

# Bioenergy Revolving Fund

# Bioenergy Revolving Fund project documents

- International Technical Assistance Project "Biomass Energy for Heating and Hot Water Supply in the Republic of Belarus" (registered by the Ministry of Economy of the Republic of Belarus on 29.07.2003, No. 2/03/000119);
- Instruction of the Council of Ministers of the Republic of Belarus of 18.11.2005 No. 03/313-127, 313-240;
- Order No. 74 of the Committee on Energy Efficiency at the Council of Ministers of the Republic of Belarus of 28.11.2005;
- The regulation on the Bioenergy Revolving Fund.

# Objectives of establishing the Bioenergy Revolving Fund

- to implement programmes and measures to replace fossil fuels with renewable energy sources, especially wood biofuels, and to improve energy efficiency;
- to reduce greenhouse gas emissions by improving energy efficiency and reducing the use of fossil fuels and/or replacing them with wood biofuel.

# Main tasks of the Bioenergy Revolving Fund

- to finance measures on using renewable energy sources, primarily wood fuel, as well as to increase the efficiency of its use;
- to finance measures on increasing energy efficiency and reducing greenhouse gas emissions;
- to ensure the financial viability of the Fund.

# Resources of the Revolving Fund for bioenergy

- a financial contribution from the Global Environment Facility, provided in the form of a grant to the Republic of Belarus in the amount of USD 1,540,000;
- a contribution of the Republic of Belarus transferred from the innovation fund of the Ministry of Energy of the Republic of Belarus earmarked for energy saving measures in the amount of BYN 330,000;
- monies from the interest income for the use of the resources of the Fund provided to organisations for the implementation of activities in accordance with the objectives of the Fund in foreign currency and/or in Belarusian roubles on a repayable basis;
- penalties for breaches of the terms of repayment of the funds disbursed by organisations;
- interest on deposits from the placement of the Fund's uncommitted funds;
- voluntary contributions made by citizens and legal entities;
- other financial resources from sources not prohibited by law.

# Conditions for the provision of resources from the Bioenergy Revolving Fund

- a written request for funding of activities;
- a feasibility study of the measure;
- interest rate (base rate):
  - 0.75 of the refinancing rate of the National Bank of the Republic of Belarus (Belarusian roubles)
  - 0.75 of the rate for foreign currency loans set by Priorbank JSC on the date of entering into an agreement on the provision of funds (USD);
- a balance sheet for the previous two years as well as for the most recent reporting date;
- an unconditional bank guarantee of repayment.

# Functions of the steering committee

- decides on the appropriateness of the allocation of funds;
- determines specific conditions for the disbursement of funds (amount, purpose, term of disbursement, repayment procedure, interest rate, frequency of interest payments);
- decides to amend the terms and conditions of the Fund's contract;
- decides whether or not to impose penalties and their amounts;
- decides on unilateral early termination of the contract with the Fund;
- decides on the provisioning of funds for the implementation of individual projects.

# Energy efficiency and energy-saving measures

Belinvestenergosberezheniye RUE,  
acting in the capacity of the Bioenergy Revolving Fund  
for the implementation of energy efficiency and energy saving  
measures in the period 2004-2020,  
has concluded and provided the following funds:

**17 contracts in the amount of USD 5.0 m**

**50 contracts in the amount of BYN 7.3 m**

## **As at 01.01.2021:**

uncommitted funds - BYN 2.0 m

receivables under contracts - BYN 3.4 m



# Energy efficiency and energy-saving measures

## 1. CONSTRUCTION (RECONSTRUCTION) OF MINI-CHPS FOR LOCAL FUEL TYPES, HYDROELECTRIC POWER PLANT

1	Mostovdrev JSC	Reconstruction and modernisation of a mini-CHP using wood refuse
2	Minskenergo RUE	Reconstruction and modernisation of a mini-CHP in Vileyka
3	Znamya Industrializatsyi JSC	Converting a boiler house into a mini-CHP at 11 Gagarina St.
4	Slutsk Cheese Factory JSC	Construction of a mini-CHP based on Capstone microturbines with a total capacity of 4 MW
5	Subbotniki SEC	Reconstruction of the "Zhemyslavl hydroelectric power plant"
6	Bobruisk Tractor Parts and Units Plant RUE	Establishment of a mini-CHP up to 2.5 MW
7	Dnieper-Bug Waterway	Procurement of equipment for the construction of the "Duboy" small hydro power plant in Pinsk district

# Energy efficiency and energy-saving measures

## 2. CONSTRUCTION OF BOILER HOUSES FOR LOCAL FUEL TYPES, INSTALLATION OF LOCAL FUEL TYPES BOILERS

1	Orshateploseti District Heating Company	Installation of local fuel boilers in Krapivno and Obukhovo
2	Orshateploseti District Heating Company	Installation of a 0.3 MW boiler in the boiler houses in Obukhovo and Zaslouovka Installation of a pellet boiler in the boiler house in Yurtsevo
3	Orshateploseti District Heating Company	Replacing idle high power boilers with low-power boilers in boiler houses in Smoljany and Jakovljevichi
4	Penal Colony No. 2, Bobruisk	Construction of a local process steam source for local fuel types
5	Penal Colony No. 19, Mogilev	Installation of a block-modular boiler house for local fuel types
6	Elektret Ltd	Installation of local fuel boilers with a parallel solar water heating system
7	Housing and Communal Services of the Liozna district	Purchase of a local fuel boiler
8	Teploset District Heating Company	Transfer of load from Prirodnyi to a local fuel boiler house at Illyicha Str.
9	Volat-1 Ltd	Construction of a boiler house for local fuel types

# Energy efficiency and energy-saving measures

## 3. INSTALLATION OF SOLAR COLLECTORS (SOLAR ENERGY SYSTEMS)

1	Orshateploseti District Heating Company	Installation of solar collectors for hot water supply to community facilities and housing
2	Orshateploseti District Heating Company	Modernisation of the hot water supply system through the installation of a solar energy plant in residential buildings at 8 Svyazistov St. in Obukhovo and at 1 and 2 Internatovskaya 1 and 2 St. in Zvezdnaya.
3	Elektret Ltd	Installation of local fuel boilers with a parallel solar water heating system

# Energy efficiency and energy-saving measures

## 4. MUNICIPAL PUBLIC INSTITUTION, INSTALLATION OF A GAS COMPRESSOR UNIT

1	Grodno Factory of Building Materials, JSC	Installation of a cogeneration unit
2	Minsk factory of construction materials JSC	Installation of gas reciprocation units

# Energy efficiency and energy-saving measures

## 5. INSTALLATION (REPLACEMENT) OF ENERGY EFFICIENT PUMPS INSTALLATION OF ABSORPTION REFRIGERATORS AND COOLING EQUIPMENT

1	Masty Housing and Communal Services RUE	Installation of energy efficient pumps
2	Zabudova Holding Management Company JSC	Replacement of pumping equipment, purchase of equipment for the production of pellets from wood waste
3	Ivanovskoye Housing and Communal Services	Replacement of pumping equipment and installation of an automation system for the technical processes of the Lesnoy water intake point
4	Buda-Koshelevsky kommunalnik housing company	Replacement of pumping equipment
5	Vodokanal, Baranavichi	Purchase of energy efficient pumping equipment for the second water intake station "Shchara-2"
6	Vietkauski housing company	Installation of energy efficient pumps
7	Ivanovskoye Housing and Communal Services	Replacement of district heating pumps in the boiler house
8	Checherskoye housing company	Replacement of pumping equipment for energy-saving equipment
9	Starobinskoye JSC	Implementation of energy-saving measure to replace cooling equipment and heating systems
10	Kobrinskoye Housing and Communal Services	Replacing pumping equipment with energy efficient equipment with frequency converters
11	Borisovdrev JSC	Installation of a variable frequency-regulated drive in a boiler house
12	Pinskvodokanal	Installation of antifreeze-water heat pumps in the heating system of the Pina-2 waterworks buildings in Pinsk

# Energy efficiency and energy-saving measures

## 5. INSTALLATION (REPLACEMENT) OF ENERGY EFFICIENT PUMPS INSTALLATION OF ABSORPTION REFRIGERATORS AND COOLING EQUIPMENT

13	Bate JSC	Decentralisation of compressor stations with the installation of air screw compressors
14	Znamya Industrializatsyi JSC	Installation of an absorption refrigerator
15	Klimovichi Distillery JSC	Installation of energy-saving technology at a distiller in Kostyukovichi distillery
16	Krasnopolskoye District Consumers Society	Modernisation of commercial and catering facilities with the installation of energy efficient cooling equipment
17	Mstislavskoye District Consumers Society	Modernisation of commercial facilities with the installation of energy efficient cooling equipment
18	Khotimskoye District Consumers Society	Modernisation of commercial facilities with the installation of energy efficient cooling equipment

# Energy efficiency and energy-saving measures

## 6. MODERNISATION (RECONSTRUCTION) OF LIGHTING AND ENERGY SUPPLY

1	Branch of Krichevcementnoshifer JSC	Installation of their own energy source and optimisation of the company's energy supply scheme
2	Zabudova Holding Management Company JSC	Replacement of pumping equipment, purchase of equipment for the production of pellets from wood waste
3	HOUSING AND COMMUNAL SERVICES Ivanovskoe Housing and Utilities	Organisation of an automated meter reading and control system at the Vodoprovod dispatching point
4	Slutsk Poultry Breeding Farm	Installation of LED energy-saving lighting in farm buildings
5	Starobinskoye Working Supplies Company JSC	Implementation of energy-saving measure to install energy efficient lighting
6	Mogilev Artificial Fibre Factory JSC	Modernisation of lighting
7	Minsk Engine Plant JSC	Installation of energy efficient lighting devices

# Energy efficiency and energy-saving measures

## 7. INSTALLATION OF EQUIPMENT FOR WOOD CHIPS

1	Vitebskenergo RUE	Acquisition of technological equipment for the production of fuel chips from renewable shelterbelt vegetation in the power transmission line exclusion zone
2	Vileyka Forestry	Acquisition of equipment and installation of wood fuel utilization technology at Vileyka Forestry to provide wood fuel for a mini-CHP in Vileyka



# Energy efficiency and energy-saving measures

## 8. RECONSTRUCTION OF FURNACES

1	Minsk Construction Materials Plant JSC	Modernisation of a tunnel calcinating kiln with an automated process control system
2	Mstislavskoye District Consumers Society	Installation of energy efficient equipment in a pastry shop
3	Klichevskoye District Consumers Society	Modernisation of the bakery production line at the production department of the Klichevskoye District Consumers Society
4	Cherikovskoye District Consumers Society	Replacement of an existing G4-HPF-16 baking oven with an energy efficient Poisk 360 baking oven
5	Kopylskiy Koopprom	Replacement of the FTL-2 oven with an energy-efficient one with an equipment package
6	MAZ production RUE	Installation of a gas furnace for heating billets before stamping

# Energy efficiency and energy-saving measures

## 9. REPLACEMENT OF BOILERS WITH ENERGY EFFICIENT ONES

1	<b>Alberting Paper Mill JSC</b>	<b>Construction of a modular boiler house with the capacity of 32 t/hour of steam</b>
2	<b>Nesvizh Housing and Communal Services RUE</b>	<b>Replacement of an inefficient gas KVG4,6 boiler with a more economical one in the “Grupповaya” boiler house in Nesvizh</b>
3	<b>Minsk Engine Plant JSC</b>	<b>Modernisation of a boiler house with the installation of a high efficiency boiler</b>

# Energy efficiency and energy-saving measures

## 10. MICROCLIMATE

1	<b>Smolevichi Broiler Farm</b>	<b>Decentralisation of heating and installation of an automated microclimate system</b>
2	<b>Zadneprovsky Selection Centre</b>	<b>Reconstruction of the process heating system and creation of a microclimate in pig farm buildings</b>

Thank you for your attention!

