BalkanMed Borders as an opportunity

WATenERgy CYCLE is conceptualized on the basis of recognized transnational problems related to water supply in the BalkanMed area. The shared trans-boundary water resources, necessary for drinking water supply & also effective adaptation to climate change resilience is the core issue.

A network of expertise

The partnership is a well harmonized set of stakeholders from the entire BalkanMed area, primarily focused to the main actors in the field: 5 Water Utilities, 2 Associations (ERDF), 1 Research Institution and 2 Observers (EU & IPA level). The results will affect the entire area, providing practical guidelines, methodologies, tools & policies, addressing a wide spectrum of issues, which should be determined & maintained in the

"water is a precious social good; every drop counts & its value exceeds by far its real cost; let's treat it wisely"

case of transnational cooperation.

Project co-funded by the European Union and National Funds of the participating countries

Why WATEnERgy CYCLE

The WFD 2000/60, Drinking Water Directive 1998/83 & EU2020 strategy towards climate change & energy sustainability is the trigger of legislations' harmonization. Complying with that, WATenERgy CYCLE project aims at developing a common methodological approach towards efficient & effective transnational water & energy resources management.

Our common challenge is to increase the current low level of innovative technologies use along the water supply chain, from the water's source to its end-users and back to the environment along with the increase in climate change resilience.

WATenERgy CYCLE is a valuable & unique jointtool for the design, preparation & implementation of an integrated multi-level approach in the urban (short term), rural & industrial (midterm) environment, promoting a Europe of worth living solidarity.

http://www.interreg-balkanmed.eu/approvedproject/23/

Lead Partner: Municipal Water and Sewerage Company of Larissa, Greece www.deyal.gr





Partners

| Municipal Water and Sewerage Company of Larissa | Greece |
|--|--|
| Bulgarian Water Association | Bulgaria |
| Joint Stock Company Water Supply and Sewerage Korce | Republic of Albania |
| Special Secretariat for Water, Ministry of Environment and Energy | Greece |
| Municipal Enterprise for Water Supply and Sewerage of Kozani | Greece |
| Public Communal Enterprise Water supply and Sewerage- Prilep | The former Yugoslav Republic of Macedonia |
| University of Thessaly-Special Account Funds for Research- Department of Civil Engineering | Greece |
| Water Board of Nicosia | Cyprus |

Observer Partners

| EurEau | | | | EU |
|-----------|-------------|------|-------|-------------|
| Water | Supply | and | Sewer | Republic of |
| Associati | ion of Alba | Inia | | Albania |



The cooperation Programme

"INTERREG Balkan-Mediterranean 2014-2020" is a new cooperation Programme, deriving from both the strong will of the "BalkanMed" participating countries to promote cooperation in the area and the split of the "South East Europe 2007-2013". The Programme brings together five (5) countries, three (3) EU member states (Bulgaria, Cyprus and Greece) and two (2) candidate countries, Republic Albania and the former Yugoslav Republic of Macedonia.

It is the first time ever that the European cooperation addresses the Balkan Peninsula and the Eastern Mediterranean Sea together, in a joint effort across maritime and terrestrial borders, to contribute to the "EU 2020" strategy, for smart, sustainable and inclusive growth".



Scientific Coordination University of Thessaly, Greece Civil Engineering Dept. <u>http://www.civ.uth.gr</u>

The geographic & cultural context

WATenERgy CYCLE is part of the BalkanMED Programme between Albania, Greece, FYROM, Bulgaria and Cyprus. Its character is therefore strongly oriented towards cross-border action.



WATenERgy CYCLE results

- Increase of the level of use of innovative technologies regarding climate change and overall water management efficiency, including energy efficiency
- Reduced water losses and NRW in water distribution networks: identification of NRW causes; development of water distribution networks hydraulic simulation models; implementation of NRW reduction measures (pressure management; leakage detection)

- Water saving through informing consumers who will get water bills more often (shorter billing periods) as their consumption will be registered by smart water meters
- Energy Recovery through installation of energy recovery equipment at selected locations of the water supply network
- Full Water Cost (FWC) estimation methodology on a scientific model basis including direct, environmental, and resource costs calculations. An action plan is developed to assess and recover the FWC considering the WFD's guidelines and the methods applied
- Estimation and forecast of water demand related to the water price. Identification of the water price elasticity of demand
- Identification and analysis of the current urban water pricing policies implemented by water utilities. Development of an action plan to apply the appropriate water pricing policies based on the FWC considering also the "socially fair price" principle
- Water conservation by reducing water losses in distribution networks and water saving in water consumption through informed users with increased environmental awareness
- Reduced carbon and water footprints and energy consumption in the entire water supply chain. Their contribution to the programme and to the result indicators will be the increase of the level of adaptation to resources efficiency and climate change resilience measures in alignment with EU policy