

## South East Europe Transnational Programme

### Project Idea Form

**Project idea's title**

**Climate Change and Impact on Water Supply**

**Priority 2**

(choose priority and indicate the relative area of intervention)

|   |  |
|---|--|
| <input type="checkbox"/> Priority Axis 1            | AoI _____  |
| <input checked="" type="checkbox"/> Priority Axis 2 | AoI 2.1 Improve integrated water management and flood risk prevention _____<br>— |
| <input type="checkbox"/> Priority Axis 3            | AoI _____  |
| <input type="checkbox"/> Priority Axis 4            | AoI _____  |

**Project Idea Promoter**

(name of the institution)

Municipality of the City of Vienna - Waterworks

**Contact Person**

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Is the applicant the project's potential Lead Partner?

☒ Yes ☐ No

If not, is the potential Lead Partner already being chosen?

☐ Yes ☐ No

**Background** (main problems or challenges to be addressed)

The reports of the Intergovernmental Panel on Climate Change (IPCC 1990) and those that have followed (IPCC 2001 IPCC, 2007) conclude that our climate is changing. One of the most important impacts of climate change is on the world's fresh water supplies, caused by increased temperatures, changed precipitation, and shifts in the historic hydrologic cycle. Climate change can alter the demand for water, with demands increasing during dry, warm periods and decreasing during cool, wet periods. These changes in availability and demand of water will impact municipalities that are charged with providing safe and reliable drinking water. Climate change may impact a municipality's ability to provide water to existing customers and their planning for the future. New sources of water may be required, and the evaluation of these new sources should consider potential climate change.

The extent of the change will not be the same all over the world. The potential change in temperature, precipitation and other meteorological parameters will differ regionally and seasonally. The influence on water recovery defined by changing meteorological parameters has to be assessed.

Furthermore land use activities exert pressure on water resources. But climate change will have impacts on land use activities too. Land use activities will change according to the extent of climate change. To anticipate

this change in climate and land use activities and to assess its impacts on water resources is crucial for safeguarding future water supply. The spatial and temporal climate changes on the scale of catchment's areas are not enough investigated.

The problem is relevant for all water suppliers and their regulating governmental bodies regardless to their geographical location. Therefore it is interesting to exchange experience and to work out and evaluate methods to predict climate change and thus direct or indirect impacts on water supply. Additionally measures have to be developed to adapt to climate change.

### **Objectives** (main and specific objectives to be achieved)

- **Safeguarding future water supply under conditons of climate change**
- **Discuss, develop and test measures which support adaptation to climate change of water recovery techniques**
- **Assess direct and indirect impacts of climate change**
- **Develop methods and tools in order to quantify regional and local extent of climate change**

### **Main foreseen activities**

Alrady existing sets of meteorological and hydrological relevant data (high spatial resolution and long time series data) will be analysed

Meteorological and hydrological models will be applied, evaluated and developed

Prognosis/ scenarios of available water resources will be worked out

Applying regional-local climate change data to assess impacts and change on land use activities.

Assessment of vulnerability of water resources due to climate change and land use activities on transnational, regional and local level

Work out appropriate measures, guidelines and plans to adapt water supply to changing climate and land use activities

Point out possible consequences of climate change driven impacts on economy and society

### **Expected outputs and results**

**Reports and models describing the change of hydrological relevant meteorological parameters**

**Evaluation of meteorological and hydrological models in order to decide under which conditions they should be applied**

**Reports and models describing the impacts of climate change on various land use activities**

**Analyses of socio-economic aspects of climate change and water supply**

**Measures and management strategies for water supply systems in order to adopt to changing climate /land use activities**

**Innovative character of the project idea**

**It addresses a problem which has not been dealt with in the programme area**

**Newest scientific findings will be applied and new scientific knowledge will be worked out by the project**

**Climate change and its potential impacts on water supply will be considered from a technical, a scientific and a socio-economic view**

### **Partnership**

**Partners involved at this stage**

**ERDF  
Partners**

**Austria, Bulgaria, Hungary, Italy, Romania and Slovenia**

|                           |                |                    |
|---------------------------|----------------|--------------------|
| <b>Partners requested</b> | IPA Partners   | Croatia and Serbia |
|                           | ENPI Partners* |                    |
|                           | ERDF Partners  | Greece             |
|                           | IPA Partners   |                    |
|                           | ENPI Partners  |                    |

**Estimated Total Budget** 3,500.000

**Does your project idea foresee the application for the 10% rule\***

|  |  |
|--|--|
| <input type="checkbox"/> Yes. Please, explain in detail what will it be used for and the relevance for the project | <input checked="" type="checkbox"/> No |
|--|--|

**Estimated duration**  
(in months) 36

☒ I would like my project's idea to be published on the Southeast Europe Transnational Programme's website and presented during the SEE kick off event.

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\* ENPI Funds won't be available for the 1<sup>st</sup> Call. Partners from Ukraine and Republic of Moldova can be involved by applying for the 10% rule.

\* The 20% rule is not applicable for the 1<sup>st</sup> Call.