UNDP-GEF Project
Buildings Energy Efficiency in North-West Russia
Project target – local capacity improvement for energy effective design and construction of buildings, regional knowledge level and energy administrative skills. Demonstration of sustainable results for three pilot regions of North-West Russia:

- Pskov
- Vologda
- Arkhangelsk
In partnership with Ministry of construction and utilities of Russian Federation:

Methodology development on economical analysis of EE measures application in multi-apartment buildings retrofits

Energy Performance contracts administrative model for regional retrofits of common premises in multi-apartment buildings

Launched informational-analytical system www.банкжкх.рф Best EE technologies catalogue

Practical recommendations for external investment engagement in the field of EE

Prepared and presented for local Administrations feasibility studies for public sector buildings in Pskov, Vologda and Arkhangelsk regions (including energy audits)
Developed outputs:

- Approved Order of Ministry of construction and utilities № 644 from 08 September 2015 «About establishment of approximate conditions of energy performance contracts...»
- Released a draft of new Federal law «About changes in Housing codes of Russian Federation (in the field of common energy efficiency increasing by utilizing of a properties in buildings»
- www.банкжкх.рф became a public platform of experience sharing among Russian experts and representatives of housing sector in the field of energy efficiency
Component 2. Knowledge sharing and educational programs development

7000 workbooks on “How to save energy at home” and 235 methodical materials were disseminated in schools of the North-West Russia.

Educational EE school programme implemented in 83 schools, 5 universities and other educational centers in Saint-Petersburg, Pskov, Vologda, Arkhangelsk and Novgorod regions.
Energy savings Days festive for schools organized in 4 cities – Arkhangelsk, Pskov, Vologda and Saint-Petersburg

3 international competitions on best project in the field of EE for high school students organized in 2015-2016

First graduated energy managers with masters degree in 2017

Establishment of continuing education system in the field of energy efficiency
The creation of the laboratory for energy management became a wonderful visual learning tool for students in basic educational programs as well as for students of programs in professional development and additional educational programs of the integrated learning center for energy efficiency, and also became a platform for research postgraduate students.
Interregional educational center for advanced professional trainings on buildings energy efficiency and energy management and its regional branches in Arkhangelsk, Pskov, Vologda and Saint-Petersburg. Within the 2016 almost 900 specialists were trained and received the appropriate education documents - certificates of qualification

www.rueelp.ru
Educational trainings for international specialists in the field of energy efficiency, energy saving and energy management. Since 2015 our team has already organized three equal international training courses for specialists from more than 30 countries (Jamaica, Mexico, Uzbekistan, Cape Verde, Chile, Armenia, Uganda, Fiji, Malawi, Ecuador, Dominican Republic, Argentina, Egypt, Guatemala, Kenya, Madagascar, Mongolia, Republic of the Congo, Belarus, Colombia, Kazakhstan and etc.)
Component 3. Demonstration of energy efficient solutions and energy management mechanisms

- Energy efficient design and construction for a municipal multi-apartment house. Demo sites in Pskov and Novgorod regions.
- Energy efficient capital repair of public buildings. Demo sites in Pskov and Vologda regions.
- Automated municipal energy management system development and implementation in Pskov and Vologda regions.
EE Pilots for new construction of municipal multi-apartment residential houses: Parfino city, Novgorod region

25 apartments of total area 1282 m²

Estimated energy saving

13.6 MW·h/year
125.62 MW·h/year
28.12 tons per year
EE Pilots for new construction of municipal multi-apartment residential houses: Porkhov city, Pskov region

42 apartments of total area 2083 m²

Estimated energy saving

128,71 MW*h

26 tons per year
EE retrofits for public buildings. Demo site – Kindergarten «Rainbow», Ostrov city, Pskov region

Estimated energy saving

The electricity consumption will be reduced almost by 65%.

54 tons per year.
EE retrofits for public buildings. Demo site – Kindergarten «Rainbow», Ostrov city, Pskov region

Before EE retrofit

After EE retrofit
EE retrofits for public buildings. «Vologda city health clinic №3»

Estimated energy saving

582.76 Gcal
16,182 kW*h
140.1 tons per year
EE retrofits for public buildings.
«Vologda city health clinic №3»

After EE retrofit
City energy management systems implementation
The main advantage of CENMS introduction is a potential for reduction of energy resources consumption in the municipalities, which ensures the rational and efficient use of resources, and a favorable environment in the city.

- First Russian regional energy managers in Pskov and Vologda
- Both alarm and automatic energy consumption account in budgetary sector
- Organized educational trainings for representatives, responsible for EE from municipal buildings
An automated Energy Management Information System startup in Pskov and Vologda Regions. EMIS was developed in launched under support of UNDP Croatia in 2010. Since 2016 EMIS implemented in Russia according to the agreement between the Government of Croatia and Ministry of energy of Russian Federation.

223 connected municipal buildings in Pskov and Vologda regions including 69 buildings with online energy consumption account.
For more information please visit

www.undp-eeb.ru

Thank you!

Vitaly Bekker
Project Manager
vitaly.bekker@undp.org