It is also considered as appropriate, as suggested by the project design, that the GEF project would pay for the agreed incremental costs of the envisaged new pilot EE building(s)

to demonstrate new, internationally recognized state of the art EE design principles and technologies, while the financing of the renovation of the existing buildings should be covered by the project's co-financing sources.

The identified main shortcomings in the design and implementation approach of component 3 relate to the following:

- the extensive work supported earlier by the Norwegian government and the NEFCO in North West Region is not really reflected in the project design, especially as it concerns the activities implemented in Arkhangelsk oblast (apart from mentioning the development of the database supported by the Norwegian government at the time project formulation). As an example, it would have been worth elaborating further how not only the database that was under development at the time of the project design, but also all the other previously supported activities will contribute to the successful implementation of the new UNDP/GEF project, what is the incremental value added of the proposed new UNDP/GEF project and what are the particular results and activities of these other projects, on which the new UNDP/GEF project can build.
- required mechanisms and implementation arrangements for ensuring that the quality and intermediate results of component 3 reflect the internationally recognized state or the art approaches and best practices (e.g. through on-the job training, close monitoring and international peer review) are not addressed at the adequate level in the project design and risk analysis;
- apart from the demo activities geared directly to the renovation of a few pilot buildings, the co-ordination and complementarity of the other activities implemented in Arkhangelsk under component 3 with those implemented in Pskov and Vologda under component 1 is not clear (see the previous comments for component 1). This concerns, for instance, the activities dealing with the information management tool (output 3,3) and energy certification of buildings (output 3.2). The exact function and planned scope of work of the planned energy efficiency design office is also not clear, since no responsibilities seems to have been assigned for it in implementing any other activities of the project.

In summary, the barriers that the three project components are trying to address are properly identified and the three components together are addressing all the elements that have been found as critical also in other countries for improving the energy efficiency of new construction as well as of the existing building stock. These areas to be addressed include: i) an enabling legal and regulatory framework and its effective enforcement, ii) transparent and reliable monitoring, iii) targeted capacity building and training, and iv) public awareness raising and building the confidence of the targeted stakeholders by replicable demonstration projects. By streamlining the project implementation approach and by building the project on a more thorough baseline analysis as it concerns, for instance, the past and/or other ongoing donor supported activities in the North West of Russia, however, the project design could have been contributing into more effective implementation of it.

Another thing is that the formulation of the project results framework, as it stands now, does not fully support and highlight the aspects that are most essential for ensuring the impact and sustainability of the project results. As an example, the stated development objective of the project is "to build local capacities for and demonstrate local solutions to improved energy efficiency in construction and maintenance of buildings in the North West of Russia: Pskov, Vologda, and Arkhangelsk Oblasts", which at least for the demonstration part can hardly be considered as the ultimate development objective of the project. Although not likely to be the main reason for the problems encountered during project implementation, defining the main project goals for implementation starts from the project results framework: The main emphasis should be on the project impact on the construction and building sector as a whole with corresponding GHG reduction, which is correctly addressed by the development objective indicators, but not by the formulation of the development objective itself.

At the outcome level, the selected indicators and stated targets do not really measure the progress towards the desired outcome, but consist of a mix different subtargets, some of which are more like outputs or results of individual activities. The stated outcome targets for Outcomes 1 and 2 also include no quality criteria. As an example, a target of "a model system operating in the oblast including an on-site (inspection program) and the program shared with other oblasts" does not place any requirements for the content of that model system in terms of targeted energy savings or enforcement levels or comparison with construction norms used in other countries. Similarly, "municipal norms adopted in two municipalities" does not tell anything about the content of or required energy efficiency improvements by those norms.

Finally, no reference in the description of any of the project components is made on the eventually required international expert support and how this should be organised in a way that would benefit the project most. The eventual local capacity constraints to effectively implement the project activities are not mentioned in the project risk analysis either.

For the reasons elaborated above, the project design and implementation approach as a whole is rated as marginally satisfactory (MS)

3.1.3 Country ownership/driveness

The section dealing with the country driveness in project document does not specifically mention the new energy efficiency law adopted in 2009, but it basically provides the basis, on which the targeted success of all project components is building, The regional authorities are obliged to implement the provisions of the federal law that concern their area and to which task the activities of the UNDP/GEF project should be directly and indirectly contributing. Thus the level of country ownership and driveness judged on the basis of the information provided in the project document is considered as satisfactory (S) despite the fact that no particular complementary initiatives undertaken by the regional authorities of participating oblasts that would further support the claim on country ownership and driveness are highlighted in the project document.

3.1.4 Stakeholder participation

The list of identified stakeholders foreseen to be engaged in project implementation (Annex 2 of the project document) as well as the consulted financial institutions (Annex 3) is extensive providing an excellent basis for follow up by the project management team. Some further analysis of the results of the activities already implemented and/or planned to be implemented by the identified stakeholders and integration of the results of this analysis into the original project design would have been useful, however. By just considering the relevance of the key stakeholders listed in the project document and suggestions made for their involvement, the project formulation can be considered as satisfactory (S).

3.1.5 Replication approach

As a replication strategy, the project document states that "the pilots in Component 3 will cover both institutional and technological models and financing arrangements for projects. The outputs of these local pilots will then be further replicated and scaled up to the regional and federal levels through the institutional networks of the North West Federal Okrug, which is the regional branch of the Presidential Administration and by developing a sustainable financing model with project partners." The project document does not describe in greater detail, however, what this sustainable financing modality might be. In the section "financing modality" it is stated that "the project is centered around regulatory development, capacity building and technology demonstration. The project objectives will be attained through technical assistance and investment in demonstration activities. Loan and/or revolving-fund mechanisms are not considered appropriate for these approaches and therefore grant-type is considered most adequate to enable the successful delivery of project outcomes. However, the project will work with a selected financial institution or institutions active in North West Russia, which will support the sustainability and replicability of the project". Presumably, with this grant funding the

project document does not mean only GEF grant funding, but still it does not provide much further clarification what the promoted sustainable financing modality would be.

While the project document is rightly recognizing the importance of early engagement of financial institutions in the financing of the demo projects rather than using GEF grant funds for purely technical demonstrations, it fails to provide guidance on how to do this in practice. The replication related indicators and targets are not adequately reflected in the project's Strategic Results Framework either. Thus the replication approach presented in the project document is rated as marginally satisfactory (MS)

3.1.6 Cost-effectiveness

Similar to other UNDP/GEF funded projects implemented under the Russia Energy Efficiency Umbrella project, the total budget of the project with USD 5,84 million (considering the GEF funding only) for primarily technical assistance type of activities is significantly higher than the size of similar projects supported by GEF in other countries. Although the costs of technical assistance activities do not directly correlate with the size of the country as it concerns, for instance, the drafting of new regulations, development of new analytical tools, development of new training and educational materials and supporting selected demonstration activities, the larger amounts of data and other information to be managed, larger number of stakeholders to be targeted by the various public awareness raising and training related activities, the complexity of the administrative system in Russia with federal, regional, sub-regional and municipal levels and other similar considerations obviously somewhat raise the costs of this type of technical assistance.

Ultimately, however, the cost effectiveness of the project compared to similar projects implemented in other countries is determined by the achieved results. Should the project succeed in contributing in a major way to its stated goal to put the construction and housing sector in North West Russia on a lower carbon trajectory, it would be worth of every cent and rouble spent. In the opposite case, it would end up as a heavily oversized technical assistance initiative, which has produced some useful results e.g. in the educational sector, but which results could have been achieved at a similar level with much smaller amount of resources. The success with the remaining project activities supported by the project will, therefore, be critical in completing this assessment and, therefore, the rating of this is left for the final evaluation.

3.1.7 Sustainability

For sustainability the project document states that "because the stricter building codes developed under the project will remain in force after the project comes to an end, the impact that the project activities will have on the buildings sector is highly sustainable. In addition, the curriculum and materials developed for professional training and the prototype building plans will be used after the project concludes and will continue to improve the capacity of architects and engineers to design more efficient buildings".

By working with the construction norms and their effective enforcement, improved monitoring and energy management, capacity building and training and by highlighting the importance of broad stakeholder engagement, including close co-operation with the regional authorities and other financing partners for the financing of demo projects rather than relying on GEF grant financing only, the project design is including the right ingredients in trying to make the effort sustainable. Some further component specific details and requirements for the project management on how to do this in practice and highlighting, among others, the importance of validating the intermediate results by international expert peer-review would have strengthened the project documentation. In general, however, the main components included into the project design to ensure its sustainability can be considered as satisfactory (S).

3.1.8 Linkages between project and other interventions within the sector

Beside the extensive list of identified stakeholders and summary of the consultations with the financial institutions mentioned in chapter 3.1.4 and the reference to the Norwegian funded project under output 3,3c, the project document does not really provide many other details about the linkages and co-operation opportunities with other interventions within the sector nor does it explain to what extent the project can build on and how it complements the results of the earlier projects.

In the chapter "Design principles and strategic considerations" the project document states that "a number of energy saving projects have been implemented in the North Western Federal Okrug, including infrastructure projects with the World Bank, EBRD and NEFCO financing (e.g. energy metering and energy savings in water supply systems and residential buildings), TACIS supported projects on energy efficiency training, technology transfer and local norms in St. Petersburg construction sites, and the Norwegian Ministry of Foreign Affairs has provided financial support for energy efficiency activities in Arkhangelsk Oblast. These projects remained mainly uncoordinated. The proposed project will analyze, coordinate, and disseminate best practices of these initiatives through the institutional networks of the North West Federal Okrug and Representative of the President of Russia in the North West Federal Okrug".

A more thorough analysis of the results and lessons learnt from these past projects as well as those projects that were ongoing or under development would have been recommendable to do already during the project formulation, so that these linkages and co-operation opportunities could have been addressed and elaborated in greater detail in the project design and suggested project implementation arrangements. Leaving that all for the project implementation stage is too late from the effective project design and formulation point of view. As such, the rating for this part of project formulation is rated as marginally unsatisfactory (MU).

3.1.9 Management arrangements

The selection of the Office of Plenipotentiary Representative of the President of the RF in the North-West Federal Okrug as the initial project implementing agency based on the reasons explained in the project document sounds as a rational one for ensuring replication and sustainability of the project results. Furthermore, the envisaged roles of the National Project Director and the Project Steering Committee are clearly described in the project document. The institutional changes that have taken place after that were likely not possible to predict at the time of project formulation.

The operational level project management arrangements elaborated in the project document, consisting of three regional team leaders responsible for day-to-day management and implementation of the UNDP/GEF project activities in his/her respective oblast and the central project management office in Saint Petersburg consisting of a project manager and administrative assistance with an oversight on the effective co-ordination and implementation of all activities also appears as a rational approach, if effectively implemented.

What is missing in the project design is the discussion about possible local capacity constraints that may pose a serious risk to the effective project management and thereby to the success of the project as whole. There was overwhelming evidence from many earlier GEF funded projects already at the time of project formulation that to great extent apart from how well or badly the original project design has been made, the capacity of the project management ultimately determines the success or failure of the project. Several nationally executed GEF funded projects in different countries have also evidenced problems in attracting experienced enough local project managers that can manage the project entirely on their own without external expert support and advice, who can bring state of the art knowledge and experience from similar projects implemented elsewhere and monitor the progress and substantive impact of the project on an ongoing basis starting from the project inception. Therefore and especially for the project of this size and complexity, close monitoring of the project progress and inclusion of an experienced international project adviser into the project management structure with demonstrated capacity and adequate experience from similar projects implemented in other countries

to serve that function together with adaptive management advise should have been considered already at the project design stage and the draft Terms of Reference for that attached into the project document. As a difference to short term international experts typically hired for some particular tasks, a chief project technical/management adviser would require a longer term (but not necessarily full time) assignment starting from project inception and with a possibility for several consequent visits at few months' interval throughout the implementation of the project. Alternatively, such an expert with a residence already in Russia could have been found. In the course of time and after the demonstrated capacity of the project management to effectively implement the project on its own, the level of engagement of this external project management and implementation adviser, as applicable, could have been gradually reduced.

Given the above and the impact such oversights typically have on the successful project implementation, the suggested management arrangements as described in the project document are rated as marginally unsatisfactory (MU).

3.1.10 Risk analysis

The risk assessment made at the project design does not like a serious one. How all the risks can be considered as low for a very broad reaching and challenging project like this in quite a complex institutional and financing environment ? Whether this is partly because of the actual and/or perceived GEF approval culture, where any risk identified as high may jeopardize the entire approval of the project can be discussed further, but nevertheless, a more serious and realistic risk assessment would have been essential in order to adequately and on time address the risks that were recognizable already at the project design phase. As an example and based on the lessons learnt from the other ongoing or already completed UNDP/GEF funded projects, the project management risk should be included as a standard risk element to all projects. Furthermore, the prevailing policy, institutional, other capacity and financing risks were not analyzed adequately or not at all.

Given the above, the rating of risk analysis at the project design is considered as unsatisfactory (U).

3.2 Project implementation

The summary of the ratings for project implementation are presented in the table below with further details in chapters 3.2.1 – 3.2.5.

Project implementation and management approach and arrangements (3.2.1)	U
Project administration and financial management (3.2.2)	MU
Monitoring, evaluation and adaptive management (3.2.3)	MU
Contribution of Implementing and Executing Agencies (3.2.4)	MU
Stakeholder involvement, outreach and co-ordination with other related initiatives (3.2.5)	MU
Identification and management of risks (3.2.6)	U
Project implementation all	**MU**

3.2.1 Project implementation and management approach and arrangements

In the project inception report, which according to the information obtained from the PIR 2012 was finalized in February 2012 i.e. 15 months after the project start and 8 months after the project inception workshop, the project implementation arrangements were still described as follows:

"The project will be implemented according to the national implementation modality by authorities of the Russian Federation. The Office of the Plenipotentiary of the President of the Russian Federation in the Northwest Federal District acts as a National Executive Agency (= Implementing Partner) for the

project and is responsible for planning and overall control of project activities, reporting, monitoring, and project evaluation. The Steering Committee will be established for overall project coordination. The committee will include officials from the Ministry of Energy of the Russian Federation, Ministry of Economic Development of the Russian Federation, Ministry of Education and Science of the Russian Federation, other key ministries and agencies, the Administrations of Arkhangelsk, Vologda and Pskov Oblasts, nongovernmental organizations and energy efficiency centres, domestic and international producers of construction products and construction companies, officials from institutions of tertiary education. UNDP is responsible for project control, monitoring and evaluation, reporting to GEF, including financial reporting."

Soon after that (in the end of 2012), the main project partner, namely the Specific Commission on Energy Efficiency under the auspices of the Office of the Plenipotentiary of the President of the Russian Federation in the Northwest Federal District was dismissed, and in 2013 UNDP received an official letter from the Project Director that the structural and functional changes in the Office allowed him to perform the functions of Project Director only until the end of 2013. In the same letter a suggestion was made to consider the Russian Energy Agency as a candidate for the new Project Implementing Partner, which decision together with the selection of a new Project Director was taken by the second Project Steering Committee meeting on December 16, 2013. Apart from this and the first PSC meeting at the project inception phase, no other PSC meetings have been organized during project implementation.

In the PIR of 2012, the problem about the double role of the National Deputy Director was raised acting at the same time as the project manager i.e. the same person requesting and authorizing the payments. Based on the information provided in the PIR, the problem was evident already earlier, but could not have been sold. Later, a separate project manager was hired and replaced again in summer 2013 with a new project manager, while the former project manager has been continuing since then as the "Project Implementation Co-ordinator". After all these changes, however, there is still fundamental lack of clarity about who is actually managing the project, since most discussions during the project evaluation mission were conducted with the Project Implementation Coordinator, while for any substantial issues, both members of the current project management team were frequently referring to the former National Deputy Director as the one, who continues to provide all the substantive advice for project implementation and, among others, is managing all discussions with the project partners on any financing related matters.

As it concerns the current role of the regional co-ordinators (RCs) in the project implementation, the observations and interviews conducted during the mission support a conclusion that rather than being engaged in the management of all regional project activities with a clear vision on what the project is expected to achieve for their particular region, the RCs have been assigned with quite specific and limited tasks only such as to convene and co-ordinate the work of the local working groups, act as local contact persons for core project management team, take care of different administrative and logistic tasks and, as applicable, review the technical documentation produced by the project to the extent that it falls under their specific area of expertise. The RCs in general were not familiar with the content of the project document, including some critical project components for their respective region such as the enforcement related activities in Vologda or the regulation related activities in Pskov. Apparently, the RCs had not been asked to initiate any activities in those substance areas. The barriers related to effective enforcement of the existing norms and regulations and the planned project activities to remove those barriers have generally remained unrecognized and have not been addressed by any substantive action by the core project management team either.

Given the above, there are some serious concerns about the current project management arrangements and capacity to effectively manage and implement the project. The main identified deficiencies in the project management continue to be in the area of:

- Understanding the key project targets at the objective and outcome level and planning and managing the implementation of the project activities accordingly. In particular, this concerns

the lack of recognition and understanding about the need to demonstrate the sustainable financing arrangements as a part of project's demonstration activities, the fundamentals of energy and (cost-) efficient building design, effective and timely utilisation of international expertise to overcome the local capacity constraints; and effective stocktaking and partnership building with other national and international activities currently implemented in the region with similar goals and efforts to improve the building sector energy efficiency;

- The continuing lack of clarity about who is actually managing the project. As mentioned before, during the project evaluation mission the main discussions about the current status and implementation strategy of the project were conducted with the former project manager, while on any major financial issues and negotiations with the regional and municipal administrations, including agreed arrangements for cost-sharing, the primary role of the former deputy director was highlighted. All this is obviously leading to a question whether it is still the former deputy director, the former project manager or the current project manager who "de facto" is managing the project;
- Choosing the right indicators for measuring the progress and success of the project. As an example, rather than considering a completed report as the final result, the focus throughout the implementation should be on critically assessing and monitoring the relevance and quality of those reports in contributing to the main development goals of the project and, as applicable, on the required concrete follow-up action. Based on the initial observations during the project evaluation mission, there appears to be too many highly paid reports and documents accumulating on the shelves with no real follow up and contribution to the main development goals of the project;
- Serious oversights of many critical aspects elaborated in the project document, especially as it concerns effective partnership building with other national and international entities active in the area, the already mentioned financing aspects and the need to address also the enforcement related issues beside just developing new energy efficiency norms; and
- Rather defensive approach to any outside advice to guide the project towards its stated targets and for ensuring the sustainability of its results, thereby not really recognising the reporting responsibilities that also the project funding organisation(s) have on the impact and results of the financial support provided.

On the positive side, an area where the project and the project management team clearly seems to have succeeded is the engagement of the regional and city administration through the establishment of regional working groups to review and discuss the projects results and provide advice for their further development. As examples, the process of developing new construction norms in Vologda and the energy management system in Pskov can be mentioned. This approach can be considered as absolutely essential for ensuring local ownership and thereby the sustainability of the project results and, therefore, is definitely worth continuing.

This alone, however, is not enough to compensate for the inefficient and unsustainable implementation approaches in other areas described above, which are likely to prevent the achievement of the stated project targets. As an example, the local working group established for the review, discussion and adoption of the new construction norms in Vologda is critical, but it does not compensate for those capacity constraints and lack of information that, for instance, the local design institutes at the oblast level still have (as openly recognized also by themselves) in drafting those norms and conducting energy efficient building design by incorporating international good practices and state of the art approaches. These constraints could have been overcome by more effective use of project resources allocated for capacity building and supporting international expertise (e.g. through the on the job training) and by identifying opportunities for co-operation and partnership building with both international and national expert institutions engaged in similar work in Russia.

Given the above, the current project management and implementation approach as a whole must be rated as unsatisfactory (U).

3.2.2 Project administration and financial management

At the end of the 2013, the project had disbursed slightly over USD 1,6 million. This represents about 28% of total approved GEF funding of USD 5,84 million compared to 15% as of June 30, 2013. While still behind the originally envisaged implementation schedule and delivery rate, this can be at least partly justified by the past and ongoing administrative reforms, which have been slowing down some activities. Furthermore, at the beginning the project lost its originally assigned site for pilot buildings in Vologda, which led to a round of new negotiations with the local authorities and delayed the implementation of this particular component. The complete table showing the outcome specific project disbursements for the years 2011 – 2013 and the currently planned disbursements for the years 2014 and 2015 is presented in Annex 8.

The project financial audit report for 2012 did not reveal any discrepancies with UNDP financial management and accounting rules. The question on the double role of the national project director raised in the PIR 2012 was not reflected in the financial audit report either. By the time of this mid-term evaluation, no financial audit report for 2013 was available yet.

The delivery rate is typically used as one of the key indicators to measure the efficiency of project implementation, but this is not without problems and may sometimes send wrong signals to the project management. This is, if the importance of maintaining the delivery rate is emphasized at the costs of project's sustainable impact and cost-efficient use of project resources. In every UNDP/GEF project dealing, for instance, with legal and regulatory measures and having some institutional capacity building and policy targets, there is a fair deal of uncertainty outside the influence of the project about the speed, by which the proposed institutional and policy changes can take place, while still eventually being prerequisites or at least supporting the planned capacity building, public awareness raising and/or investment related activities. To some extent, risks like this can be addressed by good project design, but not entirely should the project wish to avoid implementing activities of just some marginal impact. Significant unpredicted cost savings during project implementation can also be achieved by effective partnership building and co-operation with other projects and by cost-effective procurement. In such cases, the delivery rate should be of secondary concern, should the measures undertaken and the way the project is managed and implemented expand the overall project impact.

On the other hand, extending the project duration always increases the project management costs vs. the resources used for substantive activities and, therefore, automatically granting the extension for projects, for which the delivery rate is dragging behind due to the inefficient project management does not provide correct signals either. As such, the situation needs to be evaluated on a case by case basis. For this particular project, this is discussed in further detail in chapter 4.

The project management costs since the project start (excluding the costs of regional co-ordinators, but including the PMT contributions to the actual implementation of activities – not only administrative management) were reported at USD 250,000. With current staffing, the fixed project implementation costs (including the costs of the core project team in Saint Petersburg and three regional co-ordinators) can be estimated at around USD 120,000 –130,000 per year, which can be considered as reasonable for a project of this size and complexity, if the project management was effectively contributing towards meeting the stated project targets also by other than just administrative management. This is not the case yet, however, and is, therefore, an aspect that needs to be taken into account when considering the possible extension of the project.

A significant amount of project resources has been spent on the preparation of studies and detailed design documents, for which the quality control, however, has not been adequate in terms of making sure that they reflect international state of the art approaches and practices. This applies, in particular, for activities implemented under Outcome 3, for which close to USD 500,000 has been spent on studies and detailed design documents of the pilot projects in Vologda and Arkhangelsk and for setting up the energy certification, monitoring and data management system. Out of this, only USD 34,000 has been spent for international expert support despite the fact that concerns about the local capacity constraints to effectively implement these activities have been raised from the project start.

Under Outcome 1, the development of the energy management systems for the Ostrov and Nevel districts in the Pskov oblast appeared to proceed relatively well. Given the fact that, however, that this is the only substantial achievement so far that could be observed under Outcome 1 (for further details, see chapter 3.3.1) a question can be raised, whether similar results could have been achieved by less resources, e.g. by more efficiently taking advantage from similar systems developed in other countries. The same applies to the new draft construction norms developed in Vologda.

Table 3.1 A summary of the project disbursements on consultancy contracts in 2011 - 2013

Budget Line	Description	Outcome 1 USD	Outcome 2 USD	Outcome 3 USD	Total USD
71200	International consultants	**39 781**	**29 802**	**34 000**	**103 583**
73100	Local consultants (individuals), of which:	139 962	102 357	179 928	**422 248**
Share of the core team + regional co-ordinators		56 745	42 833	67 983	**167 561**
Local consultants - others		**83 218**	**59 524**	**111 945**	**254 686**
72100	Contractual services (companies)	**313 634**	**97 580**	**348 757**	**759 970**
Total for consultancy services without core team and regional co-ordinators		**436 632**	**186 905**	**494 702**	**1 118 239**

Without conducting a more detailed technical review of each and every document produced by the project so far (which, as explained before in chapter 1.5, was not possible to conduct in the frame of this MTE), it is difficult to make a final judgement on how judiciously project funds have been used and how cost-effective all the interventions have been. The observed results vs. the disbursements under outcomes 1 and 3 in particular indicate, however, that there is room for some improvement.

According to the project management team, the procurement has followed the standard UNDP procurement rules requiring the tendering of all contracts. While daily rates and expected number of days to be spent for the assignment are typically required in all tenders for international experts, this is not the case for local contracts. A question related to this was raised during the evaluation, as the costs of certain local consultancy contracts (such as those for energy audits + certification in Arkhangelsk and the finalization of the design of the EE measures for the pilot buildings in Vologda) seemed to significantly exceed the amount of work typically required for such outputs (see Annex 4, Question 5 for further details).

For co-financing, the project seems to be meeting its co-financing targets at the aggregate level, but at the specific activity level such as leveraging financing for the planned demonstration projects, there are significant gaps. These gaps are currently slowing down the project implementation. As such, it is also questionable to what extent the reported co-financing has been leveraged by the project and to what extent it would have happened anyway. For further details, see Annex 8 of this MTE report.

Given the above, the overall rating for project administration and financial management and for the cost-efficiency of the resources used so far is considered as marginally unsatisfactory (MU). This may be further evolving after a more detailed technical review of all the studies, educational materials and others have been conducted and compared to the resources spent.

3.2.3 Monitoring, evaluation and adaptive management

The main entities and tools for facilitating ongoing monitoring of the project progress and related adaptive management are 1) Project Steering Committee, which should be convened at regular intervals to monitor and provide guidance for project implementation and co-ordinate its work with other related activities; 2) Three regional working groups convened from experts from the main regional and municipal stakeholders the project is working with; and 3) the Project Implementation Reviews (PIRs), where the project's main outputs and progress towards reaching its development

objective are reported and rated annually by the project management, UNDP CO and the UNDP/GEF regional technical adviser with suggestions for adaptive management, when needed.

The mid-term, evaluation was initiated three years after the project start i.e. slightly later than at the mid-point, but still relatively well in schedule by taking into account the delays experienced at the beginning of the project. During the MTE, the project team provided good access to all requested information and a broad range of stakeholder consultations were organized in an appropriate way.

By the time of starting this MTE, only one PSC meeting had been organized at the project start. The second meeting was organized during the MTE to decide on the change of the Project Implementing Partner and Project Director. As such, the PSC has not really been able so far to fulfil its envisaged role in effectively monitoring and guiding the project implementation. As reasons for the PSC being practically absent from the project's M&E structure, the past and ongoing administrative changes and staff turnover in the key federal ministries and regional/local administrations were mentioned.

The three regional working groups included as complementary elements into the project M&E framework may have, to some extent at least, compensated for the absence of the PSC, but cannot replace it entirely. The composition and working procedures of the working group in order to effectively assess, discuss and further develop the project outputs with due attention on the sustainability aspects by taking into account international best practices and state of the art approaches may also be thought and discussed further. The project management team with adequate capacity to effectively guide and further capacitate this process has a crucial role to play there.

Two project implementation reviews (PIRs) from June 2012 and June 2013 were available for review at the time of the MTE. A summary of the project results, as reported in the PIRs is provided in chapter 2.5 of this MTE. Although an impressive list of outputs are reported in both PIRs, much of the focus of this reporting has been on distinct activities rather than measuring the progress towards the actual goals of the project and how the reported results have contributed or will contribute to this in practice. Partly, this can be blamed by inadequate project results framework not having the right indicators and targets to measure such progress and project impact, but not much has been done to correct the situation during the project implementation either. While in a few occasions the PIRs are also reporting about the actually completed renovation and reconstruction projects in Pskov and Arkhangelsk, no further evidence was provided during the project evaluation mission that the project would have effectively facilitated or contributed to this. As such, there may be a need for some further clarification on this.

As it concerns the given ratings and related comments in the PIRs of project progress towards meeting its development objective (DO) and implementation progress (IP), the assessment and ratings by all three reviewers in the in first PIR of 2012 are realistic, recognizing some problems with the delayed project start and low disbursement rate, but correctly optimistic about the future opportunities of the project to accelerate its activities and opportunities to have a major impact on shifting the new building construction and renovation of the existing building stock on more energy efficient and sustainable track. The recommendations provided by UNDP CO and RTA for adaptive management were also valid to be taken into account by the project management team. Among others, these recommendations included:

- to further strengthen practical cooperation and partnership with the federal government stakeholders, primarily with the Russian Energy Agency, the government-based agency supporting implementation of the federal energy efficiency programme, and with the Ministry of regional development (UNDP CO);
- better integration with on-going EBRD/IFC/GEF projects. Although series of consultations and regular working meetings with IFC and EBRD partners have been conducted by UNDP, cooperation will have to be promoted at a more working level (UNDP CO);
- a stronger and greater emphasis on financing solutions for regional administrations and access to extra-budgetary sources of funds as well as improving the way that funds are

allocated in the state budget for energy-efficiency measures to provide the right incentives for building energy-efficiency (UNDP RTA);

- In addition, mobilizing private sector investment will be an important component of making this project successful. Providing the right incentives for the private sector (esp. construction companies) to invest in building energy-efficiency is critical if this project is to be successful (UNDP RTA).
- To be successful and go beyond simply helping to implement a few pilot/demonstration activities, the project team should consider how they can be more active in engaging the private sector, including construction companies and banks in a meaningful manner in this project. For example, a Council of Self-Regulating Organizations has been established in the construction sector facilitating cooperation between the authority and business and the project could focus on stimulating additional business investment through this Council. The lessons learned from UNDP GEF's energy-efficiency project in the State Sector in Belarus (which launched a private sector energy-efficiency investment vehicle, the International Energy-Efficiency Centre, an ESCO and was pro-active and leveraged significant additional State Sector co-financing for energy-efficiency investments) could be studied in this regard (UNDP RTA).
- Additional efforts to secure the co-financing and to track and monitor it appropriately should be expended (UNDP RTA)

All the recommendations listed above are still valid 1,5 years after they were made, together with the recommendation of the former project director in the first PSC meeting of June 2011 for an expert evaluation of already existed projects in order to replicate their experience. What is obviously creating some concerns is that most recommendations listed above have not been effectively followed up until now. As an example, views were still expressed during the evaluation mission by the project management team that the work with any financial mechanism or efforts to secure financing for the targeted replication is not required by the project strategy and is, therefore, out of the project scope. Similar confusion appeared to be about financing of the planned EE retrofits in Arkhangelsk, for which the key stakeholders seemed to have completely different views by whom and how the planned demo projects are supposed to be financed. From the effective project management and project credibility point of view for effectively reaching its targets, a situation like this after 3 years from starting the project implementation and after spending significant amount of project resources (100k+) for detailed design of the planned demo projects is clearly unacceptable..

The main adaptive management actions reported by project management team in the annual PIRs are the decentralization of the management of the regional activities to regional co-ordinators (PIR 2012) and establishment of the regional (technical) working groups to review and discuss the project's technical documentation and deliverables, for which the core project management team felt that they did not have enough capacity to do it themselves (PIR 2013). Both initiatives can be considered as a very good approach to promote dialogue and project ownership at regional level, but they cannot compensate the need to have also a core project management team in place, which has a clear vision and adequate technical capacity and knowledge to assess the quality and relevance of the project deliverables and to where the project is heading in general. Based on the observations during the evaluation mission, the regional co-ordinators did not have a full vision of the specific project targets to be achieved in their particular region either and in general were not aware, for instance, of the provisions of the project document in this respect.

For the reasons above, the overall rating for monitoring, evaluation and adaptive management at the project implementation is considered as marginally unsatisfactory (MU).

3.2.4 Contribution of Implementing and Executing Agencies

Given the problems with the project administration and the apparent absence of a common vision and constructive co-operation between the project team, the local UNDP office and the UNDP/GEF

regional advisor to guide project implementation and support its adaptive management, the contribution of the Implementing and Executing Agencies to the successful project implementation cannot be rated as satisfactory. Based on the review of the PIRs and the interviews conducted during the evaluation, valid advice and suggestions have been provided at different occasions, but these have not led to any significant changes in the project implementation approach and have not been effectively followed up. This applies, for instance, to the suggestions made to strengthen the co-operation with other related initiatives, more efficient use of the available international expert support and the need to put more emphasis on the financing related aspects of the project.

In general, the need and the required resourced for effectively monitoring and supervising the project management and implementation by UNDP as the GEF implementing agency seems to have been clearly underestimated or it has not, for other reasons, been able to identify and address the observed problems with project implementation and reaching its envisaged targets on time.

Given the above, the contribution of the Implementing and Executing Agencies to the project implementation as a whole until now is rated as unsatisfactory (MU). The selection of a new Project Director and the Russian Energy Agency as the new executing agency (implementing partner) in December 2013, the eventual more frequent PSC meetings in the future taking their envisaged role as well as the eventually recognized need to outsource some of the ongoing project monitoring and advisory functions for adaptive management to an independent external project advisor may gradually start to improve the situation.

3.2.5 Stakeholder involvement, outreach and co-ordination with other related initiatives

As mentioned in chapter 3.1.4, the stakeholder analysis made at the project design stage and repeated in the project inception report provides a very good basis for further consultations, but unfortunately this has not been effectively followed up by the project management team during the actual project implementation. Apart from participation in a few workshops, no evidence was provided during the MTE about effective research, coordination and partnership building with other ongoing projects and initiatives dealing with the same substance area, including the two EBRD (one in co-operation with the IFC) projects approved for GEF funding under the same GEF energy efficiency umbrella project. Neither such efforts have been made by the EBRD/IFC/GEF projects towards the UNDP project. The different oblasts, in which the three GEF funded building energy efficiency projects are simultaneously implemented hardly justify the practically complete lack co-operation and effort to find synergies and mutual benefits by these three activities implemented in parallel.

In the PIR 2012, it was stated that the project is actively engaged with leading associations related to EE and energy savings improving, such as Nordic Council of Ministers, National Builders Association (NOSTROY), Union of power engineers of the North-West region of Russia, Non-profit Partnership AVOK North West, Thematic society "Energy Efficiency and Energy Savings", while on the financing side the project was said to actively cooperate with private companies and financial institutes, such as Gazprom bank (OJSC), VEB (OJSC), Sberbank (OJSC), NEFCO, Raiffeisen bank and others. According to the PIR 2013, this was continued also during the following year. The outcomes of this co-operation do not really show up in the project results yet, however. In the complementary responses provided by the project team after the evaluation mission (Annex 4), it was stated (Question 12 concerning other than the financing entities) that “key objectives, which the project pursued in cooperation with these organizations have been achieved...First by the exchange of experiences and solutions”. This exchange of information does not show up, for instance, in the pilot building design and/or draft construction norms in Vologda, leading to a question that what is the specific objective contributing to the actual goals of the project that has been achieved by this exchange of experiences and solutions ?

According to the PIR 2012, the project was presented at more than big 30 forums, congresses and seminars related to building EE issues, while during 2012-2013 the project initiated a dynamic public awareness campaign being active participant in more than 15 big forums, congresses and seminars

on EE building. In partnership with other organizations, the project organized 5 thematic seminars in the cities of Vologda, Kaliningrad, St.-Petersburg, and Arkhangelsk and claims to have all the prerequisites to become a national platform for distributing best technologies and practices in energy-efficient housing construction. To further support this, the project has established a website (http://www.undp-eeb.ru/), thereby demonstrating the use of the available IT technology. At the time of the MTE, however, the concrete results of these activities towards reaching the project objective were not evident yet. Apart from providing some basic information about the project and an electronic platform for announcing project related tenders, the project web-site does not show up either yet the characteristics "to become a leading knowledge management platform for energy efficient housing construction in Russia."

On the positive side, the project appears to be quite successful in engaging the key municipal and regional authorities from the three participating oblasts for meaningful dialogue about the project results by the establishment of local working groups in each of the three oblasts the project is working with. Furthermore, the involvement and apparently good co-operation with the local universities for the implementation of the education related activities under component 2 can be mentioned as a positive observation.

The overall rating for stakeholder involvement, outreach and co-ordination with other related initiatives is considered as marginally unsatisfactory (MU). Although the project initiative to involve the local municipal and regional authorities through the establishment of working groups for each of the participating oblasts can be considered as a very good approach, it cannot compensate for the critical need for partnership building and co-ordination with other related initiatives to reach the project objective and to ensure the sustainability of the project results, especially as it concerns the financial and regulatory aspects of the work to be done.

3.2.6 Identification and management of risks

As mentioned in chapter 3.1.10, the risk analysis done at the project design phase cannot be considered as a realistic assessment of the probability and impact of the listed risks and did not capture some typical and critical risk to successful project implementation at all. Therefore, the basis for the project's risk management actions was quite weak already at the beginning of the project, but not much has been done during project implementation either to correct that situation. The risk analysis has essentially remained the same throughout the project implementation and has continued to rate all risks as "low" despite of serious delays in project implementation, ongoing institutional changes, recognized capacity constraints, uncertainties in obtaining required financing for the implementation of the planned pilot projects and in ensuring their sustainability and effective follow up. As such, the identification and management of risks needs to be rated as unsatisfactory (U).

3.3 Results

3.3.1 Attainment of project objective, outcomes and outputs

Project progress towards the attainment of project objective, outcomes and outputs is summarized in the table below with the following colour codes:

GREEN / COMPLETED	= Indicators show successful achievement
YELLOW	= Indicators show expected completion by end of Project
RED	= Indicators show poor achievement - unlikely to be completed by end of Project

Project Strategy	Indicator	Targets End of Project	Status of Delivery in December 2013	Comments	Rating
Project Objective Build local capacities for and demonstrate local solutions to improved energy efficiency in construction and maintenance of buildings in the North West of Russia: Pskov, Vologda, and Arkhangelsk Oblasts.	CO_2 emissions from energy use in new and renovated buildings in the three participating oblasts.	Direct reductions of 48,050 tCO_{2eq} as compared to the baseline.		Based on a tentative analysis of the planned pilot projects (with somewhat amended methodology and assumptions from the ones used in the project document) , the direct GHG reduction target remains plausible, but is not secured yet	**MS**
		Indirect reductions of 599,000 tCO_2 emitted due to space heating in new and renovated buildings during their lifetime (assuming a 20-year lifetime)		Given the concerns brought up in the MTE about the sustainable and replicable impact of the project, its ability to meet the projected indirect GHG reduction target by the current course of implementation remains questionable.	**MU**
Outcome 1 **(equivalent to activity in ATLAS)** Provincial and local policies and regulations ensuring enforcement of energy efficient building norms	Operational oblast-level legal and regulatory framework for enforcing and monitoring building codes in Vologda oblast.	Model system operating in the oblast including an on-site (inspection program) and the program shared with other oblasts.		No evidence yet whether the outcome of the activities in Vologda to develop new construction norms and to facilitate their effective implementation is producing a "good practice" model to be replicated in other oblasts. As discussed in further detail later in section 3.3.2, there are some concerns that reaching this outcome is not fully on the track.	**MU**
	Effective implementation of the Pskov Oblast Energy Efficiency Programme;	Oblast-level system of results-based monitoring operating in Pskov.		To the extent that this indicator and target relates to the development of the pilot energy management system in Ostrov, the progress has been good and the developed system design and software looks appropriate. The challenge will be in ensuring adequate replication of the monitoring in other than the pilot district and continuing flow of real time input data into the systems also after the project.	**S**
		Capacity of the EE Programme increased in at least 3 key areas as stated in the capacity development plan.		Not clear what is meant by this capacity development plan, as no information about the existence of such a plan was revealed during the evaluation	**U**
		Good practice disseminated in Russia and		As reflected in the earlier comments, the development of a good practice model for new	**U**

Project Strategy	Indicator	Targets End of Project	Status of Delivery in December 2013	Comments	Rating
		abroad.		construction norms and enforcement mechanism to be disseminated in Russia and abroad does not look evident yet	
	Effective implementation of an institutional and management model for EE municipalities in the Pskov Oblast;	Applied model of utility services provision in place and functioning for 2 municipal districts;		See comments for indicator # 2 under this Outcome	**S**
	Development of municipal energy efficiency norms in Pskov Oblast	Municipal EE norms adopted in 2 municipalities in Pskov oblast; norms disseminated to other oblasts.		No municipal EE norms have been reported to be under development	**U**
OUTCOME 1 AS A WHOLE					**MU**
Outcome 2 Improved local capacities to leverage and manage investments into energy efficiency.	Development and introduction of capacity-building and professional training modules (Vologda Oblast)	Modules introduced in additional schools in each category and disseminated to other oblasts		The progress with the development of educational modules appears to be satisfactory, but it was not possible in the frame of this MTE to evaluate the detailed technical content of those training modules. As such, a complementary, independent peer-review of the developed training modules is recommended to complement this evaluation..	**S**
	Development and introduction of EE-related curricula in universities and technical colleges in the three participating oblasts	"Know-how," including software, developed and distributed by VSTU and two kits (curriculum, lecture outlines, exams, texts and workbooks) are produced and in use		Similar to the above, the progress with the development of the EE-related curricula for universities and technical colleges appears to be satisfactory, but it was not possible in the frame of this MTE to evaluate the detailed technical content of those curriculas. As such, a complementary, independent peer-review of the developed training modules is recommended.	**S**
	Fully-functioning inter-regional professional training center;	Branches of a university-based training center established across the NW Federal Region.		The training centers are under development, but sustainable demand for their services and corresponding financial sustainability not evident yet. Also eventual capacity constraints.	**MS**

Project Strategy	Indicator	Targets End of Project	Status of Delivery in December 2013	Comments	Rating
	Access of professionals to a distance learning system for EE topics;	22 training units developed and in use at the inter-regional training center and in the Center for Distance Learning		The training units apparently under development, but sustainable demand for their services and corresponding financial sustainability not evident yet. Also eventual capacity constraints.	**MS**
	Level of exchange of best practices and lessons learned	Project lessons/best practices are produced and distributed to target groups and influence target group practices; replication partners are identified and a relationship with them is formalized.		Based on the initial findings and observations during the project mid-term evaluation, the project work and results with the educational components have potential to become a model for good practice to be disseminated and replicated, if further evaluated and verified for quality and alignment with international state of the approaches and latest knowledge on energy efficient building design and construction.	**S**
OUTCOME 2 AS A WHOLE					**S**
Outcome 3 Reduction of GHG emissions demonstrated: 45-76% reduction in energy consumption in construction and maintenance sectors; 10-20% reduction in energy losses in energy networks.	Reduction in energy consumption in the construction and communal services (utilities) sectors of Vologda oblast.	Necessary legislation adopted and applicable permits are obtained for a model site in Vologda oblast; Construction is completed, with buildings demonstrating savings of 45-76% over the regional average for thermal performance of buildings and network losses that are lower by 10-20%. The prototype residential development is finalized and replicated.		After loosing the initially planned pilot site, the project managed to agree with the Vologda municipality on a new site. The required permits are also likely to be obtained. The problem is, however, that apart from the devices installed for heat recovery from the ventilation, the design of the planned pilot buildings does not really represent any fundamental improvement on the standard building design. No network losses, as envisaged by the indicator, are foreseen to be addressed either. Although heat recovery from ventilation even on its own (if successful) can produce significant energy savings, the process otherwise has not really followed the initial project idea to evaluate and adopt new, international state of the art approaches to energy efficient building design and construction in Russia in accordance with integrated building design principles and adequate cost-efficiency analysis of different	**MU**

Project Strategy	Indicator	Targets End of Project	Status of Delivery in December 2013	Comments	Rating
				EE measures, while simultaneously providing on-the-job training for local design institutes. No further changes into the current building design at this stage was claimed to be possible. As such and apart from the eventual acceptance of heat recovery from ventilation air as a good practice model to be replicated in other buildings (although highly sensitive to its costs), the recognition of the current pilot building design as a good practice model to replicated in other buildings looks highly questionable at the moment.	
	Use of energy performance certificates in the building stock in Arkhangelsk	At least 579 buildings will receive audits and the corresponding energy performance certificate ("energy passport"), and specific EE measures will be undertaken in six existing buildings in response to information generated from the certification process; results disseminated.		While partly with the GEF support, partly with municipal funding the project is reporting about energy audits that have been conducted for a number of buildings and energy certificates issued, no evidence on the progress with the actual implementation of the EE measures "in six existing buildings in response to information generated by these activities" was evident during the MTE. Fundamental lack of clarity on the financing source of any meaningful EE retrofits still prevailed during the MTE and no concrete activities seemed to be underway by the project team to secure such financing	**MU**
	Reliable and timely information on EE buildings available for decision-making in municipalities in Arkhangelsk Oblast.	Municipal-level programs for heat supply and water delivery created;		Not clear to which concrete activities and project results this indicator is referring to. No concrete results so far reported.	**U**
		Energy-efficient design office created at AOEEC, the regional energy efficiency center		The establishment of an EE design office at the AOEEC was reported to be in progress, but no clear evidence on the sustainable demand and financing for its services yet	**MS**
		Certification system introduced for public and residential buildings based on an electronic		A model for the database and data management system was reported, but the framework for systematic collection of regular and credible input data not evident yet.	**MS**

Project Strategy	Indicator	Targets End of Project	Status of Delivery in December 2013	Comments	Rating
		database and data management system.			
		Power consumption monitored on an ongoing basis.		See the comment above	**MS**
		Energy audit program in place for public and residential buildings when they are commissioned;		Apparently, a program for such an audit program is in place, but in the absence of a more comprehensive set of activities to introduce new, with the international good practices comparable construction norms and to ensure effective enforcement of those norms, the real value added of just auditing newly constructed buildings is somewhat questionable.	**MS**
		Inspections of public and residential buildings carried out.		See the comment above	**MS**
		Best practices and lessons learned shared across the NW federal region.		Apart from the eventually interesting results from the ventilation air heat recovery, not evident yet that the project can produce “best practices” for this particular component to be shared and replicated across the NW federal region	**MU**
OUTCOME 3 AS A WHOLE				Since the core of this component are the planned demonstration projects (indicators #1 and #2), the overall rating of this component is considered as MU	**MU**

3.3.2 Project impact and prospects for sustainability

Based on the observations and review of the results at the mid-point of project implementation, the biggest and most sustainable impact of the project is likely to be made by the educational programs developed for different levels of education, which activities seem to proceed well also schedule wise, Furthermore, they seemed to benefit from motivated consultants working on these programs as well as on similarly motivated target beneficiaries. Another project subcomponent proceeding relatively well and also demonstrating some initial elements for sustainability (with good local ownership) is the energy monitoring and management system developed for and planned to be tested in the Pskov oblast. The concrete implementation plan and value added of the Energy Management system developed by another consultant group for the Arkhangelsk oblast is not completely clear yet and is likely to require some further research and consultations.

The weakest prospects for the sustainable project impact currently appear to be with the planned demonstration projects in Arkhangelsk dealing with the energy efficiency retrofits of the existing

buildings. At the time of the MTE, no concrete steps had been taken by the project yet to secure financing for these projects and both the regional and the central project team in general seemed not to be aware that the actual investments are not supposed to be funded by the GEF resources. Furthermore, no adequate cost-efficiency analysis and priorisation of the proposed measures seems to have been undertaken, but the feasibility studies have been completed for a package of measures with a payback period of over 30 years The highest investment costs and also the longest pay-back period is, according to the project team, with the renovation of the building facade contributing to over 75% of the total estimated budget of USD 35-40 million per building. Projects with such financial figures can be hard to sell to any potential financiers, whether private apartment owners, local city or regional administration or any private or semi private banks when considering larger scale replication.

Another point of concern relates to the information received during the project evaluation mission that the elements included into the pilot building design have been used as a basis also for the proposed new construction norms in the Vologda region. The review of the design of the planned pilot building in Vologda at the end of 2013 by an international building energy efficiency expert contracted by the project revealed some significant shortcomings raising a question whether similar shortcomings and suboptimal requirements have remained in the new construction norms. The local institution responsible for the design of those norms expressed during the interviews also as their own concern that some complementary capacity building would have been useful as they may still not have adequate capacity and knowledge to conduct all the work by taking into account the contemporary international practices. These concerns and risks have not been effectively addressed by the project yet by effectively engaging and utilizing the international expertise to build up the capacity of the local design institutes and making sure that also the local working group has adequate capacity to review and make recommendations for further development of those norms by taking into account state of the art approaches and international good practices to energy efficiency building design and construction.

Thirdly, it appeared during the evaluation mission that no activities have been initiated yet by the project to address the enforcement related barriers that were identified as a problem already in the project document. The project management neither at the core PMT nor at the regional level were really aware about the existence of such activities in the project design and/or what is meant by them in practice. It is well known, however, that the impact of even the best pieces of legal and normative acts can be effectively ruined by weak enforcement, which is why activities starting to address this issue should have been in place from the very beginning of the project.

The absence of credible business plans (at least those that the MTE would be aware of) and uncertainties in the adequate demand of services to be paid by the targeted customers for the distant learning centers established under component 2 in Vologda and the energy-efficient design office created by the AOEEC in Arkhangelsk are raising questions about their sustainability, especially as their exact role in supporting the other subcomponents of the project dealing with design and training related activities remained unclear. A vision of the local stakeholders emerging from the interviews was that the GEF is expected to pay for the first 1-2 years of the operation of those centres, after which they should become self-sustaining. There are considerable uncertainties and risks with this approach, however, which may have not been effectively addressed yet

A general concern about the sustainable impact of the project is based on the observation that for many subcomponents, finalised report was seen as an adequate result on itself without really thinking its contribution towards reaching the ultimate goals of the project. This approach, which is unfortunately common also for many other technical assistance activities, may leave behind an impressive pile of reports, but may not really produce results for replication and sustainable project impact.

3.4 Summary of ratings

Project Component or Objective	**Rating**
Ratings of Relevance, Efficiency and Effectiveness* (6 - Highly Satisfactory, 5 - Satisfactory, 4 - Marginally Satisfactory, 3 - Marginally Unsatisfactory, 2 -Unsatisfactory, 1 - Highly Unsatisfactory)	
Project Formulation	
Overall Project Formulation (Relevance)	**4**
- Conceptualization/design	4
- Stakeholder participation	5
Project Implementation	
Implementation Approach (Efficiency)	**3**
- Use of the logical framework	4
- Adaptive management	3
- Use/establishment of information technologies	4
- Operational relationships between the institutions involved	3
- Technical capacities	3
Monitoring and Evaluation	**3**
Stakeholder Participation	**3**
- Production and dissemination of information	3
- Local resource users and NGOs participation	4
- Establishment of partnerships	3
- Involvement and support of governmental/regional/municipal institutions	4
Project Results	
Overall Achievement of Objective and Outcomes (Effectiveness)	**3**
- Objective	NA
- Outcome 1	3
- Outcome 2	5
- Outcome 3	3
Sustainability Ratings** (4 - Likely, 3 - Moderately Likely, 2 - Moderately Unlikely, 1 - Unlikely)	
Sustainability	**2**
- Financial sustainability	2
- Institutional sustainability	3
- Socio-economic sustainability	2
- Ecological sustainability	3
Overall Project Achievement and Impact	**3 (MU)**

4. RECOMMENDATIONS

4.1 Corrective actions for the design, duration, implementation, monitoring and evaluation of the project

Revision of project's strategic results framework

As mentioned already before, the strategic results framework of the project in its current form does not really serve the effective monitoring of the project progress towards its main goals and would require a fundamental revision. While substantial content of the different outcomes can stay pretty much as they are, the number of indicators and targets need to be reduced and redefined with the focus on the main target(s) to be achieved under each outcome with due attention on qualitative and sustainability related aspects. After that, all project outputs under each outcome can be reviewed and adjusted to effectively contribute to the revised targets of each outcome.

Project management arrangements

For improving the likelihood for reaching the envisaged project goal, some serious reorganisation and strengthening of the project management needs to be realized as soon as possible. The first steps towards that direction were already taken by selecting the Russian Energy Agency as the new national Implementing Agency. The next step is to address the identified deficiencies and capacity constraints of the operational project management, as elaborated in further detail in chapter 3.2.1 of this MTE.

As a part of the required management changes and given the eventual difficulties to find experienced enough local project managers to run the project entirely on their own, the recruitment of an experienced international project management and technical advisor (with knowledge of the Russian language/Russian speaking staff and previous working experience in the Russian building sector) to support the project with any substantive issues, adaptive planning and management and ongoing progress monitoring is also strongly recommended with direct reporting responsibility to the project director, UNDP Regional Technical Adviser and UNDP CO.

Financing of demo projects

All the research work and project funds invested in energy audits, energy certificates and preparation of feasibility studies are pretty much useless, if not leading to concrete energy efficiency investments. For leveraging funding for these investments, the project needs to intensify its efforts. As clearly stated in the project document (page 7, Project rationale): "GEF financing will not be invested directly into renovation or energy efficiency improvements in existing/old buildings. However GEF funds will be used to leverage additional private sector investment".

While no new financing mechanism *per se* is foreseen to be established by the project, the project needs to tie its activities more closely to the already available financing sources and prepare investment proposals for EE improvements in such a way that they can be realistically also financed by other than the GEF resources. In the current feasibility studies this has not been done yet. Examples of possible financing sources that the project should be jointly developing with the local and municipal authorities towards systematic financing of energy efficiency improvements are different federal, regional and municipal building renovation funds, local and international banking sector as well as residents' own financing. The opportunities provided by the new "Federal Law on Capital Repairs" that entered into force in 2013 and obliging all apartment owners to pay a monthly fee into an account collecting funds for the required capital repairs may in this respect be of particular interest. This law, the preparation of which was supported by the joint IFC/EBRD/GEF "Improving Urban Housing Efficiency" project, seeks to[3]:

- provide a stable and secure cash flow from apartments owners that could be used to repay bank loans for building renovations;

[3] Based on informal consultations with the IFC project manager during the MTE

- make Home Owners Associations bankable clients for the purpose of financing energy efficiency repairs of multi-family buildings; and
- allow Russia's regions to introduce credit enhancement mechanisms, such as guarantees for bank loans on capital and energy efficiency repairs (which makes residential energy efficiency lending more attractive to local banks).

Co-operation and effective partnership building with other ongoing projects

Apart from the apparently good co-operation with the local municipal and regional administrations and the local universities in the three oblasts the project is working with, identification of co-operation opportunities and effective partnership building with other ongoing projects and entities dealing with building energy efficiency needs to be activated from the current standstill. As an initial step and beside the entities already listed both in the project document and in the project inception report, the activities and entities listed below were identified during the MTE process for further follow up:

- The Finnish-Russian co-operation projects (Ekograd and RYM) with the Saint Petersburg Construction Committee to develop new regional construction norms for the Saint Petersburg area;
- The ongoing work of the Research Institute for Building Physics of Russian Academy of Architecture and Building Sciences in Moscow on new guidelines for avoiding thermal bridges;
- The ongoing IFC/EBRD/GEF and EBRD/GEF projects "Improving Energy Efficiency in Urban Housing" and Improving Energy Efficiency of Public" buildings included in the framework of the GEF Energy Efficiency Umbrella project is Russia. The implementation of both projects were intended to be closely co-ordinated with the parallel UNDP/GEF Building Energy Efficiency project in North West Russia to enable mutually benefitting exchange of information and materials developed under each project, but little has been done so far to facilitate this in practice. This despite the fact that clear opportunities for such co-operation exist.
- The ongoing initiatives of other financing entities such as NEFCO, Nordisk Investment Bank and others exploring energy efficiency investment opportunities in Russia; and
- The Russian Green Building Council and other local NGOs working in the area of building energy efficiency.

Possible project extension

Given the current status of implementation, the project is neither likely to be able to complete all of its envisaged activities and reach the targeted objectives by the currently planned closing date of January, 2016 nor to spend all of its remaining financial resources by then. At the same time, the project scope and planned activities have remained highly relevant even for the coming years, if effectively and professionally implemented.

According to the PIR 2012, the project inception period took longer than planned partly because of the need to set up implementation structure for the project covering 3 pilot regions, but also because of the on-going administrative reform (parliamentary and presidential elections took place in Russia over the reporting period and many technical work dependent on cooperation with the regional administrations slowed down. Delays also emerged, when the project "lost" its initially approved demo site for the pilot buildings in Vologda and had to negotiate with Vologda Oblast authorities about the transfer of the pilot site to another location, on which the agreement was signed just in 2013.

While there are reasons for delays such as the major administrative reforms and the problems encountered with the initial pilot site in Vologda, which to great extent have been out of the control of the UNDP and the project management to influence, the relatively complex project design with a need to launch several distinct activities in three different oblasts in parallel and some of the project management related problems discussed before have also taken their toll. In addition, the MTE

revealed some concerns, which are likely to jeopardize the progress towards reaching the project objective even the extension were granted.

By taking into account the above, the issues to be discussed and clarified when considering the possible extension include, among others, the following:

- As observed during the MTE mission, the current project management appears to lack the longer term vision on what the project is basically about and what it is trying to achieve in the end. Therefore, the project extension alone is not likely to ensure its successful completion without addressing other, equally important elements of the current project implementation and management arrangements;
- For pilot buildings, at least one year after the completion of the construction should be reserved for monitoring and documenting their performance and for compiling and disseminating the results. Since none of this construction and renovations works has started yet, it is likely to take at least 2 to 3 years from now, before verified results from the constructed buildings can be reported and the effective dissemination of the results can start;
- On the other hand, the current design of the group of pilot buildings in Vologda does not really fulfil the initially envisaged characteristics of an EE pilot building to be used as a model for replication. Therefore, a question can be raised whether worth implementing at all, if no amendments into the current design are anymore possible. Testing the heat recovery from ventilation may provide some useful information and examples for follow up, but based on the expert review conducted in parallel to this MTE, there are others, eventually more cost-effective and relatively simple EE measures that in the current design have been neglected. In either case, it does not look sensible to implement the same EE measures in all three buildings, but to have at least one building equipped and used for monitoring the baseline energy consumption;
- At the time of the MTE mission, the financing of the planned EE retrofits in Arkhangelsk was still entirely open and apparently had not been even raised with the local administration yet. Therefore, should these financing issues not be swiftly sorted out, the project extension would not help much;
- In general, the project activities completed so far in Arkhangelsk are raising serious concerns about their cost-efficiency, replicability and sustainability (for further details see chapter 3.3.2), which the project extension alone would not solve; and
- Until now, the project management team has not demonstrated any real initiative to co-ordinate their activities with other ongoing projects in Russia dealing with the same substance area. For any extension of the project, this approach would need to be changed, including stronger co-operation and partnership building with other entities and projects, as discussed already before.

While those project activities that have shown best progress so far, namely the educational activities developed in Vologda and Saint Petersburg and the introduction of the energy management system in Pskov oblast could eventually be completed even by January 2016 (subject to further evaluation), there is no doubt that in the hands of capable, motivated and with adequate networking and partnership building skills equipped project management with a clear vision on what the project can achieve by continuing the apparently already good co-operation with the local regional and municipal administration, further extension of the project can yield quite impressive results. This, however, would require a comprehensive correction of the course of certain things as well as clear evidence before an extension is granted that these changes have been made and are likely to also sustain. In particular, further evidence should be obtained from the planned pilot projects and from the new construction norms under development that they provide a feasible basis for replication. This is not the case yet. After clarified, the required duration of the extension to reach this goal can be discussed.

Apart from whether an extension for the project is granted or not, the ongoing monitoring of the project progress between the PIRs needs to be strengthened. A revised strategic results framework as it concerns, in particular, its indicators and targets, can provide a basis for this together with the engagement of new resources to strengthen ongoing monitoring and quality control and, as required, adaptive management also between the PIRs.

4.2 Actions to strengthen the ownership, manage potential risks and reinforce the benefits from the project with due emphasis on sustainability aspects

In order to manage the quality related risks and strengthen the benefits from the project's TA activities, it is recommended that some key reports prepared so far, including the feasibility studies of planned energy efficiency retrofits and the new draft construction norms will be made available for international peer review by experts familiar with energy efficiency building design in other countries with climate similar to North West Russia. The current efforts of the EU countries to move towards close to zero energy buildings by 2020 for new construction are also to be taken into account in this respect.

The project risk analysis needs to be updated together with an appropriate risk mitigation plan and actions to address the operational, political, institutional and financial risks not considered until now, but which have materialized already during the first half of project implementation.

Similarly, a stronger emphasis on critically assessing and monitoring the sustainability related aspects and the contribution the different activities make towards the actual greenhouse gas reduction goals of the project needs to be incorporated into the project design and implementation approach. This applies, for instance, to all the research and analytical work, establishment of new entities such as distant learning centers and EE design offices, energy management and monitoring models developed and tested as well as training and capacity building. For all this, the amount of financing leveraged for actual EE investments in the construction and building sector in North West Russia and resulting GHG reduction present some of the key indicators.

5. LESSONS LEARNED

The first lesson to be learnt is the utmost importance of ensuring that the recruited project management has adequate technical capacity and experience to effectively lead the project and that the project implementing partner, GEF implementing agency staff both in the CO and Regional Office and the operational project management share the same vision about the main project targets and how to reach them, can realistically assess the eventual capacity constraints and can jointly agree on a strategy and a set of actions to address those constraints. A major contributing factor to the problems currently faced with project subject to this MTE appears to have been in fundamentally diverging views of these key project stakeholders on the main objectives and targets of the project, project staffing and the need for external support to address the identified and/or anticipated capacity constraints and even the exact content and interpretation of the project document. Under such circumstances, the results can seldom be good.

Secondly and partly related to the above, the importance of having the right monitoring and evaluation framework in place from the very beginning is to be highlighted, starting from the indicators and stated targets in the project results framework. Correspondingly, reporting a long and diverse list of different outputs and activities should not qualify for the PIR, but the focus needs to be on the targets and indicators to measure both quantitative and qualitative impact, contribution and progress of the project and its different outcomes towards its main development goal(s).

The GEF implementing agencies need to have enough resources and capacity to effectively monitor the progress of the projects also during their implementation, including frequent enough site visits to identify eventual problems on time and to discuss and agree with the project management on the required adaptive management actions to address those problems. If not feasible for the permanent staff, such ongoing monitoring and adaptive management advisory functions may need to be outsourced, while also ensuring that there are enough resources in the project and/or administrative fees allocated for that. For problem projects and those requiring specific attention otherwise, the annually completed PIRs together with the MTE are clearly not enough to uncover and address the eventual problems on time – especially, if there are no staff resources to effectively follow them up.

Thirdly, too often the risk assessment is just seen as an extra page in the project document, but is not thoroughly prepared and effectively used as a project management tool to ensure that the most common risks such as the different operational, institutional and financing risks can be effectively taken into account and addressed already at the project inception phase and later during project implementation. Given the experience from many other projects and its importance to the overall project success, the operational project management risk together with related mitigation measures should be included as a standard risk element to all UNDP/GEF funded projects apart from the country concerned.

The importance and value added of effective and productive co-ordination and co-operation with other ongoing projects dealing with the same substance area are frequently highlighted in the project documentation, but unless seriously adopted by the project management and rigorously monitored and followed up by the project supervisors, they are often neglected during the actual implementation. This applies also for the three GEF funded projects (one UNDP and two EBRD projects, of which one jointly with the IFC) dealing with the building sector energy efficiency in Russia and implemented under same GEF umbrella project, for which the co-operation and efforts to find synergies in line with the provisions of the project document have been practically non-existent. The past situation described in the project document that a number energy saving projects have been and are implemented in the North Western Federal Okrug, but they largely remained uncoordinated, can be observed still today.

ANNEXES

Annex 1: Terms of reference of the evaluation

Annex 2: Itinerary

Annex 3: Meetings during the project evaluation mission

Annex 4: Complementary post mission questions to the project management team

Annex 5: List of documents reviewed

Annex 6: PSC inception meeting report

Annex 7a: Stakeholder matrix and institutional coordination as elaborated in the project document

Annex 7b: Summary of international financial institutions consultations

Annex 7c: Russia energy efficiency umbrella project

Annex 8: Project disbursement for years 2011-2013 and planned disbursement for years 2014-2015

Annex 9: Project co-financing in 2011-2013

Annex 10: Comments by stakeholders (only in case of discrepancies with evaluation findings and conclusions)

ANNEX 1: TERMS OF REFERENCE OF THE EVALUATION

UNITED NATIONS DEVELOPMENT PROGRAMME

TERMS OF REFERENCE / INDIVIDUAL CONTRACT

I. Position Information

Position Title:	International Consultant/Mid-term Evaluator
Type:	Individual Contract (International)
Project Title/Department:	UNDP/GEF Project 00074315 "Building Energy Efficiency in the North West of Russia"
Duration of the service:	25 working days, from 15 October to 30 November 2013
Duty station:	Home-based with one mission to St Petersburg, Pskov, Vologda and Arkhangelsk

II. Background

1. Standard UNDP/GEF Monitoring and Evaluation Requirements

The Monitoring and Evaluation (M&E) policy at the project level in UNDP/GEF has four objectives: i) to monitor and evaluate results and impacts; ii) to provide a basis for decision making on necessary amendments and improvements; iii) to promote accountability for resource use; and iv) to document, provide feedback on, and disseminate lessons learned. A combination of tools should be used to ensure effective project M&E. These might be applied continuously throughout the lifetime of the project – e.g. periodic monitoring of indicators -, or as specific time-bound exercises such as mid-term review, audit reports and independent evaluations.

In accordance with UNDP/GEF M&E policies and procedures, all projects with long implementation period (e.g. over 5 or 6 years) are strongly encouraged to conduct mid-term evaluations. In addition to providing an independent in-depth review of implementation progress, this type of evaluation is responsive to GEF Council decisions on transparency and better access to information during implementation.

Mid-term evaluations are intended to identify potential project design problems, assess progress towards the achievement of objectives, identify and document lessons learned (including lessons that might improve design and implementation of other UNDP/GEF projects), and to make recommendations regarding specific actions that might be taken to improve the project. It is expected to serve as a means of validating or filling the gaps in the initial assessment of relevance, effectiveness and efficiency obtained from monitoring. The mid-term evaluation provides the opportunity to assess early signs of project success or failure and prompt necessary adjustments.

This evaluation is to be undertaken taking into consideration the GEF Monitoring and Evaluation policy (http://www.thegef.org/gef/node/4184) and the UNDP/GEF Monitoring and Evaluation Policy (http://www.undp.org/gef/monitoring/policies.html).

2. Project Background and Overview

Since 2002, Russia's economy has been experiencing stable economic growth accompanied with the growth in energy demand. Compared to industrial sectors that were in decline for over a decade, energy consumption in Russia's communal and housing sector has been continuously growing: from 174 billion kW/h in 1990 to 243 billion kWh in 2006 (an equivalent of 178 Mt CO2/year). Consequently,

the share of the housing sector in overall energy consumption has been steadily growing from 13% in 1990 to 34% in 2006. Per capita CO2 emissions related to Russia's construction and housing sector total 10.6 tCO2/yr.

The project approach of institutionalizing improved energy efficiency through building codes and oblast-level energy efficiency programs directly contributes to the pursuit of Millennium Goal Number 7: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources. The housing sector is also important as a point of entry for regional action on climate change mitigation.

The project objective is to build local capacities for and demonstrate local solutions to improved energy efficiency in buildings in three regions in North West Russia: Pskov, Vologda and Arkhangelsk Oblasts. The project objective will be achieved through the following three components: 1) An enabling environment and enforcement capacities for improved energy efficiency at the provincial and local levels with an emphasis on efficient building codes and their enforcement; 2) Capacity building and know-how for architects, engineers, and students; and 3) Demonstration of local energy-efficient solutions and management models.

The project strategy is to reduce existing institutional, management, information, technological, investment, financial and knowledge barriers that hamper wide penetration of energy efficient technologies and practices in the construction and building maintenance sectors. GEF financing will not be invested directly into renovation or energy efficiency improvements in existing/old buildings. However GEF funds will be used to leverage additional private sector investment in EE buildings. An important part of the assessment will be an analysis of how successful the GEF project has been in leveraging additional funds for energy-efficiency so that there has been significant leveraging.of resources. GEF funds will also be utilized to build local capacities, regulations and information for effective decision-making and management systems. It will be important to assess the extent to which the project has contributed towards putting in place sustainable systems for energy management at the municipal level that will continue at the end of the project. The project will also focus on the enforcement of existing energy efficiency norms as outlined in the description of Component 1 below and it will be important for the evaluation to consider to what extent the project has contributed towards strengthened enforcement of energy-efficiency norms and standards at the municipal level.

III. Functions / Key Outputs Expected

1. EVALUATION OBJECTIVES

This Mid Term Evaluation (MTE) is initiated by UNDP as the GEF Implementing Agency for this project and it aims to provide managers (at the Project Implementation Unit, National Implementing Partner – Ministry of Energy of Russia, UNDP Russia Project Support Office and UNDP-GEF levels) with strategy and policy options for more effectively and efficiently achieving the project's expected results and for replicating the results. It also provides the basis for learning and accountability for managers and stakeholders.

The evaluation will play a critical role in the future implementation of the project by providing advice on: (i) how to strengthen the adaptive management and monitoring function of the project; (ii) how to ensure accountability for the achievement of the GEF objective; (iii) how to enhance organizational and development learning; and (iv) how to enable informed decision – making.

The evaluation will have to provide to the GEF Secretariat with complete and convincing evidence to support its findings/ratings. The evaluator should prepare specific ratings on specific aspects of the project, as described in section "Scope of the Evaluation" and ANNEX 3 of this Terms of Reference. Particular emphasis should be put on the current project results and the possibility of achieving the objective and outcomes in the established timeframe, taking into consideration the speed, at which the project is proceeding.

The evaluation is intended to provide a comprehensive overall assessment of the project and provides

an opportunity to critically assess administrative and technical strategies issues and constraints associated with large international and multi-partner initiatives. The evaluation should also provide recommendations for strategies, approaches and/or activities to improve the potential of the Project to achieve expected outcomes and meet the objective within the Project timeframe. Findings of this evaluation will be incorporated as recommendations for enhanced implementation of the current project phase in the future years.

The purposes of the MTE are:

(i) To assess overall performance against the project objective and outcomes as set out in the Project Document, project's Logical Framework, and other related documents;
(ii) To assess the effectiveness and efficiency of the project;
(iii) To analyze critically the implementation and management arrangements of the project;
(iv) To assess the progress to date towards achievement of the outcomes as defined in the project document;
(v) To review planned strategies and plans for achieving the overall objective of the project within the timeframe;
(vi) To assess the sustainability of the project's interventions meaning that at the end of the project, the capacities in local municipalities targeted by the project are significantly enhanced to implement energy-efficiency projects;
(vii) To list and document initial lessons concerning project design, implementation and management;
(viii) To assess project relevance to national priorities;
(ix) To assess the CO2 savings achieved by the project measured against the targets in the project document
(x) To provide guidance for the future project activities and, if necessary, for the implementation and management arrangements concerning adaptive management;
(xi) To provide lessons learned for the future.

In particular, this evaluation will assess progress in establishing the information baseline, and identifying any difficulties in project implementation and their causes, and recommend corrective course of action including new or revised activities and outputs. Effective action to rectify any identified issues hindering implementation will be a requirement prior to determining whether implementation should proceed.

Project performance will be measured based against the main objective of the project and on Project's Logical Framework Matrix (see Annex 2), which provides clear performance and impact indicators for project implementation along with their corresponding means of verification. Success and failure will be determined in part by monitoring changes in baseline conditions. During the inception period the Logical Framework Matrix was updated, along with a number of indicators which were revised to render more clarity and rigidity to the system.

The evaluator is expected to work with key project stakeholders, including UNDP Russia Project Support Office, the Office of the Plenipotentiary Representative of the President of the Russian Federation in the North West Federal Okrug, provincial and local Administrations of the Arkhangelsk, Pskov and Vologda Oblasts; provincial legislative bodies; regional energy committees, technical universities and energy efficiency centers.

The Report of the Mid-Term Evaluation will be stand-alone document that substantiates its recommendations and conclusions.

2. SCOPE OF THE EVALUATION

The evaluation should assess the range of aspects described below. The applicable rating criteria are as follows:

6: Highly Satisfactory (HS): no shortcomings

5: Satisfactory (S): minor shortcomings

4: Moderately Satisfactory (MS): moderate shortcomings

3: Moderately Unsatisfactory (MU): significant shortcomings.

2: Unsatisfactory (U): major problems

1: Highly Unsatisfactory (HU): severe problems

Ratings for **Sustainability** assessment are as follows:

4: Likely (L): negligible risks to sustainability

3: Moderately Likely (ML): moderate risks

2: Moderately Unlikely (MU): significant risks

1: Unlikely (U): severe risks.

Additional ratings where relevant:

N/A: Not Applicable

U/A: Unable to Assess

All ratings given should be properly substantiated.

Project Concept and Design: The evaluator will review the problem addressed by the project and the project strategy, encompassing an assessment of the appropriateness of the objectives, planned outputs, activities and inputs as compared to cost-effective alternatives. The executing modality and managerial arrangements should also be judged. The evaluator will assess the achievement of indicators and review the work plan, planned duration and budget of the project.

Project Implementation: The evaluation will assess the implementation of the project in terms of quality and timeliness of inputs and efficiency and effectiveness of activities carried out. Also, the effectiveness of management as well as the quality and timeliness of monitoring and backstopping by all parties to the project should be evaluated. In particular, the evaluation is to assess the Project team's use of adaptive management in project implementation.

Project outputs, outcomes and impact: The evaluation will assess the outputs, outcomes and impact achieved by the project as well as the likely sustainability of project results. This should encompass an assessment of the achievement of the immediate objectives and the contribution to attaining the overall objective of the project. The evaluation should also assess the extent to which the implementation of the project has been inclusive of relevant stakeholders and to which it has been able to create collaboration between different partners. The evaluation will also examine if the project has had significant unexpected effects, either of beneficial or detrimental character.

To determine the level of achievement of project outcomes and objectives following three criteria should be assessed according to the ratings provided above:

- ***Relevance*****:** Are the project's outcomes consistent with the GEF focal areas/operational program strategies and country priorities?
- ***Effectiveness*****:** Are the actual project outcomes commensurate with the original or modified project objectives? In case the original or modified expected results are merely outputs/inputs then the evaluators should assess if there are any real outcomes of the project and if yes then whether these are commensurate with the realistic expectations from such a project.
- ***Efficiency*****:** Is the project cost effective? Is the project the least cost option? Is the project

implementation delayed and if it is, then does that affect cost-effectiveness? Wherever possible, the evaluator should also compare the cost-time vs. outcomes relationship of the project with that of other similar projects.

The evaluation will also cover the following aspects:

2.1. Progress towards Results

a. Changes in development conditions:

- Are project outcomes contributing to national development priorities and plans in accordance with the Federal Law of the Russian Federation #261on *Energy Conservation and Energy Efficiency Improvement* of 11.11.2009?
- How and why project outcomes and strategies contribute to the achievement of the expected results?
- Did the project consult and make use of the skills, experience and knowledge of the appropriate government entities, NGOs, community groups, private sector, local governments and academic institutions in project activities?
- Is the project on track to meet the global environmental benefits in terms of tonnes of CO2 reduced by the end of the project as defined in the project document?

b. Measurement of change:

Progress towards results should be based on a comparison of indicators before and after (so far) the project intervention, e.g. by comparing current conditions for building energy efficiency (legal and regulatory frameworks, results of energy efficiency and energy conservation activities, etc.) to the baseline ones.

The evaluation should specifically look into:

- Adequacy of the level and proposed modes of enforcement of the regulatory and programmatic documents developed within the project for creation of an enabling environment for building energy efficiency funded from the Federal target programmes on housing and Regional EE funds;
- Adequacy to the Federal Law of the Russian Federation #261on *Energy Conservation and Energy Efficiency Improvement* of 11.11.2009;
- Timeliness of the existing Building Energy efficiency oriented curricula for the initial training (University courses);
- Tonnes of CO2e reduced (direct and indirect emissions)
- Whether the project has effectively learned lessons from other countries in which UNDP GEF has had projects aimed at energy efficiency in the municipal sector?
- Verification of legislation monitoring (Building Energy Efficiency) results;
- Adequacy and effectiveness of the developed project awareness raising products on Building energy efficiency:
  - Project's web-site
  - Communication and promotion strategy.

c. Project strategy:

- How and why outcomes (listed as outputs in the project document) and strategies contribute to the achievement of the expected results?
- Do the changes suggested during the inception phase still represent the best project strategy for achieving the project objectives? *Consider alternatives.*
- Has the project been effectively undertaking adaptive management in order to respond to changing conditions?

d. Sustainability:

- Assess the extent to which the benefits of the project will continue, within or outside the project scope, after it has come to an end; commitment of the government to support the initiative beyond the project

- The evaluators may look at factors such as mainstreaming project objectives into the broader development policies and sectoral plans and economies.

The sustainability assessment will give special attention to analysis of the risks that are likely to affect the persistence of project outcomes. In particular, the evaluation should focus on the sustainability of efforts to address energy-efficiency at the Oblast level and whether or not resources will continue to be available for such investments at the end of the project.The sustainability assessment should also explain how other important contextual factors that are not outcomes of the project will affect sustainability.

The following four dimensions or aspects of sustainability should be addressed:

- ***Financial resources:*** Are there any financial risks that may jeopardize sustenance of project outcomes? What is the likelihood of financial and economic resources not being available for increased municipal investments in energy-efficiency once the GEF assistance ends (resources can be from multiple sources, such as the public and private sectors, income generating activities, and trends that may indicate that it is likely that in future there will be adequate financial resources for sustaining project's outcomes)?
- ***Socio-political:*** Are there any social or political risks that may jeopardize the sustenance of the project outcomes? What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow? Is there sufficient public / stakeholder awareness in support of the long term objectives of the project?
- ***Institutional framework and governance:*** Do the legal frameworks, policies and governance structures and processes pose risks that may jeopardize sustenance of project benefits? While assessing this parameter, also consider if the required systems for accountability and transparency, and the required technical know-how are in place.
- ***Environmental:*** Are there any environmental risks that may jeopardize sustenance of project outcomes? The terminal evaluation should assess whether certain activities will pose a threat to the sustainability of the project outcomes.

Each sustainability dimension of the project outcomes should be rated as described above in application to Sustainability.

2.2 Project's Adaptive Management Framework

a. Monitoring systems

- Assess the monitoring tools currently being used:
  - Do they provide the necessary information?
  - Do they involve key partners?
  - Are they efficient?
  - Are additional tools required?
- Assess the use of the logical framework as a management tool during implementation and any changes made to it.
- What impact did the retro-fitting of impact indicators have on project management, if such?
- Assess whether or not M&E system facilitates timely tracking of progress towards project's objectives by collecting information on chosen indicators continually; annual project reports are complete, accurate and with well justified ratings; the information provided by the M&E system is used to improve project performance and to adapt to changing needs.

b. Risk Management

- Validate whether the risks identified in the project document and PIRs are the most important and whether the risk ratings applied are appropriate. If not, explain why.
- Describe any additional risks identified and suggest risk ratings and possible risk management strategies to be adopted.
- Assess the project's risk identification and management systems:
  - Is the UNDP-GEF Risk Management System[4] appropriately applied and if not what needs to be done?
  - How can the UNDP-GEF Risk Management System be used to strengthen the project

[4] UNDP-GEF's system is based on the Atlas Risk Module. See the UNDP-GEF Risk Management Strategy resource kit, available as Annex XII at http://www.undp.org/gef/05/monitoring/policies.html

management?

c. Work Planning

- Assess the use of routinely updated work plans.
- Assess the use of electronic information technologies to support implementation, participation and monitoring, as well as other project activities.
- Are work planning processes result-based[5]? If not, suggest ways to re-orientate work planning.

d. Financial/Project management

- Consider the financial management of the project, with specific reference to the cost-effectiveness of interventions. (Cost-effectiveness: the extent to which results have been delivered with the least costly resources possible.). Any irregularities must be noted.
- Is there due diligence in the management of funds and financial audits?
- Assess the effectiveness of the Project Management arrangements as put in place at the start of the project
- Did promised co-financing materialize (please fill out the co-financing form provided in Annex 1) and if not what needs to be done in order to improve the situation?

e. Reporting

- Assess how adaptive management changes have been reported by the project management.
- Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalized by partners.
- Assess the reduction of greenhouse gas emissions since project start (please fill out the Climate Change Mitigation Tracking Tool form provided in Annex 1).

f. Delays

- Assess if there were delays in project implementation and what were the reasons.
- Did the delay affect the achievement of project's outcomes and/or sustainability, and if it did then in what ways and through what causal linkages?

2.3 Contribution of Implementing and Executing Agencies

- Assess the role of UNDP and he Office of the Plenipotentiary Representative of the President of the Russian Federation in the North West Federal Okrug against the requirements set out in the UNDP Programme and Operations Policies and Procedures[6]. Consider:
  - Field visits;
  - Participation in Steering Committee meetings;
  - Project reviews, PIR preparation and follow-up;
  - GEF guidance;
  - Operational support.
- Consider the new UNDP requirements outlined in the UNDP Programme and Operations Policies and Procedures, especially the Project Assurance role, and ensure they are incorporated into the project's adaptive management framework.
- Assess the contribution to the project from UNDP and the Office of the Plenipotentiary Representative of the President of the Russian Federation in the North West Federal Okrug of the Russian Federation in terms of "soft" assistance (i.e. policy advice & dialogue, advocacy, and coordination).
- Suggest measures to strengthen UNDP's assistance to the project management and assess the changes to the project management that were made to the project in mid-2013. Have these changes results in any noticeable improvements to the project and what specifically have these improvements been?

2.4 Stakeholder participation, partnership strategy

- Assess whether or not and how local stakeholders participate in project management and decision-making. Include an analysis of the strengths and weaknesses of the approach adopted by the project and suggestions for improvement if necessary.

[5] RBM Support documents are available at http://www.undp.org/eo/methodologies.htm
[6] Available at http://content.undp.org/go/userguide/results/project/

- Does the project consult and make use of the skills, experience and knowledge of the appropriate government entities, NGOs, community groups, private sector, local governments and academic institutions in the implementation and evaluation of project activities?
- Consider the dissemination of project information to partners and stakeholders and if necessary suggest more appropriate mechanisms.
- Identify opportunities for stronger partnerships.

3. METHODOLOGY FOR EVALUATION APPROACH

The evaluator should seek guidance for his/her work in the following materials, which could be found at www.undp.org/gef:

- UNDP Handbook on Monitoring and Evaluation for Results
- UNDP Evaluation Policy kit

It is recommended that the evaluation methodology include the following:

2. Documentation review (desk study), to include Project Document, Inception Report, annual GEF Project Implementation Reports, Minutes of the Steering Committee meeting, GEF quarterly project updates (for more details see ANNEX 4);
3. Interviews with Project Management Unit and key project stakeholders, including UNDP Russia Project Support Office,the Office of the Plenipotentiary Representative of the President of the Russian Federation in the North West Federal Okrug, provincial and local Administrations of the Arkhangelsk, Pskov and Vologda Oblasts; provincial legislative bodies; regional energy committees, technical universities and energy efficiency centers ;
4. In-country field visits, if necessary.

The evaluation must provide evidence-based information that is credible, reliable and useful. It must be easily understood by project partners and applicable to the remaining period of the project.

4. EVALUATION DELIVERABLES

The core product of the Mid-Term Evaluation will be the Mid-Term Evaluation Report that will include:

- Executive summary;
- Introduction;
- Findings and conclusions in relation to issues to be addressed identified under the *Scope of Evaluation* section of this TOR;
- Recommendations;
- Lessons Learned;
- Annexes.

The draft and final report will be written in the format outlined in ANNEX 1 of this TOR. The expected length of the report is around 50 pages in total, not including annexes. The first draft of the report is expected to be submitted to the UNDP Russia Project Support Office within approximately **3 weeks** (will be agreed upon in the beginning of the consultancy assignment) of the in-country mission for subsequent circulation to the key project stakeholders for comments. Any discrepancies between the interpretations and findings of the evaluator and the key project stakeholders will be explained in an annex to the final report.

The report will be submitted both electronically and in printed version, in Russian and English.

The report will be supplemented by rate tables (ANEX 3).

IV. Tentative timeframe

The evaluation mission in Russia will take place in October - November 2013. The total duration of the assignment will be 25 working days during the calendar period of 1.5 months (15 October – 30 November 2013). The following tentative timetable is recommended for the evaluation, however, the

final schedule will be agreed upon in the beginning of the consultancy assignment:

Desk review, development of methodology 4 days

In-country field visits, interviews 10 days

Drafting report 3 days

Draft report circulation 5 days

Finalization of report 3 days

Prior to approval of the final report, a draft version shall be circulated for comments to the stakeholders and project management. UNDP and the stakeholders will submit comments and suggestions within 5 working days (within the calendar period agreed) after receiving the draft. All comments and suggestions (if any) shall be addressed and the report will be considered as the final deliverable as soon it is accepted by UNDP.

The final version of the evaluation report should be submitted in electronic format (MS Word) to UNDP Russia Project Support Office nataly.olofinskaya@undp.org and olga.martynenko@undp.org) and UNDP Bratislava Regional Center (john.obrien@undp.org) no later than **November 15, 2013**.

Deliverable	Timeframe
1. Desk review, development of methodology	4 days
2. Mission to the Russian Federation, including briefings for evaluators by project management and UNDP Project Support Office, in-country field visits, interviews, de-briefings for UNDP CO	10 days
3. Drafting of the evaluation report	3 days
4. Draft report circulation for comments and other types of feedback mechanisms	5 days
5. Finalization of the evaluation report (incorporating comments received on first draft)	3 days

V. Recruitment Qualifications

The mid-term evaluation will be undertaken by an individual consultant or a team of two external consultants, who will be assisted by a translator/interpreter (when needed) and will receive the support of UNDP Russia Project Support Office and Project Management Team.

The evaluators selected should not have participated in the project preparation and/or implementation and should not have conflict of interest with project related activities.

Education:	Advanced university degree in economics, energy, or related area
Experience:	• Extensive (at least 5-year) experience and proven track record with policy advice and/or project development/implementation in energy efficiency; • Proven track record of application of results-based approaches to evaluation of projects focusing on energy efficiency (relevant experience in the CIS region is a requirement; and relevant experience within UN system would be an asset); • Familiarity with energy efficiency principles and relevant international best-practices; • Knowledge of and recent experience in applying UNDP and GEF M&E policies and procedures
Language Requirements:	Excellent English communication and writing skills, knowledge of Russian would be an asset
Others:	Demonstrable analytical skills

ANNEX 2: ITINERARY

Monday, 11.11.

14:36 Arrival in Saint-Petersburg, Finlandsky trainstation (Train №1543)

15:00 Lunch with Project Manager Andrey Karpus and Project Implementing Consultant Gregory Markin

18:15 Flight to Arkhangelsk with Project Manager Andrey Karpus (Flight SU4584)

19:55 Arrival in Arkhangelsk

21:00 Hotel Check-In (Pur-Navolok)

Tuesday, 12.11

9:30 Meeting with Project Coordinator in Arkhangelsk Oblast Daniil Shaposhnikov

10:00 Meeting with Project Consultants in Arkhangelsk district

13:00 Lunch

14:30 Meeting with mayor of Arkhangelsk district about prospects of the Project on a pilot site

15:30 Meeting with Minister of FEC and utility of Arkhangelsk district I.Godzhish

16:30 Visiting of Nord (Arctic) federal university about modern scientific-educational base in the field of energy saving

20:08 Departure to Vologda (Train №015M)

Wednesday, 13.11

7:40 Arrival in Vologda with Project Manager Andrey Karpus, Hotel Check-In (Atrium)

8:00 Breakfast with Coordinator in Vologda Oblast Aleksandr Elyukov

9:00 Meeting with rector of Vologda state technical university Sokolov L.I.

10:00 Meetings with Project Consultants on development of educational modules multilevel training, visiting of the center of distance learning

12:00 Visiting of a pilot site (multiprofile Lyceum) on introduction of training modules in the field of energy efficiency for primary school

14:00 Lunch

16:00 Meeting with representatives of the Vologda Administration Zadumkin K.A.

Thursday, 14.11

10:00 Meeting with representatives of the Vologda Oblast Administration

11:00 Meeting with representatives of Vologda Oblast legislative assembly

12:00 Visiting of a Project pilot site of «zero construction»

14:00 Lunch

15:30 Meeting with representatives of the design organization Oblstroyproject, which is engaged in development of project documentation for the pilot construction site in the Vologda region

19:12 Departure to Saint-Petersburg with Andrey Karpus (Train № 617Я)

Friday, 15.11

07:46 Arrival in Saint-Petersburg

09:00 Breakfast with Project Implementing Consultant Gregory Markin and Project Manager Andrey Karpus

11:00 Visit to the Project Office, Meeting with Project Consultant on development of training modules in the field of energy efficiency for higher educational institutions Tatyana Teryoshkina

13:00 Lunch

14:00 Project consultant on calculations of CO2 emission reduction resulting from the Project Aleksandr Romanov

17.00 Meeting with deputy of Project national Director Vera Grishina

19:00 Hotel Check-In

Monday, 18.11

06:00 Departure to Pskov with Project Manager Andrey Karpus and Project Implementing Consultant Gregory Markin

10.00 Arrival in Pskov, meeting with Project Coordinator in Pskov Oblast Pavel Muraviev, departure to Ostrov (Car)

12:00 Meeting with the developers of GIS brief, presentation of a system

13:30 Meeting with representatives of municipality Ostrov city

14:30 Lunch

15:30 Visiting to the pilot districts and objects connected to the unified geoinformation system

17:00 Departure to Pskov with Project Coordinator in Pskov Oblast Pavel Muraviev and Project Manager Andrey Karpus (Car)

20:00 Hotel Check-In (Hotel Octyabrskaya)

Tuesday, 19.11

09:00 Meeting with representatives of Pskov branch of the state University of service and Economics

11:00 Visiting of a pilot site (school) on introduction of training modules in the field of energy efficiency for primary school

13:00 Lunch

14:00 Meeting with representatives of the District Administration

15:00 Final meeting with Project Manager Andrey Karpus, Project Implementation Consultant Gregory Markin and Regional Co-ordinator Pavel Muraviev

20.25 Arrival in Saint-Petersburg, departure to Helsinki (Train 157M)

ANNEX 3: MEETINGS DURING THE PROJECT EVALUATION MISSION

(The meetings with the project management not listed separately)

Meetings in Arkhangelsk in a choronological order

Daniil Shaposhnikov, coordinator of the project in the Arkhangelsk region

Local consultants contracted to implement project activities in Arkhangelsk region

Meeting with local city administration

Yakovlev, Andrey Veniaminovich, Deputy Minister of fuel and energy and housing and communal services, Arkhangelsk regional government

Marina Kalinina, Vice-Rector, International Co-operation, Northern Arctic Federal University named after M.V. Lomonosov

Meetings in Vologda in a choronological order

Leonid Sokolov - Rector VPO "Vologda State University ." +7-817-2-72-46-45 .

Ledovskaya Irina Dionisovna - consultant on educational technologies . +7-921-682-42-12 .

Kokareva Zoya - Project Consultant for the development and filling of educational modules on energy efficiency for primary schools . +7-921-124-92-56 .

Elena Zorina - Project Consultant for the development and filling of educational modules on energy efficiency for initial vocational education. +7-911-046-52-20 .

Pribilof Svetlana - Deputy Director for elementary school BOW IN "Vologda multidisciplinary Lyceum ." +7-817-2-76-05-16 .

Fedorov Lidia - Director BOW IN "Vologda building college ." +7-817-2-27-02-53 .

Svyatysheva Larisa V. - Deputy Head of the Vocational Education Department of Education of the Vologda region . +7-817-2-75-02-10 .

Zadumkin Konstantin - Head of Strategic Planning and Investment Policy of the Administration of Vologda . +7-817-2-72-81-07 .

Blokhin, Yuri A. - Head of Architecture and Urban Planning Department of Urban Development and Infrastructure . +7-817-2-21-00-60 .

Fediunin Alexander - Deputy Head of the Department of Urban Planning and Infrastructure Public Utilities . +7-817-2-72-15-30 .

Sergei Vorobyov - Head of Construction and Housing in the Vologda region. +7-817-2-56-55-07 .

Uryadov Mikhail Borisovich - Head of Construction Department of Construction , Housing and Utilities of the Vologda region . +7-817-2-56-30-12 .

Viktor Kudryashov - Head of Housing , Department of Construction , Housing and Utilities of the Vologda region . +7-817-2-56-02-87 .

Stavrovsky Mikhail Sergeyevich - Chairman of the Committee on Ecology and Nature of the Legislative Assembly of the Vologda region . +7-817-2-72-31-86 .

Elyukov Michael Valeriyovych - Director for Production " Gorstroyzakazchik ." +7-817-2-72-20-75 .

Zubarev Yulia Nikolaevna - the head of projects for adjustment of design documentation and development of RMD LLC " FDI " Oblstroyproekt . " +7-921-828-75-45 .

Serebriakova Natalia - Senior Project Engineer for adjustment of design documentation , LLC " FDI " Oblstroyproekt . " +7-931-507-24-94 .

Meetings in Saint Petersburg in a chronological order:

Tatyana Tereshkina, Dean of Economics and Management Faculty, Saint Petersburg State Technological University, Head or Marketing and Logistics Departments

Alexander Romanov, Project Consultant on GHG Analysis, Head of International cooperation sectionScientific Research Institute for atmospheric air protection (SRI Atmosphere)

Vera Grishina, Former Deputy Director of the Project, Current Collaborator

Meetings in Pskov in chronological order:

Sirosh Arkadevna Raisa - First Deputy Head of Administration Ostrovsky District , e-mail: adm1209@ellink.ru, +7 (81152) 3-18-90

Vladimir Mitrofanov - director of "Energy Center », e-mail: workaddress@yandex.ru, +7 (911) 350-22-11

Egorov Alexander B. - Executive Director of the management company " Home Service ", tel : +7 (81152) 3-14-30

Pritulyak Vitaly V. - Executive Director of the management company "ZHILSERVIS",tel : +7 (81152) 3-68-34

Timofeev Vitaly - Head of MUP " Housing management ", tel : +7 (81152) 3-14-30

Evgeny Lunev - a teacher of the Riga Aviation University tel: +371 25805718 , e-mail: levkuban@gmail.com

Normunds Latsis - director of the Latvian company E –manifest tel: +371 26565002 e-mail: pux@apollo.lv

Meeting with representatives of the Pskov branch SPbGUSE present:

Nikolai Soloviev - Pskov Branch SPbGUSE Director , tel 8-911-356-86-68

Solodova Nadezhda - Deputy Director for Science and Information Technology , tel. 8 (8112) 62-01-29, e-mail: nadezhdasolodova@yandex.ru

Meeting at the secondary school № 11 Psko present:
Barkanova Irina - headmaster , tel / fax: (8112) 66-37-52

Meeting with representatives of the Pskov region , Pskov Oblast State Committee on Tariffs and energy - present :
Belonosova Elena - Deputy Chairperson of the Tariff and Energy Committee of Pskov Region , 68-65-57, e-mail: ev.belonosova @ obladmin.pskov.ru

Lyman Larisa Feodorovna - Consultant, Department of Energy , energy efficiency and gasification Tel. 68-65-54, e-mail: lf.liman @ obladmin.pskov.ru

Ilina Marina - Deputy Head of Department of Energy , energy efficiency and gasification
Tel. 68-65-54, e-mail: ma.petrov @ obladmin.pskov.ru

Meetings in Moscow:

UNDP Russia Project Support Office: Nataly Olofinskaya, Head of the Office;
Olga Martynenko Coordinator of Energy Efficiency Projects

Russian Energy Agency: Kozhukhovsky, Igor Stepanovich, Deputy General Director

Nordic Investment Bank: Igor Kovtun, General Representative Russia and Belarus

Alexander Hrebtov, Project International Consultant

OTHERS CONSULTATIONS BEFORE AND AFTER THE MISSION

UNDP-GEF Bratislava Regional Centre: John O'Brien, Regional Technical Adviser

EBRD resident office in Moscow: Vincent Duijnhouwer, Program Manager

IFC Advisory Services in Moscow: Katerina Levitanskaya, Project Manager

International consultants having worked for the project: Susan Legro (Eco Ltd), Adil Lari (ACE Group), Zoran Morvaj

ANNEX 4: COMPLEMENTARY POST MISSION QUESTIONS TO THE PROJECT MANAGEMENT TEAM

Question 1:

Apparently some institutional changes have taken place since the project approval, which have fundamentally affected the project management arrangements as it concerns the envisaged role and functions of the selected implementing agency, national project director and the project steering committee. Please describe the institutional changes that have taken place since the project approval, how it has affected the project management and implementation arrangements compared to what was envisaged and described in the project document and how the situation is going to be addressed for the remaining project implementation period.

Since the approval of the project document , there have been significant changes in the legislative regulation of energy efficiency and conservation . A key role in this process played a federal law № 261 -FZ , "On energy saving and improvement of the energy efficiency ... ", in addition to the general provisions of this law was issued more than 98 regulations , including acts of mandatory energy certification of buildings and improvement of the energy efficiency of buildings (Approval of the list of energy conservation events and improvement of the energy efficiency regarding the common property of owners in multi-apartment buildings). Resolution 235 established the requirements to the design documentation and sections of energy efficiency, Order number 262 establishing of thr requirements for energy efficiency of buildings and structures, Order № 229 of the Ministry of Economic Development has established requirements for energy efficiency of the materials and equipment used in the construction of buildings and structures.

Institute of self- regulation has appeared which led to a redistribution of competencies in the development of norms and standards regulations, these powers were transferred to the regional level. Powers of the authorized representative of the President in the territorial districts were changed. There was made the transition from addressing energy efficiency at the level of inter-agency commissions to the specialized federal and regional structures. There was formed the Russian Energy Agency , which was a consolidated with the regulatory, informational and educational units, as well as questions from the field of policy implementation in the field of energy conservation in buildings , and currently is one of the key state institutions dealing with energy conservation and energy efficiency .

Question 2:

In Annex I of the project document, an interagency committee for energy efficiency is mentioned. **Please explain the current status of this and the role it has had in project implementation**

The Commission mentioned in the project document , functioned in 2007 - 2009 's, before the adoption of the law on energy efficiency. Activities of the commission was the starting element for the formations of the federal legislation in the field of energy conservation. After the adoption of the Federal Law № 261 -FZ "On Energy Saving .. " and distribution functions for performing tasks in the field of energy efficiency between the relevant ministries and agencies commission further work was impractical and was abolished. Currently Project regularly cooperates with federal authorities, implementing policies on energy conservation and energy efficiency. In Northwestern District functioned Coordination Board of the Fuel and Energy activity at the plenipotentiary representative of the President in the North-West Federal District , one of whose tasks was to coordinate the issues of energy efficiency and energy conservation in the work with energy producers and consumers , for this reason, The Embassy was originally selected as an Executive Agency of the project, at the meetings of the commission the results of the project and their replication were considered as well. At the end of the year 2012 under redistribution of competence, the Commission was abolished, the position of the National Project Director was changed as well.

Question 3:

Please provide a detailed information about the provided co-financing until now, what particular project activities have been financed by these co-financing sources and by which amount.

Data on the volume of co-financing, listing the main directions and amounts of funding are listed in Appendix 1

Question 4:

Please provide an estimate of the anticipated project disbursement rate (USD and % of total funds) by the end of 2013 (excluding the PPG resources)

The volume of funds spent by the end of 2013 will be approximately 1750 thousand U.S. dollars, accounting for about 30% of the total project budget.

Question 5:

Please describe how the cost-efficiency is ensured in the activities tendered for local sub-contracts. As an example, the information received during the mission indicated the average costs of energy audits between 30,000 – 100,000 roubles per building (i.e. 1,000 – 3,000 US dollars depending on the size and type of buildings), while the subcontract made in the frame of the project for auditing 5 typical residential buildings in Arkhangelsk had a price tag of USD 50,000 in total. Similarly, contacts worth of USD 340,000 (90k in 2012 and 250k in 2013) paid by the project resources for the preparatory design work for introducing relatively minor changes for the improvement of the energy efficiency of the pilot building in Vologda (basically just consisting of a complementary heat recovery system for ventilation) sound quite extensive,

First of all, it should be noted that the work on energy audit of buildings was carried out under a separate contract only in Ostrovsky and Nevel district of the Pskov region. There were only 10 houses, the cost of the project was ...

All work on conducting of the energy audits of buildings in the Arkhangelsk region was performed as part of our energy certification, which included:

1. Analysis of existing research in this area..
2. Development of the program of energy audits of apartment houses in Arkhangelsk
3. Energy audit of apartment houses in the typical seriesin Arkhangelsk
4. Development of energy audit program
5. Development and examination of energy passport (certificates)
6. Development of design solutions for typical series of buildings under repair, as well as complex of technical and organizational measures to ensure the reduction in comparable terms of volume consumed energy and water resources, subject to the level of improvement and preservation of the quality of resource supply
7. Development of monitoring techniques (software) and economic efficiency calculation model design of energy efficient solutions
8. Analysis of existing research in the field of buildings certification, the best practice in this area
9. Development of methodology and pilot implementation of energy certification of buildings
10. Developing of the energy certificate standard form.
11. Making energy certificates for residential, located on a pilot site in Arkhangelsk, on the basis of the developed technique
12. Development and testing of methods for monitoring energy audits and energy certification of residential and public buildings in Arkhangelsk
13. Development of methodology of formation of the catalog of typical energy efficient solutions for residential and public buildings
14. Formation of a catalog of standard energy-efficient solutions for the exploited residential and public buildings in Arkhangelsk in electronic form and as the layout brochure

In the Vologda region project was implemented two different contracts:

1. Develop regional guidance documents (regulatory framework, 1st component project) in the first part of a project costing 90 thousand dollars
2. Adjustment of the two stages of the design documentation for the 3 apartment buildings in Vologda cost of 250 thousand dollars, this contract is underway. In the frame of it there were performed pre-design aimed at selection of the best organizational and technical decisions related to improving energy efficiency 3 apartment houses examination of the project, as well as working directory standard project solutions in the field of energy efficiency in the conditions of the Northwestern Federal District. Project documentation is formed on the basis of Resolution 262 of the Ministry of Economic Development.

Thus, these examples do not correspond to reality.

In general terms, all the work implemented under the project are carried out on a competitive basis and are censored validity of labor and economic efficiency, with the participation of project management, regional coordinators and experts, as well as territorial working groups.

Question 6:

Please provide a list of the international consultants hired to support the project activities so far, the duration and scope of their work, a summary of their main recommendations and advice provided and how their contributions are showing up in the project results achieved so far towards meeting the envisaged outcomes

Zoran Morvay
Quantity of the days: 45
Component: 1
Key works:
Report 1: Best Practice methodology for Energy Management in Municipalities
Report 2: Best Practice Elements for Energy Management in Buildings
Report 3: Methodology of informational and propaganda system in municipal services
Report 4&5: Project strategy and adaptive management
Reflection of the results of the project: The results of the consultant considered during the operational activities of the project within the 1st component of the project. The results were taken into account during the development of the institutional management model for energy efficiency at the municipal level in the Pskov region.

Sergeys Fedorovs
Quantity of the days: 30
Component: 2
Key works:
Report 1: International best practices elements of Training Modules in Building Energy Efficiency in field of educational and it's environmental impacts, including suggestions on its appliance to project activities.
Report 2: Training Modules development report - arising from the Educational Seminar in Vologda with methodological analysis and evaluation of modules developed by Project consultants.
Report 3: Project Strategy Report – Strategic Report outlining the key strategy of the project in order to achieve the key outcomes over the period 2013 – 2015
Reflection of the results of the project: The results were taken into account during the development of educational modules from different levels of training, as well as educational project publications.

Alexander Hrebtov
Quantity of the days: 60 (2 contracts in 2012 and 2013)
Component: 1,3
Key works:
Contract 1, 2012
Report 1: Analysis of energy savings and energy efficiency legislation in NWFD (at regional and municipal levels) on the base of international best practices.

Report 2: Applying local and international best practices elements of advanced energy-savings and energy efficiency technologies with the construction of a pilot building and regional guidance documents.
Report 3: Expertise of developed plans for the site (Demo A, Vologda Region).
Report 4: Project Strategy Report – Strategic Report outlining the key strategy in Demonstration of local energy efficient solutions and management models in order to achieve the key outcomes over the period 2013 – 2016.
Contract 2, 2013
Report 1: Analysis and control of applying regional standards and norms for EE in local practice in Vologodskaya and Archangelskaya region compare to the international regulations.
Report 2: Buildings energy efficiency certification: analysis and control, justification for applying**.**
Reflection of the results of the project**:** The results of the consultant were considered during project operations, proposed solutions by the consultant formed the basis for the implementation of the demonstration component in the Vologda region.

Adil Lari
Quantity of the days: 30
Component: 3
Key works:
Report 1: Management model for the residential construction site integrating EE criteria (Vologda and Archangelsk), legislative and regulatory measures. Assessment of the technical solutions, audit and analysis of the recommendations
Report 2: Evaluation of technical solutions for the buildings overhaul. Inspection, analysis and recommendations for the developed plans of the pilot sites (Vologda and Archangelsk).
Reflection of the results of the project**:** currently working with a consultant continues, the results of his work is plan to be included in the demonstration components in Arkhangelsk and Vologda

Question 7:

By reviewing the project design and results so far, there appears to be several overlapping activities between the different oblasts, especially as it concerns the model EE norms, enforcement mechanisms, energy data acquisition and managements systems and energy audits. Please explain how these activities implemented in different oblasts are complementary to each other apart from different geographical locations.

The structure of the project meets objectives and indicators defined in the project document and suggests the relationship and synergy effect from the implementation in different geographical locations, and is as follows:

Component 1. Creating favorable conditions and mechanisms that enhance energy efficient to buildings at the regional and local levels

"Formation of a regional legal framework in the field of control and monitoring of the application of construction standards for energy efficiency in buildings in Vologda region" (implementation in 14-15 year) Component 1. Creating favorable conditions and mechanisms that enhance energy efficient to buildings at the regional and local levels
Result 1. Analysis of the current models of the control and monitoring of the application of construction standards for energy efficiency in buildings
Result 2. Formation of a regional model sanctioned control and monitoring systems.
Result 3. Complex of the regional legislative documents regulating the activities of the specialized control organizations.
Result 4. Creation of an integrated control system
Result 5. Interregional exchange of experiences and best practices

"Development of the legal and institutional framework for the implementation of the program on energy resource efficiency on the example of the Pskov region"

Result 1. Development of regulatory basis of the implementation of the energy efficiency programs at the regional and municipal level.
Result 2. Institutional mechanisms changes.
Result 3. System of the monitoring of energy efficiency programs implementation.
Result 4. Interregional exchange of experiences and best practices.

"Organizing mechanism of the forming of the municipal institutions of high energy resource efficiency on the example of the Pskov region"
Result 1. Analysis of the current model of utilities in the municipality on the example of Ostrovsky and Nevelsky areas of the Pskov region.
Result 2. Formation of the "ideal" model of utility municipality.
Result 3. Formation of the "real" model utility municipality.
Result 4. Municipal energy efficiency standards and the mechanism of their adoption
Result 5. Duplication in the Pskov region and inter-regional exchange of experiences and best practices

Component 2. "Developing a model of professional training in the field of energy efficiency and conservation in the design, construction and operation of buildings and life support systems, as well as an inter-regional network of educational centers in Vologda region"
Result 1: Enhancing scientific and educational potential, create modules through continuous professional training on Energy Efficiency (educational-methodical complexes)
Result 2: Training programs on energy efficiency (educational-methodical complexes)
Result 3: Interregional Center VET - vocational education and training (2014-2015 years)
Result 4: Distance learning and dissemination of knowledge (2014-2015 years)
Result 5: Inter-regional exchange of experiences and best practices

Component 3: Demonstration of energy-efficient solutions and management models at the local level

Demo project A (Vologda region). Pilot construction site (housing) management model, integrating energy efficiency criteria, legislative and regulatory measures, a comprehensive design solution and project monitoring.
Result 1. Legal framework of the project, the development model
Result 2. The architectural solution of the project and pre-project based on the application of modern technologies of energy efficiency building design.
Result 3. Design solution based on territorial characteristics and function of the settlement
Result 4. Model of energy-efficient construction and operation of a complex of buildings (2014-2015 years)
Result 5. Duplication

Demo project B « Development of the calculation methodology and implementation of energy certification of buildings on the example of the Arkhangelsk Region"
Result 1. Adaptation and application of a set of rules, "Design of thermal protection"
Result 2. Development and approval of the "Guidelines on the calculation of heat consumption maintained buildings" as a regional methodical regulatory document
Result 3. Adoption of territorial norms for energy efficiency (2014-2015 years)
Result 4. Adoption of a list of energy conservation measures and their implementation buildings

Demo project C "Development and implementation of project management and energy audit - as the basis of the construction and housing and communal structure of municipal services by the example of the Arkhangelsk region"
Result 1. Analysis of existing projects / programs and methods of their implementation in the field of housing and communal services
Result 2. Development and implementation of energy-efficient techniques of project management for the sphere of housing and communal services

Result 3. Development and implementation of energy audit in buildings
Result 4. Interregional exchange of experiences and best practices

As can be seen from the structure of the project and the relationship between the intersection of project activities in different geographical regions was originally incorporated in the framework of activities of the project, suggesting that the synergistic effect of the implementation of the project components in each of the areas

Question 8:

In page 5 of the project document it is stated that "The lessons and outputs of an earlier GEF MSP in Russia's North West (see Section D) provided linkages and lessons that will strengthen project implementation. While specific project sites and objectives do not overlap, the new project will utilize the policy and institutional barrier analysis and the educational and management models developed through the earlier MSP project (2003-2006).

Furthermore it is stated in Annex 1 of the project document that the project will build on the outcomes of two UNDP/GEF energy efficiency projects implemented under GEF-3: capacity building to energy efficiency in Russian residential building (Vladimir) and energy efficiency measures in the Russian educational system (Tver, Arkhangelsk, Karelia).

Please describe how the project has utilized the results of these previous projects and what can be considered as the incremental value added of the project currently under implementation compared to these two earlier projects.

In the preparation phase of the project has been carefully studied the experience of similar projects implemented earlier , but because of institutional and technological changes that have occurred since their implementation , the experience obtained in the course of their implementation could be used in a limited format. During the study visit the experience of the Croatian project on energy efficiency has studied and an international consultant of the project worked, in the formation of energy-efficient municipalities, Mr. Zoran Morvai Currently, the project produces a steady exchange of information with other UNDP projects implemented in the field of energy efficiency in Russia , in this paper , together with the project "Standards and labeling for energy efficiency ", in the Pskov region was held a round table on the implementation of educational programs in field of energy efficiency in educational institutions of the region. Also the project has links with similar projects in the field of energy efficiency of buildings sold in the territory of the CIS countries, in the framework of exchange in 1 quarter of 2014 study visit in Astana, Kazakhstan is scheduled

Question 9:

In Annex 8 of the project document, it is stated that "a number of energy saving projects have been implemented in the North Western Federal Okrug, including infrastructure projects with the World Bank, EBRD and NEFCO financing (e.g. energy metering and energy savings in water supply systems and residential buildings), TACIS supported projects on energy efficiency training, technology transfer and local norms in St.Petersburg construction sites, and the Norwegian Ministry of Foreign Affairs has provided financial support for energy efficiency activities in Arkhangelsk Oblast. These projects remained mainly uncoordinated. The proposed project will analyze, coordinate, and disseminate best practices of these initiatives through the institutional networks of the North West Federal Okrug and Representative of the President of Russia in the North West Federal Okrug. There will also be close coordination with the work of two key federal funds (the Fund to Promote Reform in the Residential and Communal Services Sector, and the Federal Fund to Promote Housing Construction) and with other investors, such as Nordic Investment Bank, EBRD, IFC which will leverage additional financing for the demonstration initiatives in order to ensure that they are of a scaleable size."

Please describe how the provisions of this chapter have been addressed during the project implementation and how they show up in the results achieved so far and in the activities ahead.

Experience of the mentioned projects was considered at the stage of the project document and the original objectives of the project. Through the embassy in the period up to 2012 experience in implementing projects in the Northwest region were exchanged, together with the World Bank, IFC has prepared the work to increase the investment attractiveness of the North-West region of the Russian Federation and promote a regional policy aimed at improving the efficient use of energy resources in the Northwest region.

Also the draft project works actively with other projects implemented in the field of energy efficiency implemented in the North- West of the Russian Federation, primarily a project " Nordic Council of Ministers ", dedicated to the development of energy efficiency in the Northwest District , the project implemented by the European Union together with the Center for Transboundary Cooperation , aimed at raising awareness in the field of energy efficiency in buildings , project "Municipal Association Domovledeltsev" implemented in pilot form of energy service models. As part of this interaction on regular basis there are press conferences, seminars and round tables, publications organized as well. On the basis of the Arkhangelsk region there are joint activity with the Danish and Norwegian projects in energy conservation.

Question 10:

In Annex 3 of the project document, a summary of the initial consultations with international financial institutions is provided.

Please describe how the project has followed up these consultations in order to leverage funding for the planned energy efficiency improvements of both new and existing buildings and how these activities show up in the results achieved so far.

During these and subsequent consultations there were explored the possibilitis of third-party financing for the implementation of measures aimed at improving the energy efficiency of buildings Under current conditions for funding through these financial institutions is not economically justified. The project continues collaboration with private companies and financial institutions, such as ESCOs "Tyumenenergo" OJSC CB Gazprombank OJSC VEB and Sberbank Northwest branch, NEFCO, Raiffeisen bank and other

Question 11:

Table A2.2 in Annex I provides a comprehensive list of key stakeholders. Please explain how the project has engaged each subgroup of them until now in the implementation of project activities.

Interaction with project stakeholders listed occurs within designated roles. Currently, attention is focused on project work with federal agencies, regional and municipal authorities. In this work occurs support and coordination and duplication of key project tasks.

Question 12:

Chapter 3 of the inception report is listing several entities with whom initial consultations have taken place, including NOStroy, Nordic Council Ministers, Swedish Building Association, Swedish Energy Agency, Finnish Building Association, NEFCO, Saint Petersburg Construction Committee etc., all of which have expressed their interest to co-operate with the project.

Please describe how these initial discussions have been followed up and what are the eventual co-operation arrangements currently in place ? How the eventual engagement of the listed entities is showing up in the results of the project so far ?

Key objectives which the project pursued in cooperation with these organizations have been achieved. The first is the exchange of experiences and solutions , as the Council of Ministers of the Northern countries implements a similar project dedicated to energy efficiency Swedish Association provided experience in construction of EE and issues of their operation, the Finnish Construction Association

provided an opportunity to exchange experience through demonstration projects, NEFCO - point projects funded in the Vologda region and Arhnageslkyoy, Construction Committee of St. Petersburg, is a leading regional management bodies of the Russian Federation of forming of the solutions in energy efficiency, and their replication.

Currently, the project interacts with a number of organizations , including: the " Nordic Council of Ministers," National Association of Builders , the Russian Union of Industrialists and Entrepreneurs, the public organization "Business Russia" , the Union of Power Engineers North-West Russia , "City homeowners association " NP ABOK Northwest, NA "Metrology saving", Case community "Energy Efficiency and Energy Saving " and others , etc. In this work the public component of the project is implemented, also the project is taking part in the National Association of Builders as consultants, joint training programs are formed.

Question 13:

In page 9 of the project document it is stated that "Russia's approaches to building codes and standards and energy efficiency norms are largely similar to European equivalents. Key requirements to building energy efficiency included in the EU directives have been already reflected in the 2003 Russian federal construction codes (with an exception for heating boilers). However, enforcement of these codes at the design, construction and maintenance phases is undermined by the barriers described above. A gap also exists in introducing and communicating the advanced norms to various regions and municipalities and in enforcing them. Enforcement is also perceived as an area where there is little information on quality control even for previous codes. Provincial (oblast) codes and standards have been developed in a number of oblasts, but this process is not harmonized across the Federation. The oblasts in the North West federal region of the Russian Federation require assistance in developing both provincial and local regulations to implement codes that meet the federal standard. They also require assistance in structuring an enforcement system that will ensure compliance.".

Please describe how the enforcement related barriers described above have been addressed by the project activities so far apart from what have been listed in the latest PIR 2013.

This problem has been studied in detail during the initial phase of the project , the information base has been collected , the model input-output model is generated and support management decisions and monitoring are formed. Due to the fact that since 2009, building regulations and rules are voluntary, as well as the adopted regulations on the approving the list of energy conservation and energy efficiency in relation to the common property of the owners of premises in apartment buildings , there is an urgent need to develop regional guidance documents. Under the new legislation, consumption standards are established by the regions, it requires a special vocational competencies. In addition, there is no reliable information about the level of energy consumption at the municipal level, in the framework of overcoming this barrier information base in Pskov and Arkhangelsk regions are formed.

Question 14:

In page 11 of the project document it is stated (under barrier analysis) that while the current standard on the thermal protection of buildings (adopted in 2003 by the State Construction Committee) requires that all building design projects should estimate energy performance. However, professional training and education in the area of building design and engineering do not integrate energy efficiency principles and incentives. Existing local experiences are replicated through fragmented initiatives with insufficient effectiveness.

Please describe how the UNDP/GEF project has ensured that all the training materials developed reflect the state of the art energy efficiency technologies, internationally recognized best practices and approaches, while also taking into account the local project environment.

In preparation of the development of educational modules by the specialized consultants and experts of the project best practices and approaches in the field of educational programs on energy saving

and energy efficiency has been studied and skimmed, also in the development of programs , international consultant was recruited , who participated in the coordination of the development of these programs. Consideration of local technological and institutional environment was engulfed by the involvement of local consultants who have considerable experience in developing training programs in accordance with the legislation of the Russian Federation. The project is confident in the competencies of the consultants and contractors, that is evidenced by the positive reviews on the basis of testing these educational modules at the 5 regions of the North-West of Russia.

Question 15:

In page 11 of the project document, active building design professionals and building inspectors are mentioned among key target group for outreach and training. Please explain how the project has addressed or will address their training needs in practice beside developing a package of training materials and establishing distant learning centers.

Formation of additional incentives for inspectors and designers aimed at increasing their interest in identifying and addressing areas of low energy efficiency in buildings engineering structure is one of the subtasks of the project , which was planned as part of the formation of assessment methodology , within the framework of on-site inspections , the formation of which is scheduled for 2014. In this work the project also will explore possibilities of demands realixations for the case studies and training for the mentioned target groups. All training modules are supposed the using of professional retraining programs 72 and 144 hours.

Question 16:

Activity 2.2c describes a number different models and analytical tools. Please describe briefly their current status, main results and how they are or will be used in practice to contribute to the project outcomes.

Mentioned above the set of activities is considered in the framework of teaching materials developed during the project. Educational-methodical complexes allow to form a comprehensive method of teaching, and include a detailed curriculum, book for the teaching, a book for the student, workbook, web seminars and self-study programs.

Question 17:

In page 16 of the project document it is stated that "the project will cooperate with a financial institution or institutions active in North West Russia to leverage additional financing for each of the demonstration initiatives in order to ensure that they are of a scaleable size. Indicative demonstration projects were selected to demonstrate improved enforcement capacities and removal of regulatory, information and know-how barriers" and further "The development of a model for managing and monitoring residential construction project based on provincial energy efficiency norms will help to consolidate efforts of local governments and investors, in particular the Nordic Investment Bank, which will review the housing development with a view to assessing their replicability".

Please describe the how the selected demonstration projects in Vologda and Arkhangelsk are addressing the issues and approaches elaborated above ?

The project it is offered to create a model of replicable results. Most acceptable standard buildings are selected, this allows to provide the replication of project results. For overhauls of the typical series of buildings are selected. In 2014, the catalogs of typical and atypical solutions will be formed. These models are sounded at all public events of the project. Once the data design decisions are ready, it will speed up the process of getting money for fund of major repairs, and also provide the data for consideration by financial institutions including the Nordic Investment Bank as well.

ANNEX 5: LIST OF DOCUMENTS REVIEWED

General documentation

- UNDP Programme and Operations Policies and Procedures
- UNDP Handbook for Monitoring and Evaluating for Results
- GEF Monitoring and Evaluation Policy
- GEF focal area strategic program objectives

Project documentation

- GEF approved project document and Request for CEO Endorsement
- Project Inception Report
- Annual work plans
- Annual GEF Project Implementation Reports for 2012 and 2013
- CDRs
- Financial audit reports
- GEF Quarterly Reports
- Project Steering Committee minutes
- Updated risk log

Other relevant documentation

- Federal statute № 261 “About Energy Savings and Increasing Energy Efficiency and about the Entry into Force of Changes to Distinct Legislative Acts of the Russian Federation” (signed November 2009)
- Presidential Decree of 04.06.2008 № 889 "About some measures to improve energy and environmental efficiency of the Russian economy"
- Project reports (Deliverables of the contracted local consultants)
- Project reports (Deliverables of the contracted international consultants)

ANNEX 6: PSC INCEPTION MEETING REPORT

ENGLISH SUMMARY (Unofficial translation)

Chairman: Mr. Sergey M. Zimin, National Project Director,

Deputy Plenipotentiary Envoy of the RF President to the NWFD

Participants: Attachment 1

Agenda: Attachment 2

Opening of the meeting. Introduction of the Steering Committee members.

Mr. Sergey Zimin emphasised that that the Project is extremely important for energy efficiency development in the North-West Federal District. The Government pays a lot of attention to this problem on regional and federal levels.

Welcoming

Welcoming address was provided by Regional Technical Advisor of UNDP Bratislava Regional Centre Mr. John O'Brien who described Project goals and objectives in the context of UNDP/GEF and GEF strategic programming, monitoring and evaluating framework.

After this rose to speak Ms. Vera L. Grishina, Deputy National Project Director, who presented in two words to the PSC members main aspects of the Project: Project outcomes, outputs and activities, Project logframe and workplan for 2011.

Consideration, discussing and approving of Project main goals, activities, logframe and workplan for 2011.

Mr. Sergey Zimin proposed to consider possibility of expert evaluation of already existed projects in order to replicate it's experience. Also he suggested identifying place for the Project in regional energy efficiency programmes.

Mr. Leonid Sokolov, Rector of Vologda State Technical University, emphasized that education methods on energy efficiency is under revision at this moment. The Project could help universities to regulate them.

Ms. Natalya Stoumova, Head of Sector of Energy Efficiency Estimation in HCS, Municipal Development Department of Vologda Oblast, made an offer to include reduction of housing costs into Project results.

Summary

Mr. Sergey Zimin suggested PSC members to accept the Workpaln for 2011 with consideration for remarks, approve it and start it's implementation.

Conclusions:

1. Approve PSC Status and membership;
2. Approve Project logframe;
3. Approve Workplan for 2011 with consideration for remarks. Project work group prepares final version and sends it to PSC members;
4. PSC members give comments on provided materials.
5. Hold full-time meeting at least once a year with possibility of meeting in absentia if necessary.

Annex 6/1.

Participants

Organisation		Representative
Office of the RF Presidential Plenipotentiary Envoy to the Northwest Federal District	–	**Sergey M. Zimin**, Deputy Plenipotentiary Envoy of the RF President to the Northwest Federal District (PSC Chairman)
UNDP	–	**Natalya E. Olofinskaya**, Head of Environment Unit
Ministry of Education and Science of the Russian Federation	-	**Evgenia Kaperzina,** Deputy Director of Department of strategic development
Nordic Council of Ministers	-	**Arne Grove,** Director of Information office in Kaliningrad
Centre for PPP of State Corporation "The Bank for Development and Foreign Economic Affairs (Vnesheconombank)"	-	**Anastasia Baboshkina,** Manager of department on Planning PPP programs and interaction with the International Financial Institutions
Arkhangelsk Oblast	-	**Anatoly N. Lukin,** Deputy Minister of FEC and HCS – Head of FEC Department
Arkhangelsk Oblast	-	**Aleksey M. Busin,** Head of Unit of Regional Programmes and Budget Investments , Building Ministry
Arkhangelsk Oblast	-	**Sergey V. Drachev,** Deputy Head of HCS and energetics Department
Vologda Oblast	-	**Natalya V. Stoumova,** Head of Sector of Energy Efficiency Estimation in HCS, Municipal Development Department
Vologda Oblast	-	**Leonid I. Sokolov,** Rector of Vologda State Technical University
Pskov Oblast	-	**Aleksandr V. Kuznetsov,** Chairman of State Energy Tariffs Committee
NP "National Agency for Energy Saving and Renewable Energy" (NAERE)	-	**Nikolay S. Safonov,** General Director
NP "Union of power engineers of the North-West region of Russia"	-	**Vladimir V. Markin,** Vice-President

ANNEX 7A: STAKEHOLDER MATRIX AND INSTITUTIONAL COORDINATION AS ELABORATED IN THE PROJECT DOCUMENT

The proposed project is submitted in the framework of the Umbrella "Russia Energy Efficiency Programme " – a partnership of UNDP, EBRD, UNIDO involving key Russian federal sectoral agencies and regional authorities. As envisaged by the Umbrella Programme, coordination and linkages between the proposed project and other projects under the Programme will be addressed through the coordination mechanism led by GEF OFP and comprising of GEF Agencies, Ministry of Energy of the Russian Federation and other key Russian Government authorities. As part of this effort, the Russian Government has recently created an inter-agency committee on energy efficiency. As suggested in the Umbrella Programme, UNDP CO in Russia will be responsible for the overall communication and coordination between programme partners and projects. Full project proposals to be developed over the coming months will include detailed description of coordination arrangements based on consultation with OFP, Agencies and Russian partners.

Furthermore, the project will build on the outcomes of two UNDP/GEF energy efficiency projects implemented under GEF-3: capacity building to energy efficiency in Russian residential building (Vladimir) and energy efficiency measures in the Russian educational system (Tver, Arkhangelsk, Karelia). These projects above all helped to specify local and provincial barriers to energy efficiency and offered a number of lessons and best practices for the follow up initiatives.

A number of energy saving projects have been implemented in the North Western Federal Okrug, including infrastructure projects with the World Bank, EBRD and NEFCO financing (e.g. energy metering and energy savings in water supply systems and residential buildings), TACIS supported projects on energy efficiency training, technology transfer and local norms in St.Petersburg construction sites, and the Norwegian Ministry of Foreign Affairs has provide financial support for energy efficiency activities in Arkhangelsk Oblast. These projects remained mainly uncoordinated. The proposed project will analyze, coordinate, and disseminate best practices of these initiatives through the institutional networks of the North West Federal Okrug and Representative of the President of Russia in the North West Federal Okrug. There will also be close coordination with the work of two key federal funds: the Fund to Promote Reform in the Residential and Communal Services Sector, and the Federal Fund to Promote Housing Construction. At the international level, the project will coordinate with activities taking place as illustrated in Table A2.1.

Table A2.1: Proposed project coordination with related international initiatives

Organization/Initiative	**Means of Cooperation**
GEF Multi-Agency Framework for Promoting Low Greenhouse Gas Emission Buildings	Provision of findings and materials from all components of the project to other projects participating in the GEF framework programme. Dissemination of materials from other GEF framework projects to project staff and stakeholders.
Barents Energy Group Initiative	Provision of project findings to the group; participation in meetings as necessary.
Energy Charter	Provision of project findings to the Energy Charter's Working Group on Energy Efficiency and Related Environmental Aspects.
UNECE (Committee on Housing and Land Management workshops on Energy Efficiency in Housing)	Provision of data and findings from pilot sites in Component 3. Distribution of materials and presentations to project staff and stakeholders in the North West Federal Region.
International Energy Agency	Provision of project findings to the EE Policies and Measures Database; provision of supporting materials as necessary to G8 Gleaneagles

	Programme (IEA G8/G20).
SPARE (Intl. Initiative on Energy Efficiency in Schools)	Provision of all curriculum materials developed under Component 2 to the SPARE international network of schools using Russian-language materials.

Stakeholders and beneficiaries of the proposed project include: the Office of the Plenipotentiary Representative of the President of the Russian Federation in the North West Federal Okrug (inter-regional coordination, replication and up-scaling of regulatory work and management models); provincial and local Administrations of the Arkhangelsk, Pskov and Vologda Oblasts; provincial legislative bodies; regional energy committees (implementation of pilot demo projects, regulatory improvements); technical universities and energy efficiency centers (capacity building, technical training, dissemination of information, know-how and technologies); and construction companies. A stakeholder overview is provided in the table below.

Table A2.2: Stakeholder Overview

Stakeholder(s)	**Role in Project**
Component 1: Enabling environment and enforcement capacities for improved building energy efficiency at the provincial (*oblast*) and local levels	
The plenipotentiary of the President of the RF in the North West Federal District (Okrug)	Coordination of the work of the enforcement agencies across participating municipalities and oblasts.
Federal authorities responsible for enforcement of building codes and related legislation: the Ministry for Regional Development; the Ministry of Energy; and the Ministry of Natural Resources and Ecology.	Participation in taking project-related legal documents related to building efficiency at the regional and local level and to efficiency in the construction sector to the federal level.
Legislative bodies at the federal and regional (oblast) level: the State Duma of the RF and regional-level assemblies.	Consideration and acceptance of the proposed legislation to improve energy efficiency in the buildings sector.
Authorities responsible for enforcement of building codes and related legislation at the regional (oblast) level, including: The State Housing Inspectorate of the Vologda Oblast; the Central Administrative Board for Architecture and Town Planning of the Vologda Oblast; the Department of Natural Resources and Environmental Protection of the Vologda Oblast; the Department of Construction, Industry, and Electric Power of the Vologda Oblast; the regional power commission of the Vologda Oblast; the Pskov Oblast State Committee for Construction, Housing and Communal Services; the Pskov Oblast State Housing and Building Inspectorate; the Pskov Oblast State Committee on Tariffs; the Arkhangelsk Oblast Department of Tariffs and Pricing, the Department of Natural Resources of Arkhangelsk Oblast; the Department of Fuel and Energy, Housing, and Communal Services of Arkhangelsk Oblast; the Architecture and Town Planning Authority of Arkhangelsk Oblast; and the State Housing Inspectorate in Arkhangelsk Oblast.	Preparation of regulations and legislation to provide a legal foundation for energy efficiency in buildings and in the construction sector.
Municipal authorities: municipal authorities responsible for	Preparation and introduction of local

enforcement; relevant committees, departments, and authorities.	legislation and regulations to support energy efficiency in the housing and construction sector.
Federal funds: the Fund to Promote Reform in the Residential and Communal Services Sector, and the Federal Fund to Promote Housing Construction	Preparation and support of legislation to improve energy efficiency in the funds' target sectors; integration of energy efficiency considerations into the operating procedures of the funds.
Property developers and construction companies and related business associations	Cooperation on efforts to increase energy efficiency in the construction and buildings sector
Housing maintenance organizations / communal services organizations	Cooperation on efforts to increase energy efficiency in buildings maintenance
Design institutes and energy-related R&D organizations	Cooperation on efforts to increase energy efficiency in the construction and buildings sector
Technological regulation authorities: the management of the Federal Service on Ecological, Technological, and Nuclear Supervision	Cooperation on technical regulations to improve energy efficiency in the construction and buildings sector.
Generating companies and heat and power marketing companies (utilities)	Participation in resulting programs to improve energy efficiency.
Other businesses	Participation in resulting programs to improve energy efficiency.
Civil society	Participation in resulting programs to improve energy efficiency.
Component 2: Capacity Building and Know-How	
Educational institutions: Institutions providing initial vocational training, average vocational training, and advanced vocational training.	Development and introduction of training programs, re-training programs, and the corresponding academic plans and curricula.
Federal enforcement authorities: The Ministry of Education and Science	Review and dissemination of training programs, re-training programs, and the corresponding academic plans and curricula.
Other authorities: Regional monitoring bodies	Introduction of a system of training and re-training for their employees, including curriculum and general requirements.
The media	Provide information to the general public on energy efficiency and the potential for saving energy in the buildings sector; contribute to awareness of an energy-efficient mindset.
Component 3: Demonstration of local energy efficient solutions and management models	
Enforcement authorities at the level of the NW Federal Okrug	Coordination of the work at the sub-federal level
Oblast-level and local-level authorities	Acceptance of legal and organizational decisions, oversight of interests of all stakeholders at the sub-federal level.

Federal funds: the Fund to Promote Reform in the Residential and Communal Services Sector, and the Federal Fund to Promote Housing Construction	Cooperation in funding the demonstration projects, uptake of findings from these projects.
Other sources of investment and co-financing for federal funds: Norwegian Investment Bank, other bilateral and multilateral investment funds and banks.	Cooperation in funding the demonstration projects; provision of financing and/or guarantees for property developers (see below).
Technological regulation authorities: the management of the Federal Service on Ecological, Technological, and Nuclear Supervision	Monitoring and oversight on all civil-engineering-related work associated with the demonstration projects.
Property developers	Provision of technical and financial support.
Design institutes: design and R&D organizations working in the participating oblasts	Participation in the design process for the demonstration projects.
Construction companies working in the participating oblasts	Construction of buildings under the demo project.
Manufacturers of construction materials	Provision of efficient materials for the demonstration projects.
Energy audit companies	Work on baseline auditing and monitoring the performance of buildings involved in the demonstration projects and in a control group of buildings.
Building management companies	Day-to-day management of buildings in the demonstration projects
Energy producers and utilities	Provision of heat and power to demonstration project sites.
Businesses whose offices are located in the demonstration zones	Beneficiaries of reduced energy demand.
Households located in the demonstration zones	Beneficiaries of reduced energy demand.
Public organizations	Representation of the interests of the project beneficiaries (households and businesses).
The media	Raise awareness of the results of the demonstration projects and of the overall benefits of improving energy efficiency in the buildings sector.

Coordination will be ensured through the Office of Plenipotentiary Representative of the President of the RF in the North-West Federal Okrug. The Office carries out coordination of and administrative support to the implementation of the national priority projects in the North-Western regions, including the housing project. The Office is also responsible for replication of best practices and lessons within the North West Federal Okrug through the Council of Governors, the Council for National Priority Projects and through its international contacts targeting investment promotion and technology transfers. Decisions of the Councils are binding for the participating regions and drive the development of regional programmes and budgets.

ANNEX 7B: SUMMARY OF INTERNATIONAL FINANCIAL INSTITUTIONS CONSULTATIONS AS PRESENTED IN THE PROJECT DOCUMENT

1. World Bank Group, including
    - IFC
        - funding possibility for projects discussed with deputy representative of the President of the Russian Federation in the North-West Federal District and vice-governors of the districts, plans presented and key focus areas identified;
        - project funding possibilities under component 3 discussed (project site in Vologda region discussed at meeting with vice-governor of the Vologda region; projects for Arkhangelsk region discussed at meeting of the regional department for fuel and energy facilities and municipal building maintenance services). The administration and the bank are ready to examine funding plans for the projects under a guarantee by the region for a period of up to 15 years at the stage of project justification and launch. Vologda region is currently discussing practical issues related to project implementation. A possibility of funding energy efficiency advocacy activities through an IFC grant is currently being examined in the Pskov region.

2. MDM Bank, branch of OJSC 'MDM-Bank' North-West Bank
    - issues discussed include funding of energy audit, certification, implementation of infrastructure projects for boiler plants conversion and other system-level activities in the Arkhangelsk and Pskov regions.
3. BNP Paribas
    - funding possibility for projects discussed with deputy representative of the President of the Russian Federation in the North-West Federal District and vice-governors of the districts, plans presented and key focus areas identified;
    - issues of funding of energy audit, certification, implementation of infrastructure projects for boiler plants conversion and other system-level activities discussed for Vologda and Pskov regions, as well as funding of component 2 of the project (interuniversity center for energy efficiency)
4. Eurasian Development Bank
    - funding possibility for projects discussed with deputy representative of the President of the Russian Federation in the North-West Federal District and vice-governors of the districts, plans presented and key focus areas identified;
    - funding possibility for projects under component 3 discussed (project site in Vologda region discussed at meeting with vice-governor of the Vologda region; projects for Arkhangelsk region discussed at meeting of the regional department for fuel and energy facilities and municipal building maintenance services), reconstruction of community facilities and introduction of modern equipment.
5. Nordic Environment Finance Corporation (NEFCO)
    - funding possibility for projects discussed with deputy representative of the President of the Russian Federation in the North-West Federal District and vice-governors of the districts, plans presented and key focus areas identified;
    - NEFCO is actively involved in and ready to continue activities related to energy saving in the Arkhangelsk region. Funding schemes are based on revolving funds, are successfully implemented, and will be used in the project.
6. Finnvera
    - funding possibility for projects discussed with deputy representative of the President of the Russian Federation in the North-West Federal District and vice-governors of the districts, plans presented and key focus areas identified;
    - projects aimed at the introduction of energy efficient activities and events in Pskov region. Negotiations conducted with the local administration. Funding schemes involving Finnish companies currently being developed.

7. National Housing Bank of Norway ‘Husbanken’
    - actively involved in and ready to continue activities related to energy saving in the Arkhangelsk region. Funding schemes are based on revolving funds, are successfully implemented, and will be used in the project. Possibility for replication of scheme in the Vologda region under discussion.
8. Northern Investment Bank
    - funding possibility for projects discussed with deputy representative of the President of the Russian Federation in the North-West Federal District and vice-governors of the districts, key priorities identified.
9. Gazprombank (OJSC)
    - funding possibility for projects discussed with deputy representative of the President of the Russian Federation in the North-West Federal District and vice-governors of the districts, key priorities identified. The bank supports joint work with IFC in this field.
10. VTB Saint-Petersburg
    - funding possibility for projects discussed with deputy representative of the President of the Russian Federation in the North-West Federal District and vice-governors of the districts, key priorities identified. The bank is identifying the possible areas for its participation in the project, as well as timeframe.
11. LLC ‘Finconsult’ – leasing company
    - funding possibility for projects discussed with deputy representative of the President of the Russian Federation in the North-West Federal District and vice-governors of the districts, key priorities identified, the company is examining the list of equipment, conditions and duration of the lease, and potential partners.

ANNEX 7C: RUSSIA ENERGY EFFICIENCY UMBRELLA PROJECT

	EBRD Municipal Buildings Project	***EBRD Urban Housing Project***	***UNDP NW Buildings Project***	***UNDP Standards/Labels***	***UNDP Efficient Lighting***	***EBRD-UNIDO Industrial EE***
Geographic Region	Municipalities to be determined during PPG	Khanty-Mansi autonomous region, Siberia National scope for Housing Fund work	Three oblasts in the NW Russian admin. territory	Regions to be determined. National scope for labeling	National scope with demonstration activities in Nizhny Novgorod and Moscow	National, by industry and company
End-Use Sector	Public administration buildings Public facilities (educational and healthcare) Public lighting Both new and existing buildings	New public and private urban residential buildings	Buildings in all sectors	Household appliances Other equipment Lighting	Efficient lighting in all sectors	GHG-intensive industries
Co-financing	EUR 10-50 million in credit to municipalities Forfaiting mechanism for suppliers	USD 34 million in EBRD loans USD 50 million EBRD line of credit Russian Housing Municipal Reform Fund	Federal target programmes on housing Regional EE funds	Federal EE programme Product retailers	Government co-financing CFL producers	Government co-financing Private Sector (Designated Financing Mechanism)
Key Barrier Addressed	Finance gap for municipalities	Under-representation of EE in municipal planning and housing policy	"Policy-to-practice" gap	Absence of institutional arrangements for S&L and efficient procurement	Local production and standards	EE not reflected in facilities management or investments
Activities to define and support "energy-efficient" technologies	Will develop criteria for prioritizing EE investments	Will establish criteria for "EE buildings"	Will develop criteria for certification of EE buildings Will develop criteria for municipal EE norms	Will establish norms for appliances and equipment	Knowledge center, procurement, local production support	Training, Targets, Preferred suppliers
TA Mechanisms	Support for project preparation Tendering Unit	Guidance to state fund Support for municipal energy planning	Three demonstration projects Curriculum Professional training	Public awareness campaign Demonstration of implementation	Public awareness and marketing	Outreach to industry Professional training

	EBRD Municipal Buildings Project	***EBRD Urban Housing Project***	***UNDP NW Buildings Project***	***UNDP Standards/Labels***	***UNDP Efficient Lighting***	***EBRD-UNIDO Industrial EE***
Focus of Capacity Development Efforts and Target Group	Project ID and preparation (for municipalities and public facilities)	Planning (for municipalities) Mainstreaming (for fed govt) Project prep (entities)	Capacity to support EE buildings in policy and implementation (Oblast govts) Training (professionals; trainers)	Education (households, buyers, sellers) Institutional mechanisms (federal govt)	Producers Commercial buyers City and regional procurement	Energy managers Policy-makers Commercial lenders
Replication: Strategy and Scope	Lessons learned shared with participating municipalities Forfaiting mechanism scaled up to additional municipalities	Federally through the Housing Fund; to other oblasts/okrugs through IA activity Disseminate best practice for "highly efficient buildings and in municipal energy planning	Lesson from demos in 3 oblasts shared at the territorial (okrug) and federal level Professional training	Policy at federal level, and *then* Trials at oblast level	Building of national capacity for local ownership Demonstration in Moscow and Nizhny Novgorod	Agreements with key sectors and firms

ANNEX 8: DISBURSEMENTS IN 2011–2013 AND PLANNED BUDGET FOR 2014 - 2015

Project Activity	Atlas Budget Account Code	ATLAS Budget Description	Spent in 2011	Spent in 2012	Spent in 2013	Total spent at the end of 2013	Planned to be spent in 2014	Planned to be spent in 2015	Total (USD)
ACTIVITY 1 Enabling environment and enforcement capacities for improved building energy efficiency	71200	Intl. Consultants	0	39 781	0	**39 781**	7 000	3 219	**50 000**
	71300	Local Consultants	13 204	46 386	80 372	**139 962**	76 652	183 386	**400 000**
	71600	Travel	1 026	5 167	4 452	**10 646**	6 000	38 354	**55 000**
	72100	Contractual services	1 480	161 384	150 770	**313 634**	50 454	185 912	**550 000**
	72800	IT equipment	0	0	0	**0**	7 000	23 000	**30 000**
	74200	Printing & publications	44	0	0	**44**	1 000	14 956	**16 000**
	74100	Evaluation	0	0	6 645	**6 645**	10 000	83 355	**100 000**
	75700	Seminar	0	3 655	0	**3 655**	8 000	48 345	**60 000**
	74500	Miscellaneous expenses	0	402	49	**451**	1 000	13 549	**15 000**
Total Activity 1:			**15 755**	**256 775**	**242 287**	**514 818**	**167 106**	**594 076**	**1 276 000**
ACTIVITY 2 Capacity building and know-how	71200	Intl. Consultants	0	29 802	0	**29 802**	20 198	0	**50 000**
	71300	Local Consultants	10 273	65 225	26 860	**102 357**	13 480	66 163	**182 000**
	71600	Travel	571	4 788	6 665	**12 024**	4 000	11 976	**28 000**
	72100	Contractual services	1 480	2 860	93 239	**97 580**	72 000	160 420	**330 000**
	72200	Equipment	0	0	0	**0**	3 000	117 000	**120 000**
	74200	Printing & publications	0	0	0	**0**	1 000	42 000	**43 000**
	74500	Miscellaneous expenses	0	275	1	**277**	1 000	13 723	**15 000**
Total Activity 2:			**12 324**	**102 951**	**126 765**	**242 039**	**114 678**	**411 283**	**768 000**
ACTIVITY 3 Demonstration of local energy efficient solutions and management models	71200	Intl. Consultants	0	29 452	4 548	**34 000**	37 500	28 500	**100 000**
	71300	Local Consultants	14 691	95 202	70 035	**179 928**	115 344	278 728	**574 000**
	71600	Travel	5 324	20 885	3 923	**30 132**	3 000	76 868	**110 000**
	72100	Contractual services	193	133 872	214 692	**348 757**	268 681	1 097 562	**1 715 000**
	72800	Software product	0	0	0	**0**	5 000	95 000	**100 000**
	72200	Equipment	0	0	0	**0**	7 000	443 000	**450 000**
	74200	Printing & publications	18	0	0	**18**	1 000	48 982	**50 000**
	75700	Seminars	0	10 329	44 876	**55 205**	8 000	81 795	**145 000**
	74500	Miscellaneous expenses	-108	1 373	0	**1 266**	1 000	27 734	**30 000**
Total Activity 3:			**20 119**	**291 113**	**338 075**	**649 306**	**446 525**	**2 178 168**	**3 274 000**
ACTIVITY 4: Management	71400	Project personnel	33 437	58 661	66 031	**158 129**	93 400	123 471	**375 000**
	71600	Travel	474	1 243	6 177	**7 894**	2 000	10 106	**20 000**
	72200	Equipment	2 041	8 238	0	**10 279**	0	1 721	**12 000**
	72400	Communication	209	3 236	3 028	**6 473**	1 000	12 527	**20 000**
	72500	Supplies	392	2 511	12 328	**15 230**	1 000	8 770	**25 000**
	74100	Audit	0	66	2 834	**2 900**	4 000	43 100	**50 000**
	74500	Miscellaneous expenses	1 335	1 111	603	**3 049**	1 000	15 951	**20 000**
Total Activity 4:			**37 887**	**75 066**	**91 001**	**203 954**	**102 400**	**215 646**	**522 000**
PROJECT TOTAL			**86 086**	**725 904**	**798 127**	**1 610 117**	**830 709**	**3 399 174**	**5 840 000**

ANNEX 9: PROJECT CO-FINANCING IN 2011-2013

Co financing (Type/Source)	IA own Financing (mill US$)		Government (mill US$)		Other* (mill US$)		Total (mill US$)		Total Disbursement (mill US$)	
	Planned **	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grants										
Loans (concessional compared to market rate)										
Credits										
Equity investments										
In-kind support	n/a	n/a	2.540	1.270[7]	0.000	0.000	2.540	1.270	n/a	n/a
Other types ***	n/a	n/a	11.490	35.719[8]	13.470	76.751[9]	24.960	112.470	n/a	n/a
Totals			**14.030**	**36.989**	**13.470**	**76.751**	**27.500**	**113.740**		

LEVERAGED RESOURCES

Donor	Description	Amount	Type
Norden (Nordic Council of Ministers)	Organization of trainings and study tours on energy efficiency	USD 45,337.00	In-kind
	Total:	**USD 45,337.00**	

[7] Government sources according to the Project Document
[8] Vologda Oblast – USD 3.035 mln (see the Excel table)
Pskov Oblast – USD 4.926 mln (see the Excel table)
Arkhangelsk Oblast – USD 27.758 mln (see the Excel table)
[9] Extra-budget resources confirmed by Arkhangelsk Oblast (see the Excel table)

PSKOV OBLAST				
Year	Expenditure	Budget resources		
		Spent, RUB	Spent, USD*	* 1 USD = 30 RUB
2012	Overhauls of apartment houses	2 264 500	75 483	
2013	Subsidies to local budgets for improving energy efficiency in housing sector	43 059 540	1 435 318	
2013	Subsidies to local budgets for developing heating schemes	11 975 000	399 167	
2013	Monitoring of regional energy efficiency program implementation	49 650	1 655	
2013	Development of energy consumption norms for residents	3 500 000	116 667	
2013	Purchasing and installation of energy consumption meters for state public buildings	969 737	32 325	
2013	Energy audits of state public buildings	12 534 710	417 824	
2013	Purchasing and installation of energy consumption meters for municipal public buildings	11 338 900	377 963	
2013	Energy audits of municipal public buildings	51 238 020	1 707 934	
2013	Subsidies to local budgets for improving energy efficiency in housing sector	5 488 695	182 957	
2013	Purchasing and installation of energy consumption meters for municipal public buildings	5 363 800	178 793	
		Total:	**4 926 085**	

VOLOGDA OBLAST			
Year	Expenditure	Budget resources	
		Spent, RUB	Spent, USD*
2011	Modernization of heating systems for public buildings	47 040 400	1 568 013
2011	Energy audits of public buildings	477 300	15 910
2012	Modernization of heating systems for public buildings	8 892 400	296 413
2013	Modernization of heating systems for public buildings	24 632 700	821 090
2013	Development of regional energy efficiency program	3 850 000	128 333
2013	Subsidies to local budgets for developing heating schemes	6 150 000	205 000
		Total:	**3 034 760**

ARKHANGELSK OBLAST					
Year	Expenditure	Budget resources		Extra-budget resources	
		Spent, RUB	Spent, USD*	Spent, RUB	Spent, USD*
2011	Awareness raising			155 000	5 167
2011	Educational activities, trainings for energy efficiency	696 000	23 200	432 000	14 400
2011	Energy audits of state public buildings	12 209 400	406 980		0
2011	Energy audits of municipal public buildings	5 584 100	186 137		0
2011	Purchasing and installation of energy consumption meters for multifamily houses	6 652 900	221 763	82 813 600	2 760 453
2011	Purchasing and installation of energy consumption meters for state public buildings	1 925 000	64 167		0
2011	Purchasing and installation of energy consumption meters for municipal public buildings	12 713 000	423 767		0
2011	Modernization of heating systems for housing sector and public buildings	28 992 000	966 400	356 490 000	11 883 000
2011	Overhauls of residential houses and public buildings	3 081 000	102 700		0
2011	Purchasing and installation of energy consumption meters for detached houses	12 761 000	425 367		0
2012	Educational activities, trainings for energy efficiency	308 600	10 287	205 000	6 833
2012	Energy audits of state public buildings	400 245 200	13 341 507		0
2012	Energy audits of municipal public buildings	58 422 600	1 947 420		0
2012	Purchasing and installation of energy consumption meters for multifamily houses	60 999 500	2 033 317	88 392 000	2 946 400
2012	Overhauls of state public buildings	16 228 000	540 933		0
2012	Modernization of heating systems for housing sector and public buildings	1 477 000	49 233	131 567 000	4 385 567
2012	Overhauls of residential houses and municipal public buildings	3 369 600	112 320		0
2012	Purchasing and installation of energy consumption meters for detached houses	60 284 000	2 009 467		0
2013	Implementation of Regional Program on energy efficiency	146 798 767	4 893 292	1 642 462 000	54 748 733
		Total:	**27 758 256**	**Total:**	**76 750 553**

ANNEX 10: COMMENTS BY STAKEHOLDERS (only in case of discrepancies with evaluation findings and conclusions)