Challenge 5 „Climate actions, environment, resource efficiency and raw materials"
HORIZON 2020 (8th Framework Programme EU)
Offer for the participation in the project that will be prepared for the 1st call for proposals

The institution	**Name**: Central Mining Institute
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Is interested in the participation in a project that will be prepared and submitted in the following topic:	
Number of the open topic and Title (from Work Programme)	**WASTE-6-2015:** Promoting eco-innovative waste management and prevention as part of sustainable urban development; **WATER-1-2014/2015:** Bridging the gap: from innovative water solutions to market replication; **WATER-2-2014/2015:** Integrated approaches to water and climate change, **WATER-5-2014/2015:** Strengthening international R&I cooperation in the field of water; **SC5-1-2014:** Advanced Earth-system models; **SC5-3-2014:** The economics of climate change and linkages with sustainable development; **SC5-6-2014:** Biodiversity and ecosystem services: drivers of change and causalities; **SC5-7-2015:** More effective ecosystem restoration in the EU.

Short description of the organisation:
Central Mining Institute (GIG) is a research institute working in the field of environmental friendly technologies including social and economic issues. Department of Water Protection reasearch work focus on development of complex solutions in the **water resource management**, **environmental monitoring** and **sustainable development** in **urban areas** and **peri-urban areas**. Long-term cooperation with industry sector and regional authorities guarantee successful implementation of elaborated solutions. Taking active part in creation of technological development policy in region we aim at creation of favourable conditions for small and medium enterprises.

Proposed contribution to the project:
GIG can contribute to the project in the following topics:

- Planning and implementation of solutions in water and sewage systems including the technical, environmental and economic aspects,
- Water resources management (ecosystem services in the provision of waterrelated services, water cycle in urban and rural areas, implementation of eco-innovative technologies in water sector, groundwater management at areas under industrial impact),
- Development of innovative and sustainable strategies for waste prevention,
- Sustainable landuse management and planning (urban metabolism, green infrastructure planning in urban areas, biodiversity, habitat restoration and maintaining of semi-natural plant communities, redevelopment processes of postindustrial area),
- Technology development for supporting multi-stakeholder approaches (implementation of cooperation model between regional authorities, clusters and small and medium enterprises),
- Environmental risk assessment and socio-economic analyses,
- Decision support systems, scenario analyses and system solutions for environmental management (GIS and database technology).

Chosen references (publications, others):
GIG has a wide experience in projects co-financed by FP, ECSC, INTERREG, CE Programme connected with: sustainable regeneration of urban industrial sites (MASURIN, RESCUE), european sustainable mining and processing industries (NESMI), management of groundwater at industrially contaminated areas (WATERNORM, MAGIC), energy (EFONET), monitoring and verification technology of CO2 storage (CO2 REMOVE), environmental friendly technologies of biomass production (BIOSYNERGY), mitigation actions on the key sources of groundwater contamination (FOKS), optimization of biogas utilization (SEBE), etc.

Other information (if relevant):
Topics of interest: Urban metabolism, ecosystem services, environmental friendly and eco-innovative technologies, biodiversity, sustainable development, water resource management, land use planning, remediation technologies, decision support systems, GIS and earth observations systems.