



PILOT ACTION 2

ONE STOP SHOP

Information inquiry for PP 2 UMB City of
Bydgoszcz

Version 3
31/05/2017



1. GENERAL INTRODUCTION TO PILOT ACTION 2

1.1. Descriptions from the Application Form (AF)

1.1.1. General descriptions

- General description of the WP: The WP deals with different solutions to enhance the energy performance and manage with a comprehensive approach the different low carbon energy measures. The CitiEnGov toolkit (T2) can already drive some decision making processes and support the energy policy control and management in the different regions, with a strong insight within local government. A detailed knowledge of a built-up area, energy consumption in transport system and public lighting (T1), can drive incentives for energy preservation actions as well as general planning decisions in order to manage the towns energy-needs, to identify energy conservation measures to target for additional policy and programme interventions. The same data can then be used for outlining marketing and outreach activities. In connection with the implementation or update of regional/municipal Energy Plan (T2), it will be possible for the Cities and PA involved to identify and try to apply measures such as:
 - > definition of incentives and policy aimed at encouraging the efficiency of energy use, e.g. Ludwigsburg will revise and enhance existing programmes, including a funding programme,
 - > incentives for a broader use of EE adoption, public transport and RES promotion will be investigated;

Pilot actions in 6 Countries will be implemented to support strategies:

- > domestic behavioural changes- Ferrara, Ludwigsburg and EARDA will test pilot actions within a common Eco-citizens Awards Programme, which will include a final award ceremony but also intermediary trainings, pre and post energy audit;
- > Design and launch of One Stop Shop Energy Service Centre in Bydgoszcz, Grodzisk and Weiz, which will support En4PA for activating public stakeholders; thematic equipment for visualization of local energy consumption, RES and EE demo purposes for all 3 Cities (Grodzisk also small works for RES installation);
- > Innovative solutions for improving the urban public lighting management in Split(see investment).

1.1.2. WP and responsible partner

- WP: T3 Strategies and policies for supporting low carbon energy planning & pilot actions
- WP responsible partner: W.E.I.Z.

1.1.3. Outputs, Activities, General Dates

- Output:



Output O.T3.2	Pilot actions for improving local/regional Energy performance in 6 Countries	3 pilot solutions will be tested (for totally 7 pilot actions in 7 Municipalities): 1) Domestic Behavioural changes scheme in Ferrara, Ludwigsburg and EARDA-Slovenian Agencies as observer 2) Design and launch of One Stop Shop Energy Service Centre in Bydgoszcz, Grodzisk and Weiz 3) Test pilot solution for innovative public lighting in Split	S.O.2.2 - Number of pilot actions implemented for improving local/regional energy performance	7,00	04.2019
---------------	--	--	---	------	---------

- Activity: A.T3.3, Pilot Action 2, Launch of a One Stop Shop Energy Service Centre in Weiz, Bydgoszcz and Grodzisk

1.1.4. Deliverables, Descriptions, Specific Dates

Delivery No.	Title	Description	Quantification/target
D.T3.3.1	Transnational concept for One Stop Shop Energy Service outline	Comprehensive concept outline for a One Stop Shop Energy Centre, combining the cooperation of En4PA with stakeholders and exploiting energy data collected and software elaborated in A.T.1.2. Three Regional applications will be tested in Weiz, Bydgoszcz, Grodzisk	1
D.T3.3.2	One Stop Shop Energy Service Centre in Weiz, Bydgoszcz & Grodzisk. Concept elaboration	Creation of new and comprehensive service, optimizing and combining the competences of public and private actors working at EE and RES (Municipality of Weiz and its En4PA Energy Agency Weiz District heating company non profit settlement association).	3
D.T3.3.4 (sic!)	Launch of One Stop Shop Energy Service Centre in Weiz & Grodzisk: transnational info & training	Launch of it, especially focused on: -the collection, promotion and exploitation of new local and international EE and RES energy solutions (based on a permanent updated best practice databank /collection);-the information service for all local/regional/national/international trainings and educational offers to communicate to the public	2
D.T3.3.5	Launch of One Stop Shop Energy Service Centre in Weiz, Bydgoszcz & Grodzisk: RES and EE solutions	Demonstration of new EE and RES solutions with experts, schools by showing demonstration models and tools;-visualization of the local energy consumption of the public based collected data (A.T.1.2) as basis for a long-term measurement (also for city policy)	3
D.T3.3.7 (sic!)	Launch of One Stop Shop Energy Information Portal in Bydgoszcz and advisory services	Launch of One Stop Shop Energy Information Portal in Bydgoszcz and advisory services for different target groups on energy efficiency, regarding RES and EE, including the promotion of pilot applications for RES	1
D.T3.3.8	Report on pilot action 2: One Stop Shop Energy Service Centre in Weiz, Bydgoszcz, Grodzisk	Summary description of the implemented pilot action 2, reflecting the different stages (preparation, realisation, conclusion) in the 3 different Cities in 2 different Countries	3



2. ENERGY MANAGEMENT IN PARTNER CITIES - STATE OF THE ART: Bydgoszcz

2.1. Historical Development of the Energy Unit

Step 1.

EU commitments and programs:

- *Project LAKS (LIFE + program),*
- *Sustainable Energy Action Plan (20 % target of carbon dioxide reduction),*

Significant actions have been taken since 2010:

- *GHG Emission inventory,*
- *CEC5 - RES Demonstration Centre.*

Step 2.

- *1st Energy Manager position has been existing since 2012 (with perspective of establishing an Energy Office, perspective of common public procurement tended of the purchase group),*
- *Establishment of the Energy database (the database was based on invoices from public buildings),*

Step 3.

- *Absence of the Energy Manager in the city structure (free vacant from June 2015 to January 2016)*

Step 4.

2nd Energy manager has started work in January 2016

- *Contributed to EU projects (with Department of Integrated Development City Hall of Bydgoszcz), Low carbon economy plan, SEAP report - continuation of common procurement tended of the purchase group for supply of gas, energy and heat,*
- *Established the Office of Energy Management by ordinance of the Mayor in 06.2016,*

Step 5.

Office of Energy Management has been established since June 2016.



The main steps taken:

- *obtaining office equipment,*
- *recruitment of new employees and allocation of duties,*
- *identification of problems and challenges: no control of energy consumption in municipal buildings, no RES implementations in municipal buildings, unawareness of residents about International projects (tackling this issue is the main task for Office of Energy Management at the beginning), huge expectations from the Mayor of Bydgoszcz towards the Office of Energy Management, others: RES installations, car sharing, electromobility, reduction of energy costs, behavioral change.*

Main expenditures:

- *organizing events like: Energy Days, conferences, workshops, updates of strategic documents regarding energy management issues, study visits*
- *experts, activities, deliverables, staff and equipment costs of Interreg Projects,*
- *investments in the Regional Operation Program 2014-2020 of the kujawsko-pomorskie voivodeship - 13 RES systems (12 pv + 1 solar thermal) on municipal buildings in Bydgoszcz*
- *office rental fees,*
- *business trips,*
- *promotion materials,*

2.1.1. Tools and equipment

Office of Energy Management inventory:

- *office equipment (furniture, IT equipment etc.) - day to day work,*
- *digital projector - trainings, project events, meetings, workshops, study visits,*
- *Energy Cafe demonstration station - cooperation with residents, promotion of the Interreg program and CitiEnGov project, information about energy management issues, promotion of RES, information on RES funding,*

2.2. Tasks and Activities

The main tasks and activities of the Office of Energy Management are:

- *realisation of City policies regarding energy and climate protection,*



- conducting and coordinating activities related to planning, investments and services in scope of energy efficiency,
- undertaking measures to generate savings in electricity, heat and gas consumption in the municipal buildings,
- taking actions to increase the share of renewable energy (RES) in the City's energy balance (*pilot actions such as implementation of photovoltaic panels on the roofs of educational institutions*),
- establishing a system for monitoring and management of energy consumption - Energy database,
- coordination and reporting on the implementation of strategic documents related to City's commitments stemming from climate protection needs.
- *monitoring of energy consumption in school buildings (municipal buildings) after thermomodernisation,*
- *promotion of energy management in schools, cooperation with school management, raising awareness, changing behaviour,*
- *building cooperation network for energy efficiency,*
- *participating in other, new international projects. Office of Energy Management is already involved in 2 international projects: CitiEnGov, ENERGY@SCHOOL (earlier in cooperation with Department of Integrated Development).*

2.3. Goals

The primary goals are:

- *to manage and monitor energy consumption in municipal buildings,*
- *to create an Energy Database and monitoring system,*
- *to increase the amount of RES implementations in municipal buildings,*
- *to increase residents' awareness of International projects (this is the main job for Office of Energy Management at the beginning),*
- *to popularize: RES, electromobility, car sharing, behavioral change (EE),*
- *to build a cooperation network for energy efficiency,*
- *to expand the competences of the Office,*
- *to implement objectives of the ongoing Projects,*



2.4. Target Groups

The main target groups are: residents, companies related to energy and RES issues, other Departments in City Hall of Bydgoszcz, local and regional authorities, education/training centres and schools, higher education and research, stakeholders.

2.5. Energy Café

Energy Cafe is a mobile, branded, educational-promotional demonstrative table equipped with a coffee machine, PV panel and a charger which can provide enough energy to charge mobile phones, LED lamps. The coffee machine serves as an additional attraction for guests of our Energy Cafe. Besides getting a cup of coffee the visitors are provided information regarding energy issues, EE, RES, RES funding and international projects: CitiEnGov by energy experts. Energy Cafe will be regularly available for residents during local energy / environment related events. Energy Café in Bydgoszcz was launched on the 30th of March 2017 - during the Low Carbon and Subsidy Conference organized in Bydgoszcz by the Office of Energy Management with cooperation with Regional Fund for Environmental Protection and Water Management. All members of the Office of Energy Management are involved in Energy Cafe..

2.6. Role of CitiEnGov for the Energy Unit

CitiEnGov is a basic fund for establishing/improving the Energy Unit in Bydgoszcz. The project provides/ will provide:

- *office equipment,*
- *staff costs,*
- *promotion of the Office of Energy Management and programs/projects it's participating in,*
- *will provide the Office of Energy Management equipment and possibility to perform thermographic checks of municipality buildings with thermographic camera, moreover the thermographic checks will also be conducted for residents during regular pilot actions and events. The thermographic camera will be used as demonstrative instrument for EE consultancy and will provide feedback and recommendations,*
- *will establish an Energy Database,*
- *will establish an Online Advisory Portal for residents and companies,*
- *will provide Energy Consultancy Activities for residents and companies,*

3. The One Stop Shop: local implementation in Bydgoszcz

3.1. General Idea

City of Bydgoszcz has an elongated shape and extends along Brda river. The administration area of the city from west to east has a length of 22 km. In the narrowest area from north to south



it has about 10 km. Moreover Bydgoszcz has approx. 350 000 inhabitants. We strongly believe that it would be very inconvenient and time consuming for residents to travel such long distances to meet face to face with energy experts. This is the reason why we came up with the idea of the online service of One Stop Shop platform. The platform would be used as an online communication tool.

The platform would include:

- database/list of local and regional suppliers (energy, RES),
- information on the financing and preferential loans for RES,
- online reports and visualizations of energy consumption in municipal buildings (not decided yet on how detailed information will be available for public),
- information about air quality (pollution),
- access to the energy database (for energy unit members),

Additionally in the framework of the One Stop Shop pilot actions on increasing awareness of energy efficiency and RES are planned (for both municipality and residents):

- we want to mount tablet stands in public schools (with limited access only to the One Stop shop - reports, visualizations and data on energy consumption which will increase pupils awareness of energy issues),
- we want to buy demonstrative e-bikes (promotion of e-mobility by public administration),
- we want to buy a drone and special training for 2 pilots (regular pilot actions for municipality and local residents - evaluation of buildings for possible PV installations / performing checks on already implemented PV installations),
- we want to buy AutoCAD or other design software (software to demonstrate how many PV installations can be mounted on buildings that were previously examined by the drone),
- we want to mount PM10 Particle Sensors in public schools,


3.2. Location

The One Stop Shop will be operated from the same place where Office of Energy Management is located. Beside of being an online platform the one stop shop will also perform (external) pilot actions during regular meetings, trainings and promotional activities.

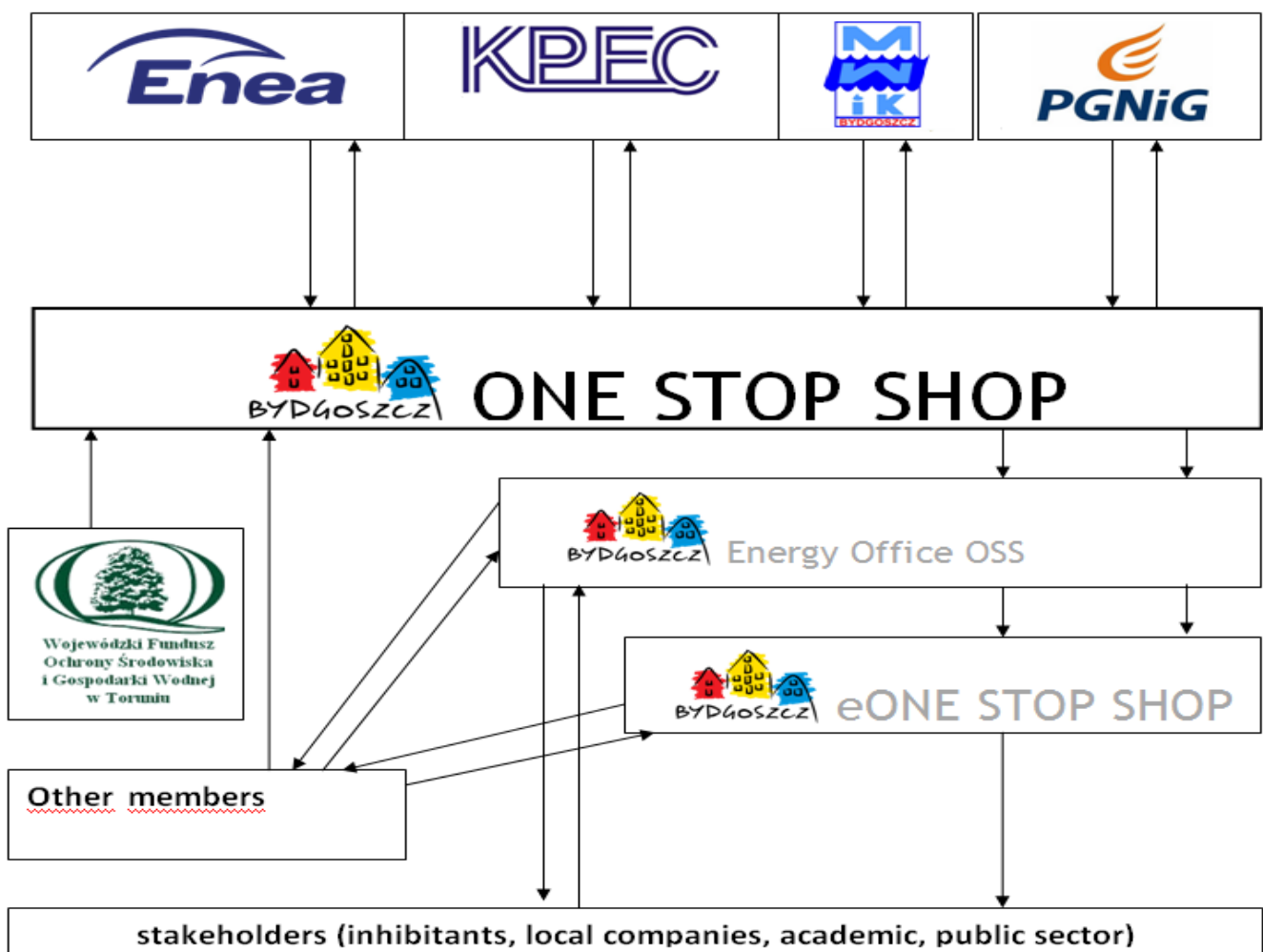
3.3. Potential Stakeholders and Partners

Partner name	Scope/type	Type of co-operation
Miasto Bydgoszcz 	the local authority	Leader / coordinator one stop shop
ENEA Bydgoszcz 	electricity supplier	substantive support / expert / support for the inhabitants
Komunalne Przedsiębiorstwo Energetyki Ciepłej sp. z o.o. 	municipal heat energy supplier	substantive support / expert / support for the inhabitants
Miejskie Wodociągi i Kanalizacja w Bydgoszczy - Sp. z o.o. 	municipal waste incineration plant	substantive support / expert / support for the inhabitants
PGNiG 	gas supplier	substantive support / expert / support for the inhabitants
ProNatura Sp. z o.o. 	municipal waste incineration plant	substantive support / expert / support for the inhabitants
Bydgoski Park Przemysłowo-Technologiczny Sp. z o.o. 	Bydgoszcz Industrial park	access to industrial companies / good practices of energy efficiency
Bydgoska Agencja Rozwoju Regionalnego Sp. z o.o. 	Bydgoszcz Agency for the Development	companies networking / good practices of energy efficiency /
Wojewódzki Fundusz Ochrony Środowiska i Gospodarki Wodnej w Toruniu 	Regional Fund for Environmental Protection and Water Management	funding and support instruments to finance ee interventions / substantive support / expert / support for the inhabitants
UTP w Bydgoszczy	Academic institution	cooperation with experts, students, increase awareness



 Uniwersytet Technologiczno-Przyrodniczy im. Jana i Jędrzeja Śniadeckich w Bydgoszczy		
Local companies, NGOs	activities related to to energy, IT, RES etc.	exchange of experiences, increasing the potential (awareness, information about funds, economic), good practices)

General concept



3.5. Equipment (examples)

Equipment item	Application
<i>demonstrative e-bikes</i>	<i>promotion of e-mobility by public administration</i>
<i>thermographic camera</i>	<i>regular pilot actions for municipality and residents of Bydgoszcz - checking energy efficiency of buildings and what needs to be improved</i>
<i>drone and special training for 2 pilots</i>	<i>regular pilot actions for municipality and local residents - evaluation of buildings for possible PV installations /</i>



	<i>performing checks on already implemented PV installations</i>
<i>AutoCAD (or other design software)</i>	<i>software to demonstrate how many PV installations can be mounted on buildings that were examined by the drone</i>
<i>tablets and stands at public schools</i>	<i>demonstration of EE and RES - pupils will have access to information about their building - schools energy/utility consumption and energy production from RES</i>
<i>PM10 Particle Sensors with equipment</i>	<i>demonstration of EE</i>
<i>laptop</i>	<i>Equipment for the One Stop Shop expert (manage the online platform and conduct pilot actions)</i>

3.6. New/Extended Tasks (in regard to Energy Unit)

3.6.1. Demonstration and Visualisation of new RES and EE Solutions (D.T3.3.4)

This will be available as an additional module database, possibility of generating reports by online-platform.

3.6.2. Online Advisory Services (D.T3.3.7)

Online Advisory Services is a simple online communication tool of Q&A type. We would like to use the Internet portal to provide the visitors most of the information and communication possibilities FAQ, Skype, online chat.

4. Difference setting/strengthening-up the Energy Unit vs. the One Stop Shop

4.1. Essential Difference between Energy Unit and One Stop Shop

The One Stop Shop responsibilities:

- Provide database about energy related companies (The database could include descriptions in Polish and English, the data could have the same format for all three partners, the partners could provide the data on all partners within their local One Stop Shops. The database might include not only companies, but also all energy-related institutions that might become partners in energy projects. It could also include international institutions. Then the catalogue could be made available for all the partners.)
- Provide an overview / List of funds and financial incentives for local stakeholder groups (online information of all collected national, regional and local funds and financial issues regarding RES and EE systems). If there are any international funding initiatives (EU-level), this part of the catalogue could be the same for all the partners, and enable cutting of costs.



- Establish an Online Advisory Portal a simple online communication tool of Q&A type - we are not interested in replacing personal advice by an Internet portal, but we would like to provide most of the information and communication possibilities via the Internet (FAQ, Skype, online chat)
- Provide Energy Consultancy Activities only non-commercial forms of services e.g. assistance in applying for funds - we cannot provide support to companies that could be bought on the free market
- Perform awareness raising activities regarding Energy Issues for the public implementation of RES systems in new municipal buildings, pilot actions
- performing thermographic checks for Municipality's buildings,
- Provide visualization of data from the Energy Database
- Provide information about air pollution

4.2. Table with Comparison of Tasks

Energy Unit	One Stop Shop
<ul style="list-style-type: none"> - <i>realisation of City policies regarding energy and climate protection,</i> - <i>conducting and coordinating activities related to planning, investments and services in scope of energy efficiency,</i> - <i>undertaking measures to generate savings in electricity, heat and gas consumption in the municipal buildings,</i> - <i>taking actions to increase the share of renewable energy (RES) in the City's energy balance (pilot actions such as implementation of photovoltaic panels on the roofs of educational institutions),</i> - <i>establishing a system for monitoring and management of energy consumption - Energy database,</i> - <i>coordination and reporting on the implementation of strategic documents related to City's commitments stemming from climate protection needs.</i> - <i>monitoring of energy consumption in school buildings (municipal buildings) after thermomodernisation,</i> - <i>promotion of energy management in</i> 	<ul style="list-style-type: none"> - <i>Provide database about energy related companies (The database could include descriptions in Polish and English, the data could have the same format for all three partners, the partners could provide the data on all partners within their local One Stop Shops. The database might include not only companies, but also all energy-related institutions that might become partners in energy projects. It could also include international institutions. Then the catalogue could be made available for all the partners.)</i> - <i>Provide an overview / List of funds and financial incentives for local stakeholder groups (online information of all collected national, regional and local funds and financial issues regarding RES and EE systems). If there are any international funding initiatives (EU-level), this part of the catalogue could be the same for all the partners, and enable cutting of costs.</i> - <i>Establish an Online Advisory Portal a simple online communication tool of Q&A type - we are not interested in replacing personal advice by an Internet portal, but we would like to provide most of the information and communication possibilities via the Internet</i>



<p><i>schools, cooperation with school management, raising awareness, changing behaviour,</i></p> <ul style="list-style-type: none"> - <i>building cooperation network for energy efficiency,</i> - <i>participating in other, new international projects. Office of Energy Management is already involved in 2 international projects: CitiEnGov, ENERGY@SCHOOL (earlier in cooperation with Department of Integrated Development).</i> 	<p><i>(FAQ, Skype, online chat)</i></p> <ul style="list-style-type: none"> - <i>Provide Energy Consultancy Activities only non-commercial forms of services e.g. assistance in applying for funds - we cannot provide support to companies that could be bought on the free market</i> - <i>Perform awareness raising activities regarding Energy Issues for the public implementation of RES systems in new municipal buildings, pilot actions</i> - <i>Performing thermographic checks for Municipality's buildings,</i> - <i>Provide data visualization and reports based on the Energy Database</i> - <i>Provide information about air pollution</i>
--	---