

Wastewater Reuse Optimization in Hot Weather Urban Environments

Acronym: WOW

Project members (ROSE Consortium):

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Growing population, industrialization, agricultural practices and urbanization have increased the water demand and hence the quantity of wastewater (WW). Availability of drinking water, including different components of daily per capita demand in developing countries, is becoming a serious issue to manage. To fight with growing water stress, reclamation and reuse of treated WW for various day-to-day uses except for drinking purpose is necessary. Reuse of WW in developing countries, may bridge the gap between supply and demand of water in the future.

Why do we respond to this call?

WOW is a mission to improve the WW treatment and reuse practices in developing countries. In serving this mission, WOW concentrates on the integration of policies, technologies and management systems to achieve workable solutions to real problems—practical, relevant results in the WW treatment and reuse.

In developing countries of Asia and Africa, WW reuse in the form of irrigation is a common practice, whereas it is not common for industrial purpose. Wastewater is used either raw or partially treated due to high treatment costs. Therefore, the greatest challenge in reuse of the WW is the implementation of low cost sewage treatment that will at the same time permit its selective reuse for agricultural and industrial purposes.

The greatest challenge in the water and sanitation sector over the next two decades will be the implementation of low cost sewage treatment that will at the same time permit selective reuse of treated effluents for agricultural and industrial purposes.

In serving this mission WOW will concentrate on the integration of policies, technologies and management systems to achieve workable solutions to real problem by:

- Assessing historical and current development of WW treatment and reuse
- Mapping laws and regulations of WW reuse
- Defining the sectoral water demand and quality
- Assessing social perception (behavior, acceptance etc...)
- Developing and providing tools (Multiple Category Analysis (MCA), models etc...)

We are drawing since many years of practical experience in working with users, communities, water managers and decision makers in the field of WW and water resources management in arid environment. Our comprehensive concept is ambitious, yet realistic. It requires a large consortium (which we know to manage well).

**Total budget requested from the WWW-YES foundation:
295,915 Euros**