# **Sustainable Concepts towards a Zero Outflow Municipality**



# Objective

Zer0-M aims at concepts and techniques to achieve optimised close-loop usage of all water and nutrient flows in small municipalities or settlements including tourism facilities. Zer0-M is about abandoning the concept of **waste** water.

# Target groups

Experts from administration, planning and design.

Politicians, schools and water users for awareness raising measures.

#### Content

Existing sustainable water management technologies

Integrated concepts for wastewater treatment and reuse in:

small rural settlements isolated tourism facilities peri-urban areas

Hygiene and good practice to avoid health hazards, from reuse of wastewater

Costs and tariffs.

# Innovation: "low tech - high concept" solutions

Integrated management of local drinking water supply, sanitation and sewage

Use of non-conventional water resources, e.g. rainwater and greywater.

#### **Activities**

#### **Exchange of know-how**

Webpage, Journal, Conferences, Training

### **Technology transfer**

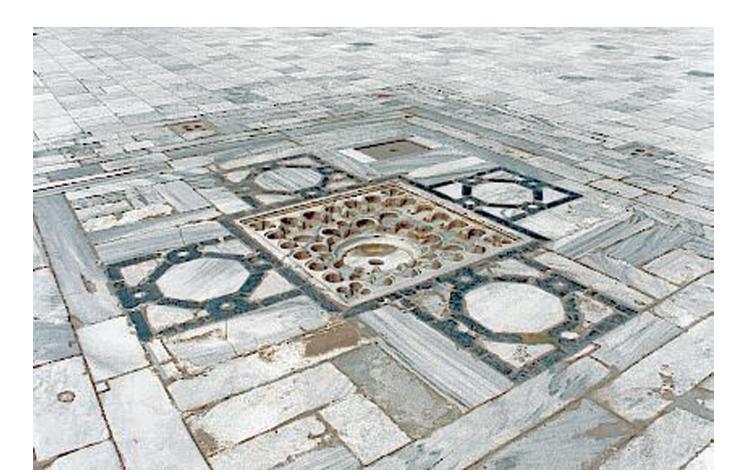
Small scale demonstration in training centres

Pilot plants

Development of a decision support system

**Awareness raising** 

www.zer0-m.org



Revival of traditions - Rainwater collection at Sidi Oqba Mosque, Kairouan Tunesia



Introduction of new techniques - Inhouse SBR greywater treatment



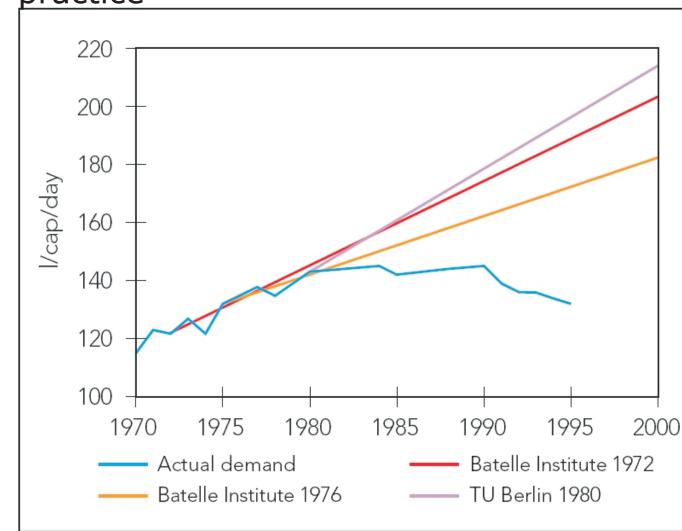
Research - Demonstration installations at partner institutions, here IAV Hassan II



Appropriate techniques - Constructed wetland in Italy, a treatment with low energy and maintenance requirements



Integrated approach for reuse - urine separation toilet as example for a good practice



Development of a policy - Water use is not a matter of trends but of joint political decisions by the stakeholders

Euro-Mediterranean Regional Programme for Local Water Management ( M E D A - W a t e r )





#### **Applicant**

AEE - Institute for Sustainable Technologies Gleisdorf, Austria +43/3112 5886 50 m.regelsberger@aee.at www.aee-intec.at



#### **Partners**

Ambiente e Lavoro Toscana Firenze, Italy

Tübitak-Marmara Research Center Gebze, Turkey

National Research Centre Cairo, Egypt

Wastewater Treatment and Recycling Laboratory, Centre de Recherches et des Technologies des Eaux, Soliman, Tunisia

Wastewater Treatment and Reuse Unit, Institut Agronomique et Vétérinaire Hassan II Rabat, Morocco

Institut für Geographie und Regionalforschung, Universtität Wien Wien, Austria

Zentraleinrichtung Kooperation, Technische Universität Berlin Berlin, Germany

Institut für Verfahrenstechnik, Technische Universität Berlin Berlin, Germany

Zentrale Einrichtung für Weiterbildung, Universität Hannover Hannover, Germany

Fachvereinigung Betriebs- und Regenwassernutzung Darmstadt, Germany

