

International Brokerage Event  
Brussels, 26-27/10/2017



***Institute of Technology and Life Sciences  
Kuyavian-Pomeranian Research Centre in  
Bydgoszcz***

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# Description of the Organization



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- The [Institute of Technology and Life Sciences](#) as research and development unit (R&D) under the Ordinance of the Minister of Agriculture and Rural Development conducts research and experimental projects in the field of agronomy, agricultural engineering and environmental engineering.
- The Institute is involved in numerous national and international activities in the field of [land reclamation, water management in rural areas, water quality protection and river catchments management](#). The Institute employs 390 staff members including 47 full-time professors and 48 doctors. [Co-publisher of Journal of Water and Land Development](#).
- Previous EU projects: FINEGRASS - *Effect of Climatic Changes on Grassland Growth, its Water Conditions and Biomass*; NMF - *Pilot Implementation of Water Framework Directive and Construction of Tools for Water Management*; Programme SMOS CAL-VAL SVRT AO-3275 - project ESA PECS SWEX-R, No. 98084 (Soil, Water and Energy Exchange/ Research). 2009-2011; [Central and Eastern Europe Integrated Drought Management Program \(IDMP\)](#), WMO-Global Water Partnership (GWP) No. 46-IDMP-2013. 2013-2015; [OPERA - Operationalizing the increase of water use efficiency and resilience in irrigation](#). ERA-NET COFUND WATERWORKS2015. HORIZON 2020. 2017-2019.

# Bydgoszcz City

## Bydgoszcz

- a city in northern Poland,
- situated on the Brda and Vistula rivers and Bydgoszcz Canal,
- population of about 360 thousand,
- area: 176 km<sup>2</sup>, the eighth-largest city in Poland.



# Bydgoszcz City



<http://geoportal.mojregion.info/>

# Description of the your research interest



## Research team of the *Kuyavian-Pomeranian Research Centre in Bydgoszcz*:

professor (1), associate professor (1), assistant professor (6), assistant (1), technician (4);

## Research activities and areas of expertise:

- Meteorology and agro-meteorology,
- Water balance, evapotranspiration and water needs of crops and green areas,
- Impact of actual weather conditions and climate change on crop water needs, irrigation needs and drought,
- Hydrology and water management in small catchment,
- Small water retention,
- Greenhouse gases (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O) and nitrate emissions from fields and grasslands,
- Mathematical modelling,
- Agro-hydro-meteorological monitoring.

**2017 CALL TOPIC:** Strengthening international cooperation on sustainable urbanisation: nature-based solutions for restoration and rehabilitation of urban ecosystems

**TITLE of the PROJECT IDEA:** **Sustainable and efficient rainwater management in cities.**



- **Objectives:**

- To increase rainwater retention in the ground to prevent drought and adapt city to climate change;
- To use rainwater resources for watering (irrigation) green areas in a city,
- To identify the needs of citizens toward blue-green city;
- To exchange knowledge and solutions for use/re-use of rainwater in Europe;
- Sharing experiences and learning about experiences of the others;
- Strengthening international cooperation and relationships researchers / municipal enterprise / citizens.

- **Expected results:**

- Increased rainwater retention in a city;
- Developed tools for rainwater retention management in cities, especially for irrigation of green areas;
- Strengthened international cooperation and relationships between research, practice (municipal enterprise) and citizens.

# Consortium - profile of known partners *(if any)*



No	Partner Name	Type	Country	Role in the Project
01		RTD		
02		SME		
03	Municipal Water Station Supply and Sewage Systems in Bydgoszcz	IND	Poland	To determine and create favourable zones (areas) for rainwater discharge and retention in the city. Case study - areas in the city with rainwater retention reservoirs and sustainable management of rainwater, especially for green areas watering.
04				

# Consortium - required partners



No	Expertise	Type	Country	Role in the project
01	Bio-economy, meteorology, environmental models developer;	RTD	All over Europe and Turkey	Development of decision support tools for rainwater sustainable use, especially for city green areas irrigation; Analysis of rainwater use efficiency.
02	IT - C++ et al. programming	SME	All over Europe and Turkey	IT support, computer programming.
03	Rainfall water management and use in cities landscape	IND	All over Europe and Turkey	Case study - areas in a city with rainwater retention reservoirs and sustainable management of rainwater, especially for city green areas watering.
04				

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