

6th Interregional Event

Gdańsk, Poland

30 – 31 May 2017



DOSSIER





Introduction

The Financial Instruments for Energy Renovation Policies (FINERPOL) Project aims to support new policies or to improve existing policies aimed at creating financial instruments for energy renovations, in particular instruments supported by the European Regional Development Fund and the European Commission for energy investment in buildings.

FINERPOL partners aim to develop regional Action Plans to overcome barriers to energy retrofit of public and private buildings, using regional and national Structural Funds integrated with other funding, such as European Fund for Strategic Investments (Juncker Plan), European Investment Bank tools or public-private partnerships.

FINERPOL is a partnership project of nine European organisations, with a Spanish institution Extremadura Energy Agency as a Leading partner. The project also involves other agencies and governing bodies from the Czech Republic, Great Britain, Greece, Italy, Portugal and Germany.

Among others, one of the main objectives of this project are interregional exchanges of local experiences and best practices to learn from each other. In accordance with obtaining this objective, the sixth Interregional event in Gdańsk, Poland took place.

FINERPOL partners and stakeholders were joined by partners and stakeholders from another IE project <u>REHABILITE</u>, a transnational platform to support energy renovation of buildings in the SUDOE area (Spain, France and Portugal). The speakers and other conference participants were local (i.e. Polish) representatives from Managing Authorities, Local Authorities, housing cooperatives, academia, research institutions, banks and energy providers.

Project partners

- Extremadura Energy Agency (Agenex), Spain (Lead partner)
- General Direction of Industry, Energy and Mines, Extremadura Regional Government, Spain
- Autonomous Province of Trento, Italy
- CEiiA Intelligence in Innovation, Innovation Centre, Portugal
- City of Prague, Czech Republic
- Climate Protection and Energy Agency of Baden Württemberg, Germany
- Plymouth City Council, UK
- University Centre for Energy Efficient Buildings, Czech Technical University in Prague, Czech Republic
- Western Macedonia Region, Greece

For more information about FINERPOL, visit our project webpage.



International conference - Financial Instruments for Energy Renovations: the Polish Experience

Tuesday, 30 May 2017

Venue: The Polish Baltic Philharmonic in Gdańsk

Programme

08:30-09:00	Registration
09:00-09:25	Introduction of FINERPOL and REHABILITE projects
09:25-09:50	Financial Instruments in Pomorskie: a bird's eye view – Magdalena Pronobis, Office of the Marshal of the Pomorskie Voivodeship
09:50-10:15	Urban Development Fund Pomorskie: specific description and its structure - Goetz von Thadden, European Investment Bank
10:15-10:40	Implementation of Financial Instruments: achievements, success factors and challenges – BGK's experiences – Ewelina Osuch, Bank Gospodarstwa Krajowego (BGK)
10:40-11.00	Coffee break
11:00-12:45	Panel discussion: Investment projects/best practices

- JESSICA loans: thermomodernization of residential buildings and revitalization of historical buildings Agnieszka Starczewska, Bank Gospodarstwa Krajowego (BGK)
- Thermal efficiency improvement of the hospitals in Pomorskie Region Stanisław Wasilewski, Office of the Marshal of the Pomorskie Voivodeship
- Integrated Territorial Investments mechanism in the energy efficiency projects (complex thermomodernization projects) Łukasz Dąbrowski, Metropolitan Area Gdańsk, Gdynia, Sopot
- Prosument Programme: PV construction and heat pump Adam Sitek, Housing cooperative "Żuławy" in Cedry Wielkie
- Thermal efficiency upgrade with resignation from coal-fired boiler Tomasz Wolski, mm-zarzadcy.pl
- Energy clusters and energy advisory support system Maciej Kazienko, Regional Fund for Environmental Protection and Water Management in Gdańsk (WFOŚ)

12:45-13:00 Questions & Answers

13:00-14:00 Lunch



Presentations Summary

The first block of presentations in the morning shed light on general aspects of financial instruments in the Pomeranian region. The first speaker, **Magdalena Pronobis** from the Department of Regional and Spatial Development, **Office of the Marshal of the Pomorskie Voivodeship** described the financial instruments design in last two programming periods, 2007-13 and 2014-2020. She offered an interesting insight into detailed consultations with relevant stakeholders when preparing the framework for the 2014-20 period, including key success factors, lessons learned and possible pitfalls. **Goetz von Thadden**, the Head of Financial Instruments Baltic Sea and Northern Europe from the **European Investment Bank** offered an interesting overview of JESSICA initiative implementation in Pomerania; showcasing examples of valuable experiences and lessons learned. A representative from the Polish state-owned development bank, **Bank Gospodarstwa Krajowego (BGK)**, **Ewelina Osuch** spoke about the varied institutional roles BGK plays in supporting social and economic growth of Poland; in the 2007-13 period it managed EU funds of repayable nature of more than PLN 2.6 billion. In the current period BGK have continued to implement financial instruments in 12 regions in the total amount of over PLN 4.8 billion in the role of Holding Fund Manager.

The second part of the conference was dedicated to presentation of best practices and investment projects financed by repayable instruments. Agnieszka Starczewska, Bank Gospodarstwa Krajowego (BGK) introduced projects improving supported by JESSICA loans in Gdańsk, Gdynia, Sopot and Słupsk that aimed at revitalization of historical buildings and at improvements of energy efficiency of residential buildings. How hospitals' thermal efficiency was improved in the region was explained by Stanisław Wasilewski from the Office of the Marshal of the Pomorskie Voivodeship. Experience from seven hospitals in Gdańsk, Gdynia and Wejherowo shows that comprehensive preparation together with detailed constructing and installing schedules contribute to overall successful project implementation; no substantive or formal errors had been issued, no hospital activity had been suspended and project indicators had exceeded their expected values. Łukasz Dąbrowski, Metropolitan Area Gdańsk, Gdynia, Sopot explained how Integrated Territorial Investments are a valuable tool to devolve decision-making to specific local areas. Within this framework, local authorities are more likely to be more closely involved in project selection.

Adam Sitek from a Housing association Żuławy spoke about their project in Cedry Wielkie that reduced energy demand of a residential building by installing PV source and heat pump. Another example of inspiring thermal efficiency upgrade was delivered by Tomasz Wolski from Property management office, mm-zarzadcy.pl in Kościerzyna. A 1940s residential building underwent a complete renovation, including insulation of roof and walls, window replacement, installation of new central heating and new hot water system, and as a result decreased its annual heat demand by 70%. The final speaker of the day, Maciej Kazienko the Vice-President of the Management Board of the Regional Fund for Environmental Protection and Water Management in Gdańsk (WFOŚ) presented the nationwide 'Energy Advisory support System for the public, residential and corporate sectors on energy efficiency and renewable energy sources', a non-investment, innovative and due to the national reach, unique initiative in Europe. An energy advisory team has been established to provide consultation to all communities in the Pomeranian region, building societies and housing cooperatives, individuals and companies to successfully promote energy savings on regional energy market level.



First technical visit – The Culture Garrison, Gdańsk Wrzeszcz

Tuesday, 30 May 2017



Garnizon Kultury

The Culture Garrison

Revitalization of the buildings of former barracks in Gdańsk-Wrzeszcz supported under the JESSICA initiative located at ul. Słowackiego 19 and 23





Description of the investment's positive results, and its impact on the lives of residents and on the functioning of the city district where it has been implemented

The Culture Garrison forms part of the bigger complex of the Garrison, which has been under development for a few years now in Gdańsk by the Investment Group Hossa S. A. This is a unique area on the map of the Tri-City metropolis, where past meets future and the spirited visions of modern architects correspond to Neo-Renaissance brick remains. In an open and friendly space, surrounded by the walls of nineteenth-century buildings, remnants of the Black Hussars who resided in Wrzeszcz, a new cultural centre is being created to serve the district. The ultimate goal of the Culture Garrison project is to revitalize seven historic buildings alongside ul. Słowackiego and a 2.5-ha-area park. The main intention of the Garrison designers is to create an inspiring place for various types of activities: cultural and entertainment, sports, a sector of diverse services and modern offices concentrating many innovative companies, and a creative sector, but above all, to create a friendly place in which to hold meetings and foster the integration of the local society.

The first two buildings of the Culture Garrison – the Old Manege (Stary Maneż) and Esprit Haus, and part of the park were restored in 2015 with funds obtained under the JESSICA initiative. Since then, the Culture Garrison has been full of life, with social and cultural events, thus becoming a real icon of Wrzeszcz – its cultural heart, a meeting spot, a place for integration and the organization centre of various activities undertaken by artists and residents of the district.

This type of investment in the revitalization of former barrack areas with historic properties, which would satisfy and fulfil commercial, public as well as pro-social aims, may not be so attractive to private investors, and particularly to banks offering construction and investment loans. The JESSICA initiative has bridged that gap by offering the financial means for starting the investment in a form of preferential loan. The value of the loan under the JESSICA initiative amounted to 19.2 million zloty.

Today, the Culture Garrison attracts artist communities, offering space for their creative actions. The Garrison organises not only artistic and entertainment events, but also unconventional co-working and educational projects. The developed park, with its historic old-growth forest and open water basin and adventure playground has become a favourite place among the district's residents for recreation and playing with children.

The Culture Garrison is also a workplace for more than 100 people, both employees and self-employed.

Old Manege (Stary Maneż), Gdańsk-Garnizon, ul. J. Słowackiego 23

The former manege, after its modernisation and adaptation to its new functions, has acquired a new image and as the "Old Manege" has become a special place valued by the community and artists, due to its extraordinary atmosphere and acoustics, its unique place on the cultural map of the Tri-City, and because it accommodates as many as 1,500 guests. This professional concert venue attracts many interesting artists from Poland and abroad. Well-known stars like Fish, Marianne Faithfull, Rykarda Parasol or Ron Carter have performed on its stage. The building also houses the Vrest craft brewery, producing beer according to its own recipes, which you can taste in the cafe located in the Old Manege.





Esprit Haus, Gdańsk-Garnizon, ul. J. Słowackiego 19

In the "Esprit Haus" building, located in the park, which was formerly the Hussars' living quarters, the following places can be found: Sztuka Wyboru; NA miejscu, AeroLab, Kreatywna Cafe, KotyNaPłoty, Wrze Pracownia, Szpila Shop and Noce i Dnie. Amongst initiatives undertaken at the Garrison there are: galleries, exhibitions, conferences, art, fashion and design shows, open design workshops, craftwork workshops, meetings with authors, and other artistic events. In the same building, students from various universities located around the Tri-City area live in the attic, and they are all very much involved in developing projects outside their universities, which they can implement in Wrzeszcz within the framework of the "Campus for Creativity" initiative. Just recently the co-working project Clipster, supporting young entrepreneurs by the realisation of the idea of a common living and working place with the assistance of mentors has been initiated by the residents of Esprit Haus.





The project involved non-standard ideas:

The buildings were erected in between 1900 - 1902 as living quarters for the second regiment of Hussars. After World War II the buildings formed part of the Polish Army barracks and served residential and warehouse purposes. In 1999 the Polish Army gave up the ownership of these barracks. On 29 December 2004 the buildings were entered into the register of historical monuments protected by law.



Both buildings underwent a complete revitalization. All the secondary elements added after the war were removed, the brick walls were restored, wooden window frames were replaced restoring their original form, and the roofing was replaced.

In the manege building, in order to give the place more light and guarantee that spectators sitting inside can appreciate the views, additional windows were designed at the lower level, which were partly covered with a rust-coloured net from the outside. This adapts the building to its new functions, ensuring light, and at the same time, designed windows are not visible from the outside on the elevation of the building. To effectively adapt the height of the interior, an entresol was created around part of the hall. In accordance with the binding provisions of law, it was not possible to use the historic, steel and riveted roofing to support the equipment necessary for an auditorium of this type, such as spotlights, loudspeakers, lamps, ventilation system, etc. To preserve the attractive and subtle features of the original roofing and, at the same time, to adapt the building to fulfil the functions as planned by the investors, additional steel beams were installed on the building walls, and these beams ensure that the roofing is safe and supports all the suspended elements.



The principal and largest part of the building is used for exhibition and concert venue purposes, with a stage which may be arranged in many ways depending on the time of day or type of planned cultural event. The building was designed with many facilities to fully equip it to serve its function as a musical hall.

Special modern additions were made for each building. In Stary Maneż both parts were connected using a glass "bridge", placed a bit lower, which constitutes a unique "doorway" between contemporary and historical elements, displaying also a decorative ledge under the roof. This new part restores the shape of the existing building, but maintains its modern form. It also reflects the architecture of the manege buildings which were located there, but were not preserved to the present day. All the technical devices necessary for ventilation and air conditioning were installed in the attic of the new part of the building, thus the historical roofing and elevation of the building were left untouched.

The second building, Esprit Haus, was extended, creating additional exhibition space and adding a two-story show pavilion connected to a gallery in the existing part of the building with a glass staircase.

The rust-coloured sheeting, with which the new parts of the building are covered, reflects the atmosphere and colouring used in the barracks, adding a modern character to the building.

The buildings also underwent technical modernization to adapt them according to the binding provisions of law. In order to minimize the number of installations visible in Stary Maneż, the existing brick chimney was used. In the historical part of the building, a multi-level system of heat management was planned and installed. Because the hall can be used for various purposes, from cosy meetings to big music shows, it is possible to heat the entire building, gradually warming up the temperature of the entire space using underfloor heating, and partially warming up using the heaters installed, and to transfer heat to the outside or to independently cool down both the auditorium as well as the stage. Thanks to this infrastructure, it is possible to save energy depending on the conditions outside or inside the building. A system of heat recycling, and partial rainwater recycling to water the green areas was also installed.

Data and indicators:

- total area: 3700 m²
- number of visitors: approx. 25 thousand per month
- number of open events organized: approx. 30 per month
- *organized events*: more than 250 events organized in the first three quarters since opening; 1,500 events during one year
- number of working places created: approx. 100 people employed



Awards received:

- 1. **The Best Residential Project 2012-2015** for Stary Maneż and Esprit Haus in the category of "The Best Revitalization". A competition organized by the Polish Union of House Developers.
- The Gdańsk President's Award for the Best Architectural Realization in Gdańsk 2011-2015 for the author of the project: architect Marcin Woyciechowski, and for the Investor and General Contractor: Investment Group Hossa SA.
- 3. **TOP Produkt Pomorskie** (TOP Product Pomerania) for Stary Maneż, in the category "Entertainment and Culture", awarded by the Competition Jury of Dziennik Bałtycki.
- 4. Construction of the Year 2015 III level award in the category "Revitalized Objects" for the buildings located at Słowackiego 19 and 23 (development and reconstruction related to the change in the methods of use of historical buildings no. 6 and 9 of the Culture Garrison investment within the area of former barracks, in Gdańsk, at ul. Słowackiego 19 and 23.). Competition organized by the Polish Union of Engineers and Construction Technicians, the Ministry of Infrastructure and Construction, and the Central Office of Construction Supervision.





Second technical visit – The Voivodship Fund for Environmental Protection and Water Management in Gdańsk

Wednesday, 31 May 2017



The Voivodship Fund for Environmental Protection and Water Management in Gdańsk Wojewódzki Fundusz Ochrony Środowiska i Gospodarki Wodnej w Gdańsku, WFOŚ located at Rybaki Górne 8



Description of the investment's positive results, and its impact on the building performance, its users and visitors and the environment

The former headquarters of WFOŚ was situated in a 1980s building at ul. Straganiarska in Gdańsk city centre. It lacked thermal insulation and due to its location in the historic part of the city the possibilities of thermomodernisation were limited. A large part of the building was shaded; as a result artificial lighting had to be used during the day. Employees and visitors struggled to get access to the office; there were traffic zones



restrictions in the neighbourhood and every year the area had been paralysed for five weeks by an annual regional market. Existence of staircases and narrow entry points made access for people with limited mobility impossible.

Within the transposition of the EPBD in Poland, an ordinance on amendments to the Ordinance of the Ministry of Infrastructure dating from the 12 April 2002, on the technical criteria to be met by the buildings and their location as of 1 January 2017 houses should annually consume max 95 KWh/m² and public buildings, other than health service buildings, maximum 60 KWh/m². The new building of the Voivodship Fund for Environmental Protection and Water Management in Gdańsk was designed to lead by example, a low energy public building using the most modern technologies, the only utility building of its kind in Pomerania.

Established at ul. Rybaki Górne 8 the construction had begun in the spring of 2015, lasted 10 months and the officials moved into the new office in March 2016. The cost of the entire investment together with the technical documentation amounted to EUR 1.6 million (PLN 6.8 million). While constructing the office building the investor also renovated the adjacent part of Radunia Canal.



The project involved non-standard ideas:

The shape of the building and its every elevation were designed to use reasonable amount of energy and to fit in Old Town architecture. The south wall and roof of the office building are lined with photovoltaic panels whose total power is about 40 kW. The energy yield is expected to be about 10-11% higher than the building demand in order to balance uneven yield due to weather. That is why the building is additionally connected to the power grid. Piotr Kumpiecki, WFOŚ energy specialist, explained they have two-way settlement with the supplier. When they produce more than they are able to consume, their green energy goes to the grid. In winter months, when the angle of sun rays is low and days are short, they take electricity from the grid.



Parameters of thermal insulation of walls, roof and floors greatly exceed current standards. The building was designed not to lose heat in winter and not to heat up in summer. Glass south elevation maximizes the use of solar energy. South facade consists of the inner part constituting the building insulation and facade cascade. This allows air circulation between the two parts, which works as an insulation from both frost and excessive sunlight. Windows with parameters of Uw = $0.76 \text{ W/m}^2\text{K}$ are installed in a thermal insulation layer, not in a wall, which reduces possible heat losses through thermal bridges. Thermal transmission through the building envelope is thus significantly reduced. As a result of the technologies used approximately 62 tons of carbon dioxide will not be released into the atmosphere each year.



In the south-facing offices additional air conditioning is installed, furthermore, each room has individual controls for heating and air-conditioning. Building Management System (BMS) controls and monitors the building mechanical and electrical equipment such as ventilations, lighting and power systems. This in turn contributes to a significant reduction in operating costs.

Another green solution is led lighting. The building has also installed a prototype gas-fired cogenerator plant powered by gas from the urban network. It produces electricity and heat at the same time. "It is not a commonly used device and WFOŚ is considering using it for educational purposes," says Piotr Kumpiecki.





The building is adapted to the needs of disabled people. Ground floor is a place for conferences, workshops, trainings that, if required, can be divided into several small rooms. The two upper floors are occupied by WFOŚ employees, a total of 65 people. They can all benefit from facilities for commuters: parking places for cyclists, changing rooms and shower facilities. The plans also include a charging station for electric cars.

Flowers, shrubs and trees are also essential part of the building and its surroundings. To water the greenery rainwater from a water retention tank built on the premises is used. The green roof is covered by leaf succulents commonly known as stonecrops. Bug hotels and nesting boxes can be found nearby to attract more wildlife.

Data and indicators:

- working on project 2 years
- realization in 10 months
- utility area -almost 1400 m²
- 65 workplaces
- cost of investment €1.6 million (6,8 million PLN)
- total power of renewable energy source installation –39,76 kW



The Regional Fund for Environmental Protection and Water Management in Gdańsk is a partner in the 'Energy Advisory Support System for the public, residential and corporate sectors on energy efficiency and renewable energy sources' project. The Fund is responsible for the project implementation in the province of Pomerania. The main objective is to support projects contributing to the implementation of the climate energy package. The task of energy advisers is to increase awareness of developments within the low-carbon economy, to support communities in the preparation and implementation of the Low-Carbon Economy Plans and in energy efficiency and renewable energy sources investments. As a result of the measures already taken by the WFOŚ in Gdańsk, most Pomeranian municipalities acceded to the Covenant of Mayors; one of its fundamental objectives is commitment to reduce energy consumption.



Awards received:

- Polish Green Building Council (PLGBC) Green Building Award 2016 Best ecological building of the public sector, <u>https://wfos.gdansk.pl/nowa-siedziba-funduszu-nagrodzona</u>
- 2. EMAS Awards 2017 Contributing to making the European economy more circular, http://ec.europa.eu/environment/emas/emas_for_you/emas_awards/emas_awards_2017_en.htm
- 3. Brick Awards 2017 Public utility building, http://www.brickaward.pl/wyniki-konkursu.html