

**PROJECT INFORMATION DOCUMENT (PID)  
APPRAISAL STAGE**

Report No.: 56314

<b>Project Name</b>	POST-CHERNOBYL RECOVERY - ADDITIONAL FINANCING
<b>Region</b>	EUROPE AND CENTRAL ASIA
<b>Sector</b>	District heating and energy efficiency services (80%); Other social services (20%)
<b>Project ID</b>	P118376
<b>Borrower(s)</b>	REPUBLIC OF BELARUS
	Republic of Belarus Belarus
<b>Implementing Agency</b>	
	Belinvestenergosberezhenie Revoliutsionnaya str. 13A Belarus Tel: 375-17- 227 20 78      Fax: 375-17-206 46 83 voitekhovich@niks.by
<b>Environment Category</b>	<input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
<b>Date PID Prepared</b>	February 5, 2010
<b>Date of Appraisal Authorization</b>	January 18, 2010
<b>Date of Board Approval</b>	July 29, 2010

1. Country and Sector Background

Belarus, situated in Eastern Europe, is a landlocked country with a total surface area of 20.8 million ha. It is bordered by the Russian Federation, Ukraine, Poland, Lithuania and Latvia. The country has four distinctive geographic regions. The north has many lakes and hills, and is covered with forests. The east is an elevated plain region. The Polesye, a lowland area of rivers and swamps, occupies the south, and the west is an agricultural region with mixed conifer forests. The marshy land of the Polesye is the largest swamp area in Europe. The climate is continental in the central and eastern parts of the country and maritime in the rest of the country. The average annual precipitation is about 700 mm, and varies between 550 mm in the southeast to 800 mm in the elevated areas of the central part of the country. Groundwater resources are available throughout the country. They amount to 18 km<sup>3</sup> per year and drain entirely into surface water bodies.

The country with a population of 9.7 million (2006 data), has an urbanization rate of 71 percent. The country is divided into six oblasts (regions), with their administrative centres in Minsk, Brest, Vitebsk, Gomel, Grodno and Mogilev. There are 110 towns, of which 15 towns have a population of over 100,000.

The Belarus economy grew at about 10 percent in 2006, averaging 8.2 percent between 2002 and 2005. A substantial terms of trade improvement (primarily, energy terms of trade) and strong

partner country growth were important factors behind these high growth rates. The centralized economic system distributed these terms of trade gains across the economy through higher wages and transfers, boosting domestic demand. The Government's generous income policies boosted household consumption by 14.2 percent in real terms in 2006. The poverty headcount ratio (national definition) fell from 30.5 percent of the population in 2002 to 11.1 percent in 2006.

An improved macroeconomic environment also supported economic growth. Price controls and the peg of the Belarus Ruble to the dollar helped lower inflation from high double digits in 2001 to 7 percent in 2006. Since 2004, the consolidated budgets have been roughly in balance and even recorded a surplus of 1.4 percent of GDP in 2006. Domestic debt has been stable at about 6 percent of GDP (5.1 percent in 2006). Total public debt accounted for a still low 19 percent of GDP by the end of 2006, of which three quarters is short-term.

However, 2007 marked a clear break in Belarus' favorable trade status with Russia. New oil and gas agreements concluded between Russia and Belarus at the beginning of 2007 implied a substantial deterioration of Belarus' energy terms of trade. With Russia's push towards market prices for its exports, the natural gas import price more than doubled in 2007 to US\$100/tcm, and, according to the agreement, will gradually increase to European market levels by 2011. In addition, on account of Russia progressively eliminating the subsidized export taxes on oil exports to Belarus, the import price for Belarus increased further.<sup>1</sup> As a result of these agreements, Belarus' net energy import bill has increased by almost US\$2.5 billion, i.e., the 2007 energy terms of trade shock was equivalent to about 5 percent of GDP.

Against this background, Belarus' performance in 2007 was better than expected. The GDP growth decelerated somewhat but remained high (8.2%), the current account deficit (CAD) widened (to 3.9 percent of GDP) but less than implied by the energy price shock, and official reserves tripled. Poverty rates declined further (to 7.7 percent of population). The most important factors behind the 2007 outcome are: (i) improved terms of trade for Belarus' main exports (fertilizers, metals, foodstuffs); (ii) acquired external financing in excess of expected CAD (of almost US\$3.5 billion, out of which about US\$1.3 billion is FDI and about US\$2 billion in terms of new debt); (iii) improved energy efficiency; and (iv) tightened fiscal policy and moderated wage growth.

The declining terms of trade from hikes in energy prices worsened with sharp declines in export prices and demand as the crisis hit Belarus' major trading partners in 2008. External payment difficulties arising from Belarus' debt maturity structure and limited international reserve cover were exacerbated by limited access to financing resulting from the crisis. The crisis exposed Belarus' structural vulnerabilities (see Box 1). The authorities' recognition of these vulnerabilities spurred reforms anchored in the SBA and DPL since late 2008. However, Belarus' external adjustment remains incomplete thus far and macroeconomic risks remain considerable.

**Energy Sector.** During recent years, Belarus has made significant efforts to reduce energy intensity and improve efficiency. The achieved results are encouraging; energy intensity was

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<sup>1</sup> From 2007, Russia started to apply oil export tax to exports of oil to Belarus in the amount of 29 percent of export tax applied to the third countries (and it is expected to rise to 36 percent by 2009).

about 0.76 (toe per dollar of GDP) in the mid-1990s and was reduced to 0.35 in 2007. The government's energy efficiency program aims to further reduce the energy intensity of the economy by over 30 percent by 2010. The aim is to strengthen energy security through capital investments in asset renovation, efficient utilization of fuel and energy resources, and more extensive use of domestic, alternative and renewable sources of energy, such as biomass.

The government has approved large energy programs in 2006 and 2007 which aim to reduce energy intensity, increase the share of domestic sources in energy generation, and increase energy security. The programs are: (i) program to modernize major energy generating plants; (ii) program to convert existing heating plants to combined heat and power generation; (iii) energy efficiency program; and (iv) renewable energy program.

In 2006, the Bank prepared the energy sector report "Belarus: Addressing Challenges Facing the Energy Sector" which emphasizes the same issues as the Government's new programs mentioned above. In addition, the report recommends the gradual introduction of structural and institutional reforms in the sector in order to move from vertically integrated state owned utilities towards more liberalized energy markets. After the report was issued, there have been positive developments in Belarus related to plans for the unbundling of the state owned energy companies and changes in the regulatory and institutional framework.

The Bank supported demand-side investments in the Social Infrastructure Retrofitting Project (SIRP), retrofitting 674 schools and hospitals for better insulation and 232 buildings for improved lighting. Combined with improvements in boilers and substations, these investments saved about 10,300 thousand cubic meters of natural gas in 2008. Under the Post-Chernobyl Recovery Project (PCRP), an additional 90 schools and hospitals have benefitted from retrofits to improve energy efficiency. In addition to more energy efficient and reliable heat and hot water services for households, the project connected 1,770 homes in eight towns to gas lines, resulting in 3,750 thousand cubic meters of natural gas fuel savings. The energy intensity of the economy has been reduced by two-thirds since 1992 and given the continuous progress in reducing energy intensity (e.g., estimated 8 percent reduction in 2009), the country is on track to meet its national target of reaching the European average energy intensity by 2020.

## 2. Objectives

The development objective of the Additional Financing will remain the same as that of the Original Project. Additional Financing will further scale-up the development impact of the Original Project. The project aims to provide the population residing in the Chernobyl affected area with energy efficient and reliable heat and hot water services in order to improve their living environment.

## 3. Rationale for Bank Involvement

Belarus does not possess a sufficient energy resource base and its economy relies heavily on the import of energy resources, which covers about 80% of the domestic demand, while annual costs related to energy supply make up about 15 percent of the national GDP. Thus the country is

vulnerable to fluctuation of international energy prices. Belarus has improved its energy performance remarkable since mid-1990 by systematically investing energy efficiency improvements. The achieved results are encouraging; energy intensity was about 0.76 (tonne of oil equivalent (toe) per dollar of GDP) in the mid-1990s and was reduced to 0.32 in 2008. The Bank is involved in three energy efficiency projects which are improving energy efficiency in demand side and in supply side, in heat and power generation.

The original loan amount for Post-Chernobyl Recovery Project amount was US\$ 50 million approved by the Board on April 18, 2006 and it became effective on August 11, 2006. The project has performed well with a large number of contracts under implementation. All the remaining contracts are expected to be completed by the Loan Closing Date of December 31, 2009. The project impact has been consistent with expectations set out in the original project appraisal document.

Considering significant social, economic and environmental benefits of the Original Project as well as its successful implementation, including functioning and experienced PIU, the local governments in the three oblasts and their districts have been extremely satisfied with the results of the project and would like to continue similar improvements and scale-up the activities at additional sites. The activities under the proposed Additional Financing are within the Government's energy efficiency strategy.

#### 4. Description

The Additional Financing will scale up the original Post-Chernobyl Project by financing similar investments at new locations. The investments will be energy efficiency improvements, including window replacements and energy efficient lighting in public buildings, rehabilitation of boiler houses and in some cases conversion of boiler houses to mini combined heat-and-power plants, and also connection of individual homes to natural gas for heating purposes. The preliminary selection of sites for the additional financing has been completed jointly by the Chernobyl Department and Energy Efficiency Department.

#### 5. Financing

Source:		(\$m.)
Borrower		0
International Bank for Reconstruction and Development		30
	Total	30

#### 6. Implementation

The project will be implemented by the Energy Efficiency Department (EED) and its Project Management Unit (PMU, Belinvestenergobezhzenie) under the same practical arrangements as the original Post-Chernobyl Recovery Project. The PMU will carry out the procurement, contract supervision, and financial management of the project including auditing and other fiduciary requirements. The staffing and incremental operating costs for the PMU will be financed by the

Government, and the WB loan funds will cover the cost of additional training for PMU staff and financial audits.

## 7. Sustainability

The project supports the government's energy efficiency program by financing a small part of the large multiyear investment plan. It is aligned with the following government objectives: (i) to increase efficiency in the utilization of energy resources in the country; (ii) to reduce dependency on imported energy, and (iii) to improve security of electricity and heat supply.

Given the government's track record of commitment to these two areas, the project is sustainable. Belarus' successful record in increasing tariffs, improving cost recovery and collections along with its commitment to physical improvement of the system is a reassuring sign of commitment and sustainability. The strategy of improving physical performance of the system to avoid losses ensured that tariff increases were minimal and avoided burdening the population with payments for wasted fuel and system inefficiencies that were beyond the customers' control. This combined strategy of physical and financial improvements contributes to the sustainability of the system.

## 8. Lessons Learned from Past Operations in the Country/Sector

The Bank's involvement in the energy sector in many of the transition countries of the region for over 15 years has provided the WB team with many lessons, a few of which have been highlighted below and reflected in the design of the proposed project.

*Complexity:* Experience has shown that projects in transition countries need to be simple in design as the Government is keen to deliver immediate and visible benefits to the population and less keen on being subjected to heavy reform agendas. This has resulted in project initiatives not materializing. Accordingly, the proposed project is simple in design and is closely aligned to the Government's national energy efficiency program which targets investments in the rehabilitation and reconstruction of energy infrastructure. The project fits with the Government's objectives to provide energy efficient power and heat generation.

*Supporting Client Objectives:* Bank experience in Belarus shows that technical capacity is generally high, and that implementation can proceed satisfactorily given a supportive governance environment. Bank projects in Belarus have faced difficulties in achieving their objectives and scored low on sustainability, largely due to the inability and unwillingness to implement difficult reform conditions. As also mentioned above, this project is closely aligned to the Government's national energy efficiency program and is not designed to push for any major reform of the energy sector at this time but rather to support the government's plan for the development of the energy sector.

## 9. Safeguard Policies (including public consultation)

The original Post-Chernobyl Recovery Project has an overall positive impact on the environment through improvements in energy efficiency and therefore reduced emission into the atmosphere. The original project was assigned an environmental screening category “B”. An environmental management plan (EMP) was developed for the Original Project, a part of which was the International Atomic Energy Agency-prepared report on the radiation management plan. The EMP requirements for specific applicable actions for contractors are used as requirements in the bidding documents for goods and works.

The EMP prepared for the Post-Chernobyl Recovery Project is also relevant for the Additional Financing Project. The implementation of EMP has been reviewed periodically. The last supervision carried out in November 2009 concluded that (a) the EMP was implemented successfully; (b) there is no need for its revision and/or updating the EMP for the proposed Additional Financing; and (c) the existing human and institutional capacities to ensure EMP implementation are adequate.

#### 10. List of Factual Technical Documents

- (i) Energy Efficiency Program (The Republican Program for Energy Savings for 2006-2010), The Council of Ministers of the Republic of Belarus, February 2006 (Russian).

#### 11. Contact point

Contact: Pekka Kalevi Salminen

Title: Sr Energy Spec.

Tel: (202) 473-0816

Fax:

Email: psalminen@worldbank.org

#### 12. For more information contact:

The InfoShop

The World Bank

1818 H Street, NW

Washington, D.C. 20433

Telephone: (202) 458-4500

Fax: (202) 522-1500

Email: pic@worldbank.org

Web: <http://www.worldbank.org/infoshop>