



CENTRUM  
PROJEKTÓW  
POLSKA  
CYFROWA

 **SWISS**  
CONTRIBUTION

# SWISS – POLISH COOPERATION PROGRAMME



**Rehabilitation and modernisation of basic infrastructure  
and improvement of the environment**

**Publisher:**

Centre for Projects Digital Poland  
Department for European Programmes  
ul. Spokojna 13A  
01-044 Warszawa  
[www.cppc.gov.pl](http://www.cppc.gov.pl)

**Texts:**

Centre for Projects Digital Poland

**Photography:**

Resources of Centre for Projects Digital Poland  
and Executing Agencies/Project Partners

**ISBN: 978-83-63179-55-7**

Free copy

Warsaw, May 2017

Publication is supported by a grant from Switzerland through the Swiss Contribution to the enlarged European Union.



CENTRUM  
PROJEKTÓW  
POLSKA  
CYFROWA



**SWISS**  
CONTRIBUTION

# SWISS – POLISH COOPERATION PROGRAMME



# BACKGROUND

**Swiss – Polish Cooperation Programme is a part of the Swiss Contribution - a non-returnable financial aid programme set by Switzerland in 2007 as an expression of solidarity of Switzerland with 13 countries, which joined the European Union after 2004. The Switzerland commitment lays ground for solid economic and political relations between Switzerland and the EU member states.**

Swiss Contribution covered the following countries:

- CHF 1 billion granted to 10 countries, which joined the European Union on 1 May 2004: Cyprus, Czech Republic, Estonia, Lithuania, Latvia, Malta, Poland, Slovakia, Slovenia and Hungary;
- CHF 257 million granted to 2 countries which joined the European Union on 1 January 2007 – Romania and Bulgaria;
- CHF 45 million contributed to Croatia, which joined the European Union on 1 July 2013.

Out of CHF 1,302 million of the Swiss support, **37,56% (CHF 489,02 million) is the financial aid for Poland to be disbursed in the period 2007-2017.**

## PROGRAMME OBJECTIVES IN POLAND

The objective of the Swiss financial aid in Poland is to reduce economic and social disparities between the Republic of Poland and more advanced countries of the enlarged European Union. On the national level, its goal is to reduce disparities between the dynamic urban centres and the structurally weaker peripheral regions.

The programme supports the following priorities, focus areas and specific objectives:

**Priority 1** – Security, stability and support for reforms - allocation 79.699.602 CHF

Focus area 1.1 Regional development initiatives in peripheral or disadvantaged regions

Focus area 1.2 Measures to secure borders

**Priority 2** – Environment and infrastructure - allocation 198.726.913 CHF

Focus area 2.1	Rehabilitation and modernisation of basic infrastructure and improvement of the environment
Objective 1	<i>To enhance municipal infrastructure services in order to increase living standards and promote economic development</i>
Objective 2	<i>To increase energy efficiency and to reduce emissions, in particular greenhouse gases and hazardous substances</i>
Objective 3	<i>To improve the management, the safety, the efficiency and the reliability of communal/regional public transportation systems</i>
Focus area 2.2	Biodiversity and nature protection and cross-border environmental initiatives

**Priority 3** – Private sector - allocation 67.866.117 CHF

Focus area 3.1	Improving the business environment and the access to financing for SMEs
Focus area 3.2	Development of the private sector and promotion of exports of SMEs

**Priority 4** – Human and social development - allocation 81.179.938 CHF

Focus area 4.1	Health
Objective 1	<i>To promote healthy lifestyles and to prevent communicable diseases on national level and in geographical focus areas</i>
Objective 2	<i>To strengthen primary health care and social services in the peripheral and disadvantageous region of the geographic focus areas in favouring a multi-sectorial programmatic approach</i>
Focus area 4.2	Research and development (including the Polish-Swiss Research Programme and the Scholarship Fund)

**Priority 5** – Special allocations – allocation 61.547.430 CHF

Focus area 5.1	Block grant for NGOs and Polish-Swiss Regional Partner Projects
Focus area 5.2	Projects proposed by the Swiss party
Focus area 5.3	Project Preparation Facility
Focus area 5.4	Swiss Programme Management
Focus area 5.5	Polish Technical Assistance



REHABILITATION AND MODERNISATION  
OF BASIC INFRASTRUCTURE AND  
IMPROVEMENT OF THE ENVIRONMENT



# SWITZERLAND SUPPORTS IMPROVEMENT OF THE ENVIRONMENT

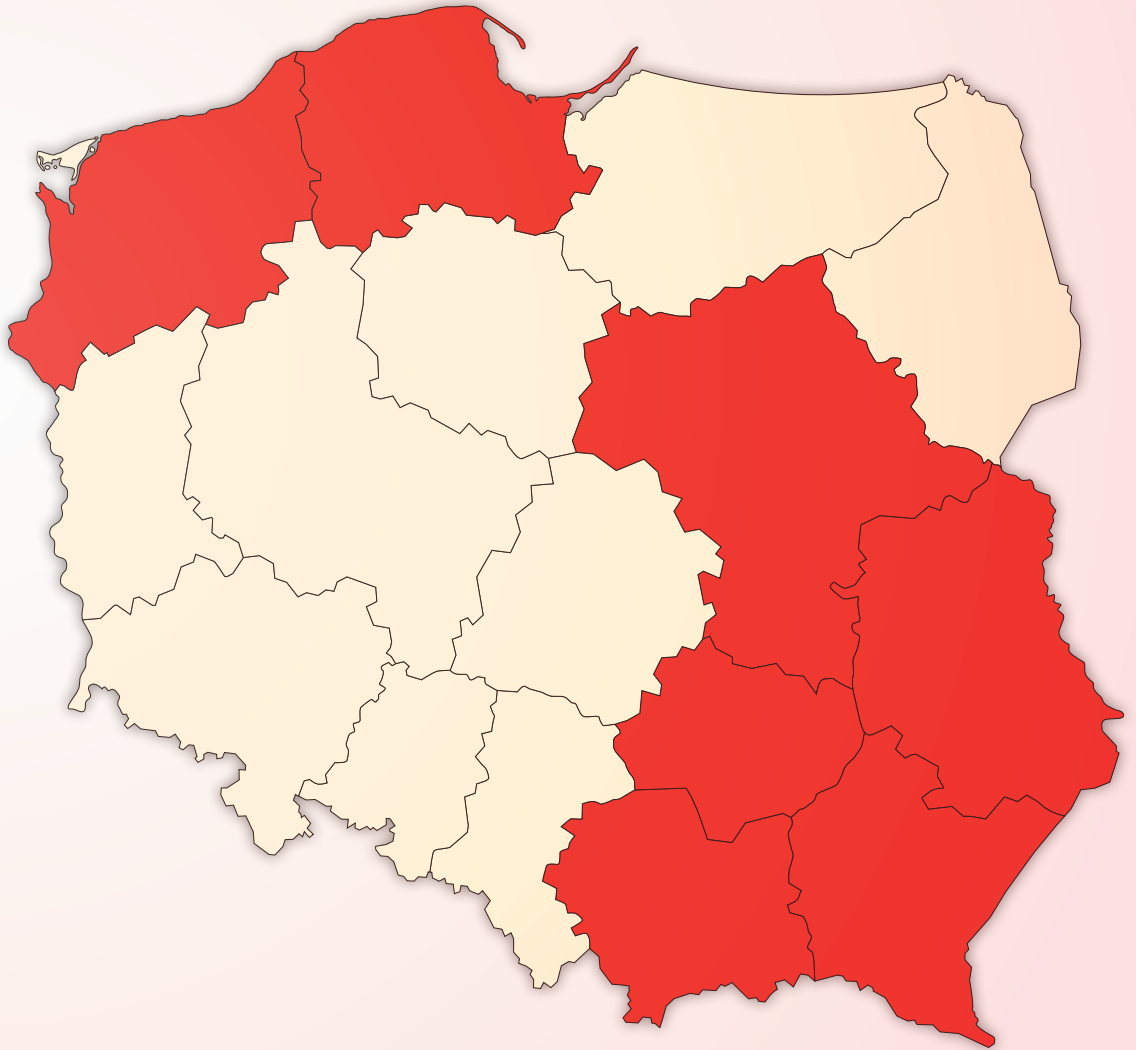
Rehabilitation and modernisation of basic infrastructure and improvement of the environment is the area in which the most projects have been implemented. The theme of improving energy efficiency, promoting renewable energy and improving the environment, so crucial for economic development and the quality of people's life, is also very important for Switzerland, which has decided to spend most money on this purpose - almost 39% of the allocation granted to Poland.

The projects implemented in this area were selected in the competition mode and the activities carried out within them were related to:

- enhancement of urban infrastructure services to up-grading living standards and promote economic development - these projects have supported the creation of a hazardous waste reception networks, the creation, repair and / or modernization of waste thermal neutralization or physicochemical installations and the dismantling of asbestos-containing products and depositing them on landfills created for this purpose or the separation of places adapted to the storage of asbestos in already existing landfills,
- increasing of energy efficiency and emission reductions, in particular greenhouse gases and hazardous substances, within these project programme supported measures to improve energy efficiency through the introduction of renewable energy systems, renewal and repair and / or modernization of municipal heating networks in this parts of cities with exceeded levels of air pollution and actions related to renovation and / or modernization of central heating sources and heating systems in public hospitals and health care centres providing hospitalization as well as in state schools,
- improvement of the management, safety, efficiency and reliability of local / regional public transport systems - these projects supported the purchase of rolling stock as well as the construction, repair and / or modernization of railway infrastructure, in particular those related to the provision of efficient railway connections of city centers with airports.

In total, 16 projects in the Lubelskie, Malopolskie, Mazowieckie, Podkarpackie, Pomorskie, Swietokrzyskie and Zachodniopomorskie voivodships were implemented within the focus area.

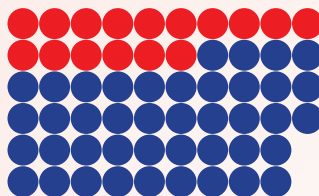




# SWISS – POLISH COOPERATION PROGRAMME



16 projects implemented within the area



16 out of 58 projects implemented in Poland

projects implementation period



SPCP contribution



**188 908 779 CHF**

allocated to Poland



**● 38,63%**

# REHABILITATION AND MODERNISATION OF BASIC INFRASTRUCTURE AND IMPROVEMENT OF THE ENVIRONMENT

## projects by budget size

PROJECT	SPCP CONTRIBUTION	OWN RESOURCES
KIK/44	4 837 389,00 CHF	5 469 047,00 CHF
KIK/23	9 041 460,00 CHF	2 735 939,00 CHF
KIK/50	9 094 519,00 CHF	1 604 915,00 CHF
KIK/63	9 205 323,00 CHF	1 624 469,00 CHF
KIK/28	9 634 464,00 CHF	1 700 199,00 CHF
KIK/73	9 892 465,00 CHF	1 745 729,00 CHF
KIK/71	10 590 988,00 CHF	1 868 998,00 CHF
KIK/61	10 628 746,00 CHF	21 301 192,00 CHF
KIK/48	10 747 331,00 CHF	1 896 588,00 CHF
KIK/51	11 206 502,00 CHF	1 977 618,00 CHF
KIK/42	11 944 510,00 CHF	4 390 367,00 CHF
KIK/39	13 215 785,00 CHF	2 332 197,00 CHF
KIK/41	14 369 355,00 CHF	7 905 675,00 CHF
KIK/46	16 845 958,00 CHF	5 714 624,00 CHF
KIK/66	18 300 143,00 CHF	6 092 498,00 CHF
KIK/22	19 353 841,00 CHF	10 746 556,00 CHF
Total	188 908 779,00 CHF	79 106 611,00 CHF



# PROJECTS





# Development of Warsaw Commuter Railway

The sustainable development of urban agglomerations requires an effective and efficient transport system that will not only ensure efficient communication of residents between their working and living places, but also reduce of the negative impact of agglomeration on the environment. In practice it means the necessity to ensure reliable and efficient urban transport, which will guarantee the traveller comfortable and safe travel conditions and will contribute to the transfer of passenger flows from car transport to rail transport that is more environmentally friendly.

This challenge was taken by Warsaw Commuter Railway Ltd. (WKD), which under the project „*Development of the public transport in Warsaw metropolitan area through improvement of the WKD efficiency, reliability and safety*”, made a number of investments in equipment and infrastructure, that have significantly improved the quality of transport services for approximately 25 000 inhabitants of 6 municipalities located along WKD lines, who use this form of transport every day.

Thanks to co-financing from the Swiss-Polish Cooperation Programme, 6 new electric traction units have been purchased, 25 km of the rail tracks have been repaired and modernized, automated traffic signaling and automatic warning system have been developed at 16 railway crossings, as well as a modern Passenger Information and Monitoring System has been introduced.

The new traction units were manufactured by Polish manufacturing company NEWAG S.A. as prototype vehicles, individually tailored for the needs of the Warsaw Commuter Railway. The technical parameters used there differ from the rolling stock commonly used on other railway routes. Thanks to the purchased traction units it was possible to withdraw all old units from the WKD line.

Units are adapted for the transport of people with disabilities as well as bicycles. For improving passenger safety, surveillance cameras have been installed in new vehicles, which together with the cameras and electronic information boards installed on the platforms of the station are a modern information system improving the quality of passenger service.

” The completed project has a positive impact on the efficiency and reliability of the Warsaw Commuter Railway. It allowed shaping the image of public transport as a modern form of travel. Comprehensive actions have increased the company’s competitiveness, helping to provide passengers with the highest level of travelling. ”

Krzysztof Kulesza, project coordinator,  
Warsaw Commuter Railway Ltd.

By affecting a number of issues related to the functioning of local communities, project contributes to the development of settlement as well as to demographic and economic development of the towns along the WKD line and allows shaping the image of public transport as a modern form of transport within the framework of its sustainable development policy, by increasing the share of public transport in the total volume of transport.

The implementation of the project has led to launching of further projects in the field of modernization and extension of the railway infrastructure, based on the solutions developed and implemented within the project. These actions represent next stage of the complex modernization of the WKD communication system, including the improvement of social, economic and spatial cohesion of the region development and improvement of technical infrastructure standards and integration with other means of public transport as defined in the Mazovian Development Strategy.

6

modern electric trains 39WE type

25km

of completely repaired railway tracks

101

passenger dynamic information boards and 86 videomonitoring cameras within the new passenger information system and monitoring system



Project: **KIK/22**

Executing Agency:

**Warsaw Commuter Railway Ltd.**

SPCP contribution: **19 353 841 CHF**

Implementation period: **2012.06 - 2017.05**





# Investments on the Pomeranian railway

As a body responsible for shaping sustainable public transport policy in the Pomorskie Voivodeship, the self-government of the Pomorskie Voivodeship has been systematically working for improving the level of spatial-functional and transport cohesion in particular areas of the voivodeship, upgrading the region's internal and external accessibility as well as enhancing the standard and safety of passenger services provided in the province. These actions are also aimed at increase of public transport share in total transport, which will positively affect the condition of the environment by reducing pollution emitted by individual car transport.

This strategic goal was implemented from the funds provided by the Swiss-Polish Cooperation Programme through the project „*Procurement of four diesel units to operate the railway section Malbork - Grudziądz, in order to improve the safety, management, efficiency and reliability of the local transport system*”. Within the project not only 4 modern and comfortable trains (combustion trains) for the Malbork - Grudziądz railway line have been

purchased, one electric train operating on the route Gdynia Chylonia - Elbląg has been modernized, but also a viaduct within the provincial road no. 529 in Brachlewo has been renovated.

The purchased trains are air-conditioned, fully adapted for people with disabilities, but also equipped with external and internal monitoring, information and passenger counting systems as well as



“ I am convinced that the comfort of traveling by new trains will satisfy the most demanding. The purchase of four train units is a continuation of positive changes in the Pomeranian railway. ”

Mieczysław Struk,  
marshal of the Pomorskie Voivodeship

vehicle location system, and wireless internet access.

An additional measure to improve the safety of passengers traveling across the region was the purchase and installation of 51 defibrillators to provide emergency assistance to people with heart disease. These devices are easy to use thanks to the built-in instructor-to-donor function. The project also produced an instructional video about first aid with defibrillators, which is displayed on trains owned by the self-government of the Pomorskie Voivodeship. Moreover, 60 train managers employed by the railway undertakings have been trained.

Reducing travel time and enhancing travel comfort have contributed to increased accessibility for residents of Malbork, Sztum and Kwidzyn counties, and has contributed to the revival of tourist traffic in the region.

4

new diesel trains and 1 modernized electric train

51

defibrillators purchased and installed on trains

1

modernized railway viaduct



Project: **KIK/23**

Executing Agency:

**Pomorskie Voivodeship**

SPCP contribution: **9 041 460 CHF**

Implementation period: **2012.05 - 2017.06**



# Interchange in Legionowo

Ensuring the sustainable development of large urban agglomerations such as Warsaw, requires not only to the development of efficient and reliable urban transport, but also the creation of convenient transport junctions to ensure the smooth movement of passengers between various means of suburban and urban transport and their linkage to long-distance transport.

The construction of such a Transport Centre facilitating various forms of local and regional communication by improving the quality and functionality of transport infrastructure was undertaken by the Legionowo Municipality, near Warsaw.

As part of the project, the railway station was built along with the accompanying infrastructure including bus platforms and car parks. There is also a new road link between Polna and Piaskowa streets-named after the donor as the Swiss street. The existing underground passage under the railway line no. 9 (E65) Warsaw-Gdynia was expanded and two multi-storey car parks operating in the „Park and Go” system were built, as well as a storage space for bicycles.

The building of the station includes passenger service areas such as waiting rooms, ticket offices, toilets, other service areas, social and technical facilities and the Mediateka. The newly created rooms of the Mediateka have been transformed into a municipal library - there are special events for children, adolescents and adults, and public space is used for the organization of various meetings.

Thanks to the project’s realization, the quality and functionality of public transport has been improved through the integration of systems and improved matching of communication services to the needs of passengers in this part of the Warsaw agglomeration.

” The implementation of the project has significantly altered the perception of public transport by residents, making it a very attractive communication offer as an alternative to individual transport. The creation of the Multimedia Passenger Service Area further enriched the project and made the station a multifunctional space for the development of education and culture. ”

Robert Feruś, project coordinator,  
Legionowo Municipality

At the same time, the number of public transport users has increased as an alternative to individual traffic in agglomeration and forms of environmentally friendly transport.

The city of Legionowo has increased its attractiveness as a centre creating better conditions for the socio-economic development of the region.

The broad spectrum of activities implemented within the project has measurable effects on the environment. Increasing the share of public transport in relation to individual transport has a real impact on the reduction of harmful emissions to the environment, and consequently positively affects the condition of the environment in the Warsaw metropolitan area.

**over 30 000 m<sup>2</sup>**

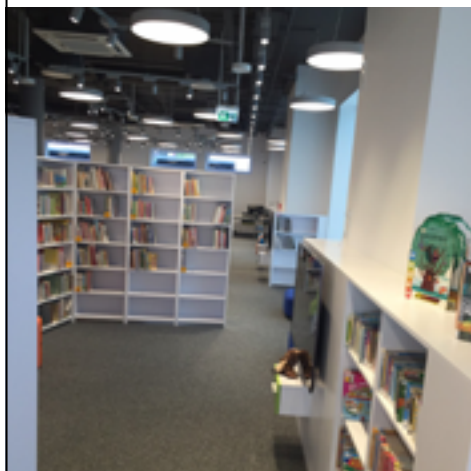
of usable area of the new railway station

**1275**

new parking spaces on two multi-storey car parks operating in the „Park and go” system

**1,8 km**

of new access roads to the railway station and multi-storey car parks



Project: **KIK/28**

Executing Agency:

**Legionowo Municipality**

SPCP contribution: **9 634 464 CHF**

Implementation period: **2012.06 - 2017.06**



## Removing asbestos on a large scale – the Lublin model

Asbestos as a mineral widely used in Poland since the 1960s, has found its widespread use in the construction (eternite, karo tiles) and car industries (brake pads, clutch discs). During the period of reconstruction and rapid development of the country, materials containing asbestos appeared to be modern and innovative building materials - robust, non-flammable, perfectly insulating. However, after many years of uncritical use of asbestos, further research into this material began to show that despite all of its advantages, it is hazardous to man and causes a number of respiratory diseases, including cancer.

The Lubelskie Voivodeship was one of the largest „consumers” of asbestos products in Poland. According to current statistics, there are over 900 000 tons of various materials containing this harmful mineral and only the Mazowieckie Voivodeship has even higher ratios in this infamous statistics.

In response to the growing demand for controlled disposal, Lubelskie Voivodeship authorities have started to implement the project „*Pilot asbestos waste management*

*system reinforces with working quantity monitoring and control system of the waste removal and neutralisation in the Lubelskie Voivodeship”.*

Thanks to the wide-ranging information and promotion campaign directed both to local authorities, as well as directly to the inhabitants, the idea of the project managed to convince 203 out of 237 self-government units from the entire Lubelskie region.

” The implementation of this project has contributed to the increase of the of ecologically cleaner area, development of the equipped end extended ecotourism base, which will in consequence make it possible to increase the attractiveness of the Lubelskie voivodeship as a place of rest for tourists from Poland and from abroad. ”

Grzegorz Kapusta,  
deputy marshal of Lubelskie Voivodeship

Thanks to the well - organized structure of the project, based on the Bureau Project Office seated in the Marshal's Office and the office branches established for the project, which were necessary for the extensive area where the project was implemented, it was finally possible to remove almost 80 000 tons of asbestos from more than 30 000 households.

At the same time, more than 700 families with a particularly difficult financial situation, besides disassembling and disposing of asbestos coverings, had also the new roofing financed. This prosocial action was particularly important due to the fact that in this group of people the main reason for not getting rid of asbestos was the financial barrier resulting from the lack of funds for the new roof.

This project was unquestionably successful and it was possible to significantly reduce the amount of asbestos materials remaining in the Lubelskie Voivodeship. The scale of the project's success is also proved by the fact that the local government has decided to provide further funding to continue the asbestos removal program by 2019, based on an existing, well-functioning operating model.

**78 913 tons**

of dismantled and neutralised asbestos

**31 765**

households with asbestos removed

**203**

local self-government units participating in the project




Project: **KIK/39**

Executing Agency:  
**Lubelskie Voivodeship**

SPCP contribution: **13 215 785 CHF**

Implementation period: **2012.01 - 2017.06**





# Renewable energy in the area of Niepolomice

Wishing to contribute to counteract global climate change, to improve air quality as well as to preserve and protect the natural ecosystems of Malopolska Region, in 2009 Niepolomice joined the Covenant of Mayors on Climate and Energy - an ambitious initiative under which Niepolomice undertook to reduce by 2020 energy consumption by 20%, CO<sup>2</sup> emission by 20% and to increase production of energy from renewable sources by 20%.

The excellent opportunity to implement such ambitious assumptions was offered by the Swiss-Polish Cooperation Programme and the implementation of the project „Installation of renewable energy systems in the following Communes: Niepolomice, Wieliczka, Skawina and Miechów on the public utility buildings and private houses”. The Niepolomice municipality has started the project with five neighbouring municipalities of: Wieliczka, Zabierzow, Skawina, Miechow and Myslenice, which also wanted to implement environmentally-friendly solutions to improve energy efficiency and reduce greenhouse gas emissions. They all were aiming to improve the living conditions and health of the people in the region.

The results of the project exceeded expectations. More than 4 000 private houses have been equipped with high-performance solar collectors that produce energy to heat domestic water. On public buildings, there are 32 solar installations for domestic hot water, 20 photovoltaic installations to produce electricity for these buildings and 9 heat pumps. In order to improve the energy efficiency of public utility buildings, over 40 of them have been thermo - modernized by insulation, replacement of window and door joinery, replacement of heating systems and replacement lighting with more economical LED type.

” The implementation of the project will enable us to meet our commitments made when joining the Covenant of Mayors of Europe, good practices in the field of RES and energy efficiency of public utility buildings. ”

Stanisław Nowacki, project coordinator,  
Niepolomice Town and Commune

Also, due to the intensive information campaign, residents' awareness of renewable energy sources and their use in everyday life has increased considerably. Satisfied solar system users are the best live advertising of technology, which results in growing number of individuals interested in solar collectors and photovoltaic installations. Positive experiences resulting from the project also result in the interest in the subject of renewable energy from other self-governments of the Malopolskie Voivodeship, and the municipalities implementing Swiss project are planning further actions to increase the share of „green” energy in total energy used and improve the efficiency of its consumption.

The effectiveness of the project activities was acknowledged by the PreQurs certificate granted to 13 buildings. The certificate is issued by the Institute for Building Emissions Certification, proving the degree and fold of reduction of building-to-air pollutant emissions from representative buildings.

**28 718 m<sup>2</sup>**

of the area of 4 058 solar installations mounted on private buildings

**5 100 m<sup>2</sup>**

of the total area of 20 photovoltaic installations mounted on public buildings

**40**

public buildings subject to thermal modernization

**Awards**

ECO - City 2016 on energy efficiency of buildings, awarded by the Embassy of France in Polandv



Project: **KIK/41**

Executing Agency:

**Niepolomice Town and Commune**

SPCP contribution: **14 369 355 CHF**

Implementation period: **2012.01 - 2017.06**



# Modern system of waste management

The growing volume of municipal waste constitutes a peculiar sign of economic growth. With the increase in society's wealth and the improvement of living conditions, the consumption also grows followed by increase of municipal waste that needs to be handled or recycled by every country. Every year the problem of municipal waste, its recycling and storage is becoming more and more a priority of local governments.

This difficult topic was chosen by the Association of Communes of Lubartów Subregion, operating in the Lubelskie Voivodeship, which, thanks to financial support from Switzerland, proceeded to implement a comprehensive project entitled „*Construction of the modern waste management system, reclamation of inactive waste dumps and asbestos elimination in the territory of the communes of Association of Communes Lubartów Subregion*”.

The most important and the biggest endeavour implemented within the project is the Waste Management Facility in Wolka Rokicka - a modern installation applying innovative, human and environmentally friendly waste processing technologies, which has obtained the status of Regional

Installation of Municipal Waste Processing for the central waste management region of Lublin Voivodeship.

The facility consist of waste sorting line, an organic waste fermentation installation, a large waste disposal point and a collection point for hazardous waste received from residents. One of the most important elements of the facility is the installation of dry fermentation in which certain waste is subject to fermentation in sealed chambers. Biogas produced in this process is used for the production of electricity and heat.

The project also financed the creation of Selective Collection Points of the Municipal Waste (PSZOK), as well as reclamation of four inactive landfills. Each time recultivation consisted of protection the



” The project is a milestone in the development of the waste management system in the Lubartow region. The project is an excellent example of a comprehensive solution to environmental protection problems.”

Krzysztof Grzegorzczak, project coordinator,  
Association of Communes of Lubartow Subregion

bulk of the landfill from the environmental impact of the waste, covering it with layers of water-impermeable materials and a layer of grassland as well as of the final planting of grass. In addition, former landfill sites had wells for leachate testing, degassing chimneys and repertoire for solidification testing installed. The monitoring of these areas in terms of their environmental impact will take place over the next several decades.

The project also included a component related to the removal of roofing made from asbestos containing materials, collection of asbestos debris deposited on properties and transportation of asbestos waste for neutralization. In addition, 168 families of the weakest financial condition were provided with materials for new roofing.

In order to solidify residents' belief that segregation of waste is not a difficult task bringing many tangible benefits, the Association organized a highly popular campaigns called „Seedlings for Waste” and „Flower Bulbs for Waste”, under which the inhabitants received seedlings and flower bulbs in return for electrified waste including compact fluorescent lamps, batteries and accumulators.

Innovative and comprehensive approach to waste management in Lubartow can be a model solution for other Polish self-government units.

1

waste management facility with a regional waste treatment status, capacity of 37 000 tons of non-sorted waste per year

4,54 ha

of the area 4 of the reclaimed landfills

116 703,42 m<sup>2</sup>

of dismantled roofing surface containing asbestos



Project: **KIK/42**

Executing Agency: **Association of Communes of Lubartow Subregion**

SPCP contribution: **11 944 510 CHF**

Implementation period: **2012.05 - 2017.06**



# Solar panels for the NATURE 2000 area protection

Environmental protection activities are particularly important in such valuable natural places as the area of the Suski powiat, where Babia Gora is located - a region of special importance, covered by three types of protection - through the Babiogorski National Park, incorporation into the NATURE 2000 network and included in the UNESCO list as a world biosphere reserve. Biodiversity of Podbabiogora requires special protection, but pro-environment activities are not easy to carry out in areas with scattered housing, where, due to the low availability of gas networks and district heating networks as well as low incomes, the coal boilers are the main source of heat and the coal used is usually of low quality. At the same time, the location of houses in mountain valleys causes the accumulation of pollutants, which negatively affects both the environment and the health of the inhabitants.

Being aware of the existing situation, Suski Powiat decided to use the Swiss support to implement the project entitled „*The programme for enhancing the use of renewable energy sources and improving the quality of air within the NATURE 2000 areas in the Poviát of Sucha Beskidzka*”, where over 3 000 solar installations were installed on private buildings and 123 solar installations on public buildings. In addition, the project

included a remote monitoring system covering 40 solar installations to identify the ecological and economic effects associated with the use of solar systems.

The installation of solar systems on private houses has significantly improved the residents' quality of life and well-being as well as has contributed to reduction the

“ I have been using my parents' solar installation since 2013. From spring to autumn we have hot water provided by the sun. We save time and money, and the air becomes cleaner. ”

Paweł Dyrzcz, project coordinator,  
Sucha Beskidzka Poviát

social disparities in the region through real financial savings for the lowest income residents. They have had access to an inexhaustible and cheap source of energy.

The project has also contributed to increasing the ecological awareness of the inhabitants, which is reflected in the real interest of other inhabitants in the assembly of solar collectors.

The efforts of the poviát authorities were appreciated on the national level - in 2014, Suski Poviát took first place in Poland in the contest „Renewable Energy Ranking” organized by the Union of Polish Poviáts under the auspices of Newsweek Poland, Forbes and Facts - Economic Magazine, and in 2015 took second place in Poland in the contest „Active for Clean Air” organized by the Ministry of the Environment.

The Suski Poviát is happy to share its experiences from the project implementation - they are described in the book entitled „Solar Installations implemented within a group project”, published in 4 000 copies, and distributed among the marshal's offices, the offices of the municipalities and towns, and the poviát governors in Poland.

**20 233,16 m<sup>2</sup>**

of the area of 3007 solar installations mounted on private buildings

**300,12 m<sup>2</sup>**

of the area of 123 solar installations mounted on public buildings

**1**

remote monitoring system for solar systems

## Awards

I place in the contest „Renewable Energy Ranking” (12.06.2014) organized by the Union of Polish Poviáts

II place in the competition „Active for Clean Air” (30.11.2015) organized by the Ministry of the Environment



Project: **KIK/44**

Executing Agency:  
**Sucha Beskidzka Poviát**

SPCP contribution: **4 837 389 CHF**

Implementation period: **2012.01 - 2017.04**



## Sunny region of Busko Zdroj

How clean air and unpolluted environment are important for human health, can be particularly visible in places like Busko Zdroj - one of the most famous spas in Swietokrzyskie Voivodeship. Expectations of countless visitors and tourists coming to the Busko Zdroj region inspire local authorities to look for new and innovative solutions to favour the improvement of the natural environment of the region and to ensure further economic development based on spa activities.

Priorities of Swiss funds support coincided perfectly with the plans and goals of the Busko Zdroj and twelve partner municipalities, resulting in the project entitled „Renewable energy systems mounted on public utility buildings and private houses in the communes of Buski Powiat and Pinczowski Powiat”. As a result of the project in the region more than 6 200 solar installations were installed on private buildings and 17 solar installations on public buildings to produce heat for hot water purpose.

At the same time, public buildings, including the local hospital, were equipped with 34 photovoltaic systems producing electricity consumed by these facilities.

In addition, more than 9 000 sodium and mercury luminaires were replaced for LED lighting which is a more economically efficient solution and at the same time improves safety of using local roads and sidewalks. The new part of the spa park was also equipped with the LED lighting



” Thanks to the installation of solar systems from the Swiss funds, we took the chance install an ecological solution, which allows less funding for heating water. The biggest advantage of solar collectors, however, is saving both money and time. ”

Damian Sieradzki, final beneficiary

supplied by the photovoltaic system. The installation on an outhouse the outskirts of the park also supplies vehicles and battery devices purchased for park maintenance. These equipment replaced previously used loud exhaust devices, which were a nuisance for spa visitors and tourists.

Investments in renewable energy sources in the Busko Zdroj region have significantly increased the ecological awareness of the inhabitants. The local educational institution responded to the increase in interest in „green” energy. The Technical and IT School Complex has enriched its teaching base with model solar and photovoltaic installations and has created new course of education related to renewable energy sources.

The actual financial savings resulting from the investments in question will allow the Commune of Busko Zdroj to undertake further actions in the area of environmental protection, which will include construction of bicycle paths, introduction of low-carbon urban communication, support for the replacement of solid fuel boilers in private houses and modernization of the district heating network.

**29 817,06 m<sup>2</sup>**

of the area of 6 202 solar installations mounted on private houses

**1 405,02 m<sup>2</sup>**

of the area of 17 solar installations mounted on public buildings

**9 232**

street lighting luminaires replaced for energy-saving LED lighting



Project: **KIK/46**

Executing Agency:

**Busko-Zdroj Commune**

SPCP contribution: **16 845 958 CHF**

Implementation period: **2012.01 - 2017.06**



# The sun for the Parseta

Located in the West Pomeranian Voivodeship, The Union of Towns and Communes of the Parseta River Basin, thanks to the proximity of seaside towns, including spa resorts, is the destination of countless tourists from Poland and abroad. The tourism industry, which is one of the main sources of income for residents, naturally depends on a clean environment.

Understanding these determinants, local governments of the Parseta River Basin have begun activities aimed at improving air purity by reducing greenhouse gases emissions and particulate matter suspended in the atmosphere.

Their focus was on reducing the use of conventional fuels in the operation of 88 public buildings, which, through large volumes and imperfections in energy technology solutions, were major recipients of heat and, consequently, increased emissions.

As a result of the project, 38 solar installations and 19 photovoltaic

installations have been installed in these buildings, modernization and expansion of the heating system has been performed, 22 heat pumps and 2 wind turbines have been installed, and also thermo-modernization works have been carried out.

Investments have been completed in selected schools, hospitals, social welfare homes, educational centres, nursery, labour offices, town hall, psychological and pedagogical centre, kindergartens, sports facilities and community centres.

Such a wide range of investments has made the positive effects of the project felt for most people in the region.

“ In the course of the project I expanded my knowledge and experience on systems equipped with renewable energy sources. This knowledge is particularly valuable because it is based on the practical aspects of using RES. The experience gained during the project has prompted me to use a heat pump as an energy source in my private home. ”

Rafał Beska, project manager's assistant,  
The Union of Towns and Communes  
of the Parseta River Basin

An important element of the project was also environmental education aimed at increasing the awareness of residents about renewable energy sources. At the Ecological Education Centre in Lipie and in the schools included in the project, educational activities were held in the field of renewable energy sources, in which more than 1 700 students took part.

The wide scope of the project and the application of modern technologies have been noticed and appreciated - in 2015 the project took 1st place in the category of investment initiative with the value of PLN 500 000 more in the contest „Active for Clean Air” organized by the Ministry of the Environment.

Additionally, 5 modernized buildings have received PreQurs certificates issued by the Institute for Building Emission Certification, confirming the degree and fold of the reduction of pollutant emissions from the building to the air, referring to representative buildings.

**1 780,78 m<sup>2</sup>**

of the area of 38 solar installations mounted on public buildings

**2 198,97 m<sup>2</sup>**

of the area of 19 photovoltaic installations mounted on public buildings

**58**

modernized heating systems, including 22 mounted heat pumps, in public buildings

**Awards**

1 place in the category of investment initiative worth more than or equal to PLN 500 000 in the contest „Active for Clean Air” organized by the Minister of the Environment and the President of the Green Mazovia Association



Project: **KIK/48**

Executing Agency:

**The Union of Towns and Communes  
of the Parseta River Basin**

SPCP contribution: **10 747 331 CHF**

Implementation period: **2011.11 - 2017.03**



## Mszana Dolna – towards the sun!

Protecting natural resources is particularly important in such scenic and valuable natural areas as the Gorce region - the mountain range located in the Western Beskidy in the Malopolskie Voivodeship. Gorczański National Park or Modrzewie nature reserve contain very rare species of plants and animals, including 21 species of animals included in the Polish Red Book of Animals - the national register of endangered species.

The local authorities of Mszana Dolna, Kamienica, Raba Wyżna, Dobra and Niedzwiedz and the Mszana Dolna town have been concerned about the nature and health of the inhabitants of the region, and decided to implement the project „Renewable Energy Sources in Mszana Dolna and Partner Communities” which included actions aiming at decreasing emission of harmful substance to the environment and the dissemination of ecological knowledge and forming pro-environmental attitudes among the inhabitants of the region.

Project activities have been targeted at installation of more than 3 900 solar systems on private buildings and 6 on public buildings in order to use solar energy for heating water. This solution has contributed to a gradual reduction in the consumption of coal and other conventional fuels in households and consequently directly affected the reduction of pollutants suspended in the air.

These investments also had a social dimension, since the change of the source of energy from the expensive carbon or



“ For a small financial contribution I have gained so much. Financial savings, comfort, improved family life and real impact on air quality are the most important arguments that convince me. ”

Maria Murzyn, final beneficiary

gas for solar energy, indirectly provided financial support to lower income residents. Undoubtedly successful, in addition to economic and ecological benefits, was increase of social trust to self-government units and closer social relationships between installation users, resulting from cooperation and exchange of experiences.

Mszana Dolna's efforts have been appreciated on the national level - in 2015 the project was awarded in the TOP Municipal Investment Contest as one of the ten best self-government investments of a pro-development effect for the economy.

Many activities that have been implemented within the framework of the project, in the future can be successfully developed on a larger scale not only in Malopolska. The success of the project has already aroused interest of neighbouring municipalities, which have started activities to promote the use of renewable energy in regions. The success of the project activities also encouraged residents and local self-governments implementing the project for further eco-friendly activities. Nearly 1 000 families have reported interest in replacing old coal boilers with modern biomass or eco-pea boilers and another 1 000 families are willing to install solar systems, photovoltaic systems and heat pumps.

**24 312,46 m<sup>2</sup>**

of the area of 3 909 solar installations mounted on private buildings

**119,85 m<sup>2</sup>**

of the area of 6 solar installations mounted on public buildings

**1**

system for monitoring environmental and energy effects

## Awards

prestigious award in the TOP Municipal Investment Contest 2015



Project: **KIK/50**

Executing Agency:

**Mszana Dolna Commune**

SPCP contribution: **9 094 519 CHF**

Implementation period: **2012.04 – 2016.12**



# Energy for Malopolska hospitals

The area of the Malopolskie voivodship is exposed to high concentrations of suspended particulates and greenhouse gases in the atmosphere due to the terrain conditions and the presence of large urban agglomerations, which has a negative impact on the health of the population. One of the factors responsible for air pollution are hospitals. Hospitals, due to the large volume of buildings and the nature of their activity, are big consumers of energy, both produced by themselves, as well as that outsourced from power plants. High energy consumption translates into significant emissions of greenhouse gases by hospitals - direct (boiler energy) or indirect (energy generated from transmission grids).

In order to reduce the negative environmental impact, the Malopolskie Voivodship has decided to modernize the three largest provincial hospitals by replacing heating and cooling installations and equipment with more modern and energy efficient and therefore more environmentally friendly.

Project: *„The improvement of energy management efficiency by the introduction of renewable power systems and modernisation of heating installations in selected voivodship public health-care utilities”* was implemented at

the Ludwik Rydygier Specialized Hospital Ltd. in Cracow, at John Paul II Specialized Hospital in Cracow and at St. Lukasz Public Provincial Hospital in Tarnow. These three provincial hospitals provide over 10% of the bed base in Malopolska, together they hospitalize more than 88 000 patients a year and are the largest providers of medical services in the Malopolskie Voivodship.

As part of the project activities, modernization of heating systems has been carried out using modern efficient technologies, such as gas heat pumps, heat

” The implementation of the project has a specific economic and utility dimension- influenced the reduction of heat and electricity from external suppliers while improving the comfort of patient accommodation. ”

Stanisław Róg, employee,  
Ludwik Rydygier Specialized Hospital in Cracow Ltd

recovery, cogeneration units that allow simultaneous production of mechanical energy (current) and heat. All 3 hot water systems were upgraded in each hospital, 17 heat recovery units were installed, 4 392 radiators were replaced, cooling systems were replaced in 3 hospitals, 6 cooling units were replaced, ventilation systems were modernized in 2 hospitals. Additionally in the Ludwik Rydygier Hospital a power management system has been implemented and, the thermo-modernization works on 11 365 m<sup>2</sup> of walls have been completed.

The technological solutions used have made it possible to achieve significant cost savings in the generation of electricity, heat, and cold, and have strengthened the hospital's safety in the event of a break in power supply. There has been an increase in the energy efficiency of hospitals while limiting the use of energy from conventional sources. As a result, atmospheric pollution was reduced by sulfur oxides, nitrogen, carbon dioxide, suspended particulate matter, and measurable financial savings in hospital operations have been observed.

The developed technology and experience gained are examples of good practice for other medical facilities, and the project is presented as an example of a model of environmental investment. Ludwik Rydygier Hospital in Cracow received 1st place in the ranking of Safe Hospital in 2015, which also evaluated the area of energy security.

**28 800 m**

of modernized central heating network in 3 hospitals

**3 390 m**

of modernized domestic hot water network

**4 392**

radiators replaced




Project: **KIK/51**

Executing Agency:

**Malopolskie Voivodeship**

SPCP contribution: **11 206 502 CHF**

Implementation period: **2012.06 - 2015.07**



# Individual substations for Warsaw

According to experts, the coming years will be a period of dynamic urbanization, which will require rational planning of urban infrastructure, including energy, water, road and associated waste management. Currently, the share of cities in global energy consumption exceeds 60 percent, and in many urban centres half of energy consumption is spent on heating and cooling. As a result of growing demand for energy and increased traffic, urban air quality deteriorates significantly.

Poland has had the most polluted air in the European Union for years. In many cities the concentrations of toxic and carcinogenic substances - PM10 and benzo (a) pyrene - exceed many times the permissible standards. According to the European Environment Agency, as many as 6 Polish cities are among the top ten European cities with the highest number of days in a year in which the daily PM10 concentration is exceeded. Therefore, the implementation of actions related to air improvement in Warsaw becomes a matter of priority.

In the early post-war years, during the construction of new housing estates in the capital, heat supply was realized through local residential boiler houses. With the development of the district heating network, burdensome residential boiler houses have been replaced by group substations connected to the network. Most group substations have been operating as so-called single cause, i.e. providing only heating of rooms (c.h.). At present, most of the group substations are over 40 years old and therefore cause many breakdowns and have been a source of heat loss. The supply of heat through group substations does not

allow efficient use of energy and rational management by heat recipients, and the pursuit of thermo-modernization activities by energy consumers is economically unjustified.

Warsaw Capital City Heat Energy Enterprise S.A. - currently VEOLIA ENERGIA WARSZAWA S.A. has decided to commence activities aimed at the implementation of the project *„Replacement of group, exchange-based heating substations with individual heating substations and modernization of heat distribution network in Warsaw Capital City's high-density multi-family housing areas where permissible air pollution levels are exceeded”*, whose main objective was to increase energy efficiency and reduce emissions, in particular greenhouse gases and hazardous substances in Warsaw, by removing 111 group substations and building 811 individual substations, as well as constructing 41 km of new high-capacity pre-insulated heating network, which has replaced the low-performance network.

Replacement of group heat exchangers into individual substations means for the residents of buildings subject to changes also running their own independent heating economy,



“ The benefits are that central hot water from the network heat is firstly cheaper by about 20% compared to hot water from gas stoves, and secondly economical security. In addition, previously the ventilation installation had to be subject to annual reviews, which also generated costs for the cooperative and its residents. ”

Jarosław Machlewski, project coordinator,  
Housing cooperative „Szaserów“

therefore deciding independently at what time and at what temperature the heating in the building is switched on and off, as well implementation of economically justified thermomodernisation activities, which may result in lower heating fees. At the same time, the inhabitants have the opportunity to heat hot water from the heating network, which will allow the elimination of gas stoves and raise the standard and security of buildings.

Replacing an outdated low-quality district heating network with a new high-performance pre-insulated network and limiting the overall length of the district heating network will also lead to a reduction in heat loss on the transmission. This will allow to save 148.771 GJ per year, which is equivalent to heating about 10 thousand energy-efficient housing with space of 50m<sup>2</sup> without additional emission.

Throughout the city, project implementation not only reduces the emission of particulate matter, greenhouse gases and hazardous substances, and consequently improves the health and living conditions of the capital city, but also determines the direction of Warsaw’s development as a „smart city” managed in a modern, ecological economical and efficient manner.

Apart from investments in infrastructure, the project also carried out educational activities aimed at raising awareness of residents and administrators in the field of rational energy management in the building. These activities consisted in the organization of training for residents and building administrators in terms of energy efficiency and issues related to thermo-modernization in the technical and financial aspects.

The investment has been implemented since 2012 and covered the following districts of Warsaw - Mokotow, Wola, Praga Poludnie, Zoliborz, Bielany, Srod miescie and Ochota. The project directly concerned about 100 000 inhabitants of Warsaw, however all the residents of Warsaw indirectly benefited from it.

Due to the very positive social reception of the project, its 2nd stage is being prepared, which will involve the removal of 41 substations and the construction of 273 individual substations.

**111**

removed group substations

**811**

individual substations built

**41 156,10 m**

of new pre-insulated heating networks



Project: **KIK/61**

Executing Agency:

**Veolia Energia Warszawa S.A.**

SPCP contribution: **10 628 746 CHF**

Implementation period: **2012.07 - 2017.06**



# Energy for hospitals of Mazovia

Significant consumption of fossil fuels is a problem identified also in the Mazowieckie Voivodship. It causes high emissions of greenhouse gases and other pollutants into the atmosphere, leading to deterioration of the natural environment. Hospitals - as one of the largest recipients of energy in the region - have also contributed to this situation.

In order to change the existing situation and contribute to the improvement of the air condition in the region, authorities of the Mazowieckie Voivodship undertook to implement the project entitled „*Building a renewable energy system - solar collectors in health care facilities*” the main task of which was to improve the efficiency of heating systems in hospitals, reduce the use of conventional fuels, and improve air quality by reducing harmful emissions.

During the implementation of the project, over 2,300 solar collectors were installed in 12 hospitals in the Mazowieckie

Voivodeship, which is enough to cover about 25% of the energy needed to heat hot water in these facilities. In addition, thermo-modernization works were carried out. The buildings have been insulated to reduce energy losses as well as comprehensive modernization of hot water and central heating systems have been carried out.

The implementation of the project directly improved the efficiency of the heating system and contributed to reducing the consumption of conventional fuels by replacing them with renewable energy

By choosing to install solar collectors in our hospitals we have gained a lot. Starting with savings on heating hot water, by protecting the environment, and ending on education. Once again, it turned out that investing in renewable energy simply pays off.

Janina Ewa Orzełowska,  
deputy marshal of the Mazowieckie Voivodeship

sources. Reducing the operating costs of hospitals as a result of increased energy efficiency has allowed the use of saved financial resources for medical needs and increased quality of services.

Undoubtedly, the benefit of such a large investment in Mazovia is not only the reduction of operating costs but also the reduction of emissions of harmful substances, such as carbon dioxide, nitrogen oxides, sulfur dioxide or PM10 suspended particulate matter. Beneficiaries of this project are not only hospitals but also their patients by increasing the quality of services provided and the use of modern equipment. However, the greatest beneficiaries of the project, through actions implemented to improve air quality, protection of the environment and health, are all residents of the Mazowieckie Voivodeship and Poland. The installation of solar collectors will have a direct and lasting impact on sustainable development, in which the principle is to preserve the environment in a state not impaired for future generations.

5 386 m<sup>2</sup>

of active surface of installed solar collectors

12

provincial hospitals with solar system installed

9

hospitals covered by thermo-modernization works



Project: **KIK/63**

Executing Agency:

**Mazowieckie Voivodeship**

SPCP contribution: **9 205 323 CHF**

Implementation period: **2014.04 - 2017.05**





# Solar potential of Podkarpacie

The region of the Wisloka River Basin is a part of the area of the Magurski National Park, which has unique natural and landscape values, so the Union of the Wisloka River Basin Communes in Jaslo has been working actively for the improvement of the environment of the region for more than 20 years. Due to deteriorating air quality resulting mainly from the so-called low emissions, i.e. emissions of dust and harmful gases from domestic coal-fired heating stoves, local governments faced the need to implement air protection projects.

Reducing gas emissions and pollution by using renewable energy sources has become the main goal of the project „*Installation of renewable energy systems on public benefit buildings and private houses within the territory of communes belonging to Union of the Wisloka River Basin Communes*“ Podkarpacie is the area with a high degree of insolation, solar energy was chosen as an alternative energy source.

Over 8 200 solar installations were installed on private residential buildings and 49 solar photovoltaic systems as well as 103 solar collectors were installed on public buildings, including school buildings, kindergartens, health centres, cultural centres, sports facilities, nursing homes and the hospital in Jaslo.

Apart from the ecological dimension, the main assets of the investment are comfort and convenience of use as well as financial savings. Residents who have installed solar systems have the opportunity to use hot water for free for several months a year. In the context of raising energy prices, it means a great benefit to family budgets.

On the other hand, the use of renewable energy sources in public buildings by local municipalities contributed to the financial savings due to the significant reduction of electric energy fees.

The use of modern photovoltaic in the public space has many advantages and is increasingly used in the creation of interesting architectural solutions, which can be exemplified by transparent photovoltaic modules, which are the roofing of the Jaslo municipal market and are producing



” Swiss support is not only the enormous financial resources that have been given to us, but also the invaluable knowledge and experience we have used in implementing this project. Switzerland is the one to learn from, as it is one of the leading countries in Europe in terms of environmental protection and sustainable development. ”

Maria Lignar, project manager,  
The Union of the Wisloka River Basin Communes

electricity for the needs of the Jaslo City Hall or photovoltaic panels installed as balcony rails and external blinds.

The project enjoyed exceptional social acceptance mainly due to the implementation of information and education activities in the field of renewable energy sources. The promotion of eco-consciousness started with the training of teachers and youth in the field of environmental protection, renewable energy and interpersonal communication techniques.

Youth, the so-called „home advisors”, explained the benefits of using solar collectors as an ecological and cheap source of energy in direct meetings with the residents. Such a form of knowledge sharing and the huge involvement of the students allowed them to build trust among the local residents and to achieve the enormous support for the project.

Solidarity of all local governments to improve the environmental condition of the Wisloka River Basin in 2016 was honored with the title of Leader of Regional Development, which goes to places where positive changes in the environment are visible. Acting in the belief, that clean environment has the enormous value, and the Union raises funds for further investments, maintaining a balance between the environmental protection and development of the civilization while meeting the needs of the people.

**41 423 m<sup>2</sup>**

of the area of 8 250 solar installations mounted on private buildings

**1 964 m<sup>2</sup>**

of the area of 103 solar installations mounted on public buildings

**8572 m<sup>2</sup>**

of the area of 49 photovoltaic installations mounted on public buildings

## Awards

The Leader of Regional Development is a prestigious national programme the winners of which are companies and cities as well as self-government organizations operating for the benefit of the local community



Project: **KIK/66**  
 Executing Agency:  
**The Union of the Wisloka River Basin Communes**  
 SPCP contribution: **18 300 143 CHF**  
 Implementation period: **2012.06 - 2017.06**



# Be aware and eliminate - Szczucin solution for asbestos

Asbestos is known to be harmful for a long time, first studies and references to its harmfulness come from the beginning of the 20th century. Unfortunately in the post-war reconstruction of our country and its rapid development, this was not remembered, and materials containing asbestos were widely used and considered extremely useful. The Szczucin Commune has become one of the victims of the asbestos boom, as it was home to a factory of asbestos products, which until 1993 had processed 350 000 tons of asbestos, including 65 000 tons (90% of domestic processing) of its most aggressive variety, i.e. blue asbestos (crocidolite). Long-term activity of the plant has contributed to the significant accumulation of asbestos products in the area of Szczucin and neighbouring communes.

In addition, over the decades of the plant operation, post-production waste was made available to local residents who used it to harden roads, courtyards and even playgrounds. Increase in public awareness and appearance of first diseases, resulting from exposure to asbestos dust, have prompted local authorities to look at this phenomenon and since 1996, a number of actions has been launched to eliminate this problem. Strategies and resources were developed for the removal of asbestos from various additional sources, including the Swiss-Polish Cooperation Programme.

The project „Disassembly and safe storage of products containing asbestos from the area of *Matopolskie voivodeship*” was carried out by a consortium consisting of Szczucin commune and 69 partner communes. Such interest in project activities also proves how important asbestos waste in the Malopolska region was. 47 774 tons of asbestos waste were removed and safely disposed on the landfills of which 16 288 tons of 5 248 residential buildings. 15.6 km of roads, the top layer of which contained asbestos, were secured.

” Apart from real effects (demolition of roofing, collection, removal of waste, support for the poorest) project had a promotional and education effect by raising awareness among the people and showing them the way to get rid of this dangerous mineral. Thanks to the project, the condition of the natural environment in Malopolska has been significantly improved.”

Tomasz Prochazka,  
project coordinator, Szczucin Commune

At the same time 1515 beneficiaries in difficult financial situation gained the support in the form of a new roofing.

Also worth mentioning is an educational campaign conducted in schools that, in an interesting way, using the specially designed Asbestodont dragon, provided students with the information about the risk of asbestos in the immediate human environment.

The knowledge taught in schools and numerous information campaigns organized by project executives have led to project information spread in the region, contributing to the growing interest of individuals in receiving support for the disposal and neutralization of asbestos.

In addition, within the project they decided to secure asbestos waste from the local roads, which will significantly reduce the emission of asbestos dust from roads.

The undoubted success of the project is the fact that it was possible to communicate its results to wide audience and raise interest in asbestos adverse effects.

The growth of interest will have an impact on the increase of the activity of residents in the field of asbestos disposal, and will mobilize local self-governments to engage in similarly themed projects in the future.

**48 813,43 tons**

of removed asbestos waste

**1 418**

of new roofs for people in difficult financial situation

**15,6 km**

secured municipal roads, the top layer of which contains asbestos



Project: **KIK/71**

Executing Agency:

**Szczucin Commune**

SPCP contribution: **10 590 988 CHF**

Implementation period: **2012.06 - 2017.06**



# Biomass - a new source of heat

Coal-fired boilers are unfortunately still the main source of heat supply in Poland, especially in small cities. According to available data, more than 75% of system heat sources (with power from 1 to 50 MW in Poland) are based on coal. Public exposure of the very poor air quality problem in Poland has increased interest in the use of renewable energy sources, including biomass.

In response to the tendencies of replacing conventional energy sources with new, more environmentally friendly, the Lebork Municipality has commenced a nationally innovative project to build a biomass - fueled power plant using modern high-efficiency cogeneration technology with ORC (Organic Rankine Cycle). As an alternative energy source, wood waste (wood chips, shavings and sawdust) have been selected, plenty of them are provided by the timber industry - wood sawmills and wood processing plants well-developed in the Lebork region. In addition to the

proximity of this rich fuel reserve, low cost of its acquisition compared to conventional sources spoke the usage of biomass. The implementation of energy technology for biomass utilization, which has not been fully utilized before, and has burdened the environment and the recycling of biomass into a clean, environmentally-neutral and energy-efficient biomass, has also been part of the sustainable development strategy for the city, as it was related to the development of a biomass supply system for CHPs thus, also with the creation of new jobs and the development of



“ I think we will get better air with this investment. ”

Witold Namysłak, mayor,  
Municipality of Lebork

entrepreneurship based on the supply of biomass.

Building biomass-fueled CHP as the main source of urban heat has also contributed to maintaining stable energy prices in the local market, increasing the reliability of heat supply, and consequently leading to an increase in urban heat consumers.

This is followed by a reduction in the number of boiler houses and coal stoves that have contributed so much to the deterioration of the environment in the region. The CHP plant is a good example of a dynamically developing so called scattered energetics, consisting in the production of energy in small manufacturing entities in the direct vicinity of the recipients.

The project realized by the Municipality of Lebork is undoubtedly very innovative and pioneering not only in the country but also in Europe and will certainly be a good example for other local governments to look for alternative sources of energy, especially if they can be based on local resources.

**5,4 MWh**

of heat output and 1.25 MWe of electric power produced by a CHP plant based on cogeneration of biomass working in the OR cycle

**4**

vehicles purchased for biomass transport

**24 693 t/per year**

total pollution (CO<sup>2</sup>, CO, SO<sup>2</sup>, PM10) was reduced

**Awards**

the project received the 1st prize in the Polish edition (for cities from 10 thousand to 100 thousand inhabitants) and 1st prize in the European competition Green ProcA (Green Public Procurement)



Project: **KIK/73**

Executing Agency:

**Municipality of Lebork**

SPCP contribution: **9 892 465 CHF**

Implementation period: **2012.06 - 2016.12**



## Contact details of Executing Agencies:

### **KIK/22**

Warsaw Commuter Railway Ltd.  
ul. Batorego 23  
05-825 Grodzisk Mazowiecki

### **KIK/23**

Pomorskie Voivodeship  
ul. Okopowa 21/27  
80-810 Gdańsk

### **KIK/28**

Legionowo Municipality  
ul. Marszałka Piłsudskiego 41  
05-120 Legionowo

### **KIK/39**

Lubelskie Voivodeship  
ul. Spokojna 4  
20-047 Lublin

### **KIK/41**

Niepołomice Town and Commune  
Pl. Zwycięstwa 13  
32-005 Niepołomice

### **KIK/42**

Association of Communes  
of Lubartow Subregion  
ul. Lubelska 68  
21-100 Lubartów

### **KIK/44**

Sucha Beskidzka Powiat  
ul. Mickiewicza 19  
34-200 Sucha Beskidzka

### **KIK/46**

Busko-Zdroj Commune  
ul. Mickiewicza 10  
28-100 Busko-Zdrój

### **KIK/48**

The Union of Towns and Communes  
of the Parseta River Basin  
ul. Szymanowskiego 17  
78-230 Karlino

### **KIK/50**

Mszana Dolna Commune  
ul. Spadochroniarzy 6  
34-730 Mszana Dolna

### **KIK/51**

Małopolskie Voivodeship  
ul. Basztowa 22  
31-156 Kraków

### **KIK/61**

Veolia Energia Warszawa S.A.  
ul. Puławska 2  
02-566 Warszawa

### **KIK/63**

Mazowieckie Voivodeship  
ul. Jagiellońska 26  
03-719 Warszawa

### **KIK/66**

The Union of the Wisłoka River  
Basin Communes  
ul. Konopnickiej 82  
38-200 Jasto

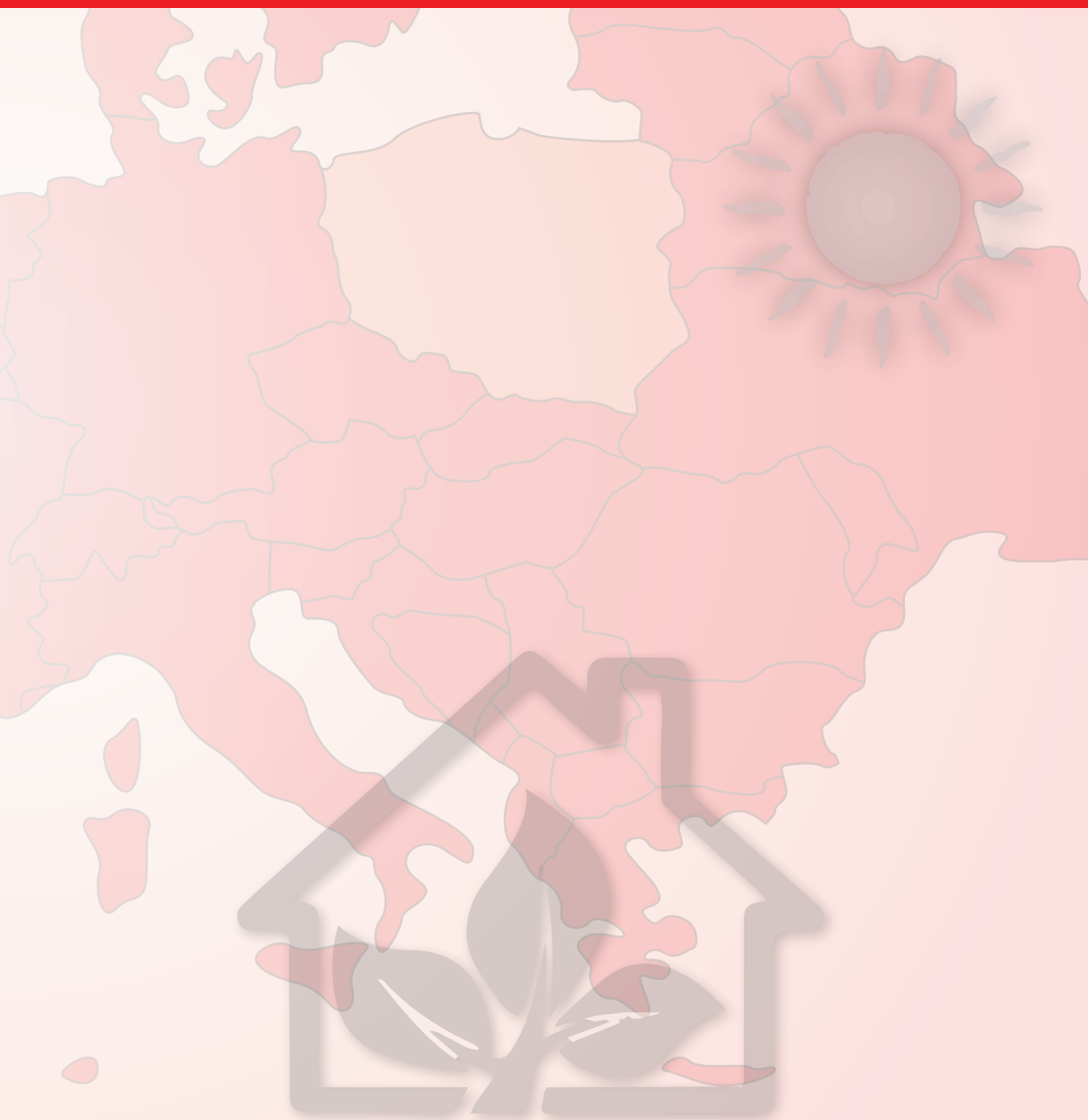
### **KIK/71**

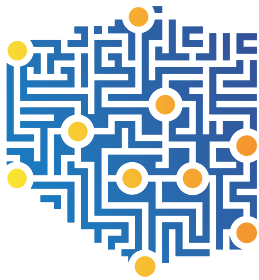
Szczucin Commune  
ul. Wolności 3  
33-230 Szczucin

### **KIK/73**

Municipality of Lebork  
ul. Armii Krajowej 14  
84-300 Lębork

# REHABILITATION AND MODERNISATION OF BASIC INFRASTRUCTURE AND IMPROVEMENT OF THE ENVIRONMENT





CENTRUM  
PROJEKTÓW  
POLSKA  
CYFROWA



## **CENTRE FOR PROJECTS DIGITAL POLAND**

CENTRE FOR PROJECTS DIGITAL POLAND (formerly: Implementing Authority for European Programmes) was established in 1994 under an agreement between the Government of the Republic of Poland and the European Commission to implement the Phare Cross Border Cooperation Programmes.

In the following years CPDP was entrusted with the implementation of other programmes, including: Schengen Facility 2004 - 2006, European Economic Area Financial Mechanism and Norwegian Financial Mechanism 2004 - 2009 (priority 2.7 and 2.9), European Refugee Fund 2004 and 2005 - 2007, Operational Programme Innovative Economy 2007-2013, Operational Programme Infrastructure and Environment (Priority XI), Operational Programme Human Capital (Subactivity 1.3.1), General Programme „Solidarity and Management of Migration Flows” 2007 - 2013.

Currently, CPDP is a state budgetary unit subordinated to the Minister of Digitization, which, on behalf of the Government of the Republic of Poland, implements tasks related to the management of the European Union structural funds (Operational Programme Digital Poland 2014 - 2020), non - returnable foreign aid (Swiss - Polish Cooperation Programme for years 2007 - 2017), as well as the funds of other programmes, which implementation was entrusted to it.

For more information on the Centre for Projects Digital Poland, please visit:

[www.cppc.gov.pl](http://www.cppc.gov.pl)

