

Stockholm World Water Week | Water and waste: Reduce and reuse
27 August - 1 September 2017

MENA FOCUS - Investment potential in wastewater treatment and reuse
Tuesday, 29 August 2017, 11h00-12h30, NL Pillar Hall

Convenor: Global Water Partnership-Mediterranean (GWP-Med)

Introduction

MENA is considered the most water-scarce region in the world. Over 60% of the region's population lives under high or very high water stress, almost double the share for the rest of the world. Water-related challenges are expected to further increase due to the impacts of climate change. Countries in the region depend on seasonal rainfall and a modest number of rivers, and often rely on fragile, and sometimes non-renewable, aquifers. Over-pumping of groundwater lowers the water table and deteriorates groundwater quality, including increasing the salinity levels.

Further to water scarcity, which in some cases can turn into acute water stress, conditions that exacerbate the situation include demographic changes, unemployment, poverty, changing consumption patterns including rising water and food demands, urbanisation, growing energy needs, environmental degradation, climate change, gender disparities. Moreover, part of the region currently faces an enduring economic crisis, socio-political instability, conflicts and large-scale migratory movements, often under dramatic conditions. The vast majority of these conditions have a direct impact on the availability and quality of water resources for people and nature in the Mediterranean, with high and rising associated costs in human lives and in monetary terms.

In order to effectively address the water predicament, there is an urgent need for action at national and regional levels, involving both water supply and demand measures. In particular, Non-Conventional Water Resources (e.g. treated wastewater, rainwater harvesting, desalination, etc.), remain a largely un-tapped resource of significant potential for the region.

The rate of wastewater treatment remains low in most MENA countries and most initiatives of wastewater reuse concern pilot applications. Some key challenges and obstacles to increasing the rate include:

- Inadequate information on impacts, options, benefits and costs
- Lack of cost-recovery mechanisms
- Social pressure for using freshwater instead of wastewater
- Inefficient water management schemes to promote its use
- Lack of available financing for investments in needed infrastructure

Wastewater management is an exceptional example of the necessary paradigm shift towards sustainable development, providing multiple social and environmental benefits: from respect to the human right to water and sanitation and reduced health risks, to water reuse, resource recovery and depollution efforts. Further to strong linkages with the SDGs (SDG 6, target 3; SDG 12, target 5), wastewater treatment can play a significant role in climate change adaptation and mitigation strategies, while improving resource efficiency not only in the water sector, but also in energy and food -thus addressing the nexus correlation- can contribute to overall security and sustainability and maximise benefits.

Sectors where fit-for-purpose reuse of treated wastewater can be applied, all requiring abiding to internationally accepted quality standards and controls, include:

- Urban reuse (e.g. irrigation of parks and gardens, toilet flushing, fire protection);
- Agricultural reuse of high-quality treated water for food crops, but also of lesser quality for non-food crops (e.g. fodder and fibre), pasture lands;
- Recreational reuse in ponds and lakes;
- Environmental reuse for creating artificial wetlands, enhancing natural wetlands and sustaining stream flows;
- Industrial reuse, mainly for process water and cooling water, as well as linked to other economic activities like tourism;
- Groundwater recharge via direct injection to groundwater aquifers.

Furthermore, wastewater can be also a resource, for example through:

- Energy recovery in the form of biogas, heating/cooling and electricity generation
- Nutrients (mainly phosphorus and nitrogen) for agriculture
- High-value by-products, including metals and other inorganic compounds

Objective of the session

The session on “Investment potential in wastewater treatment and reuse” is organised within the framework of the regional project “Governance & Financing for the Mediterranean Water Sector”¹. The project, designed and implemented jointly by the Global Water Partnership-Mediterranean (GWP-Med) and the Organisation for Economic Cooperation and Development (OECD), is supported by the Swedish International Development Cooperation Agency (Sida) and has been formally labelled under the Union for the Mediterranean (UfM) political framework.

The event, organised by the Global Water Partnership-Mediterranean (GWP-Med), will take stock of the needs, efforts and challenges in the MENA region regarding the financing and the preferred enabling environment for attracting investments -including through PSPs- in the area of wastewater treatment and reuse, as well as of best practices and lessons learnt. Input will be provided from countries and financiers. Benefits from synergies with the Nexus approach and national climate actions will be explored, including as a contribution to increasing employability in the water sector.

Specific Objectives of the session include:

- Exchange experiences on wastewater treatment and reuse options and potential in the MENA;
- Present best practices and lessons learnt, good examples as well as failures;
- Recommend approaches for promoting wastewater treatment investments and identify priority options for low-hanging investment opportunities;
- Highlight the enabling environment needed for private sector involvement through the governance-financing interplay;
- Discuss the role of the private sector -as well as that of International Financing Institutions- and the potential for PPPs in wastewater treatment;
- Highlight the gender, youth and other social dimensions of investments in the sector;
- Explore synergies with the agricultural and energy sectors under a Nexus approach and with the national climate NDCs process;
- Elaborate on how new markets and job skills on related technologies may be promoted and sustained;

¹ <http://www.gwp.org/governanceandfinancing/>

- Strengthen cooperation and enhance partnerships among countries/stakeholders to address common challenges;
- Discuss policy messages and ways forward.

Expected outcomes:

- Common understanding of the benefits of wastewater treatment and reuse;
- Enhanced knowledge of decision-makers and financiers for promoting investments;
- Identified challenges and opportunities for knowledge sharing and collaboration among stakeholders.

The event is relevant to representatives of:

- Government authorities from water and finance sectors;
- water and wastewater utilities as well as regulators;
- Private sector with an interest in water PPPs;
- Civil Society, International and Regional Organisations;
- Donor and financing institutions active in water issues in MENA;
- Academia and research institutions

Agenda

11:00 **Opening Session – which way towards sustainable investments?**

- Miguel Garcia-Herraiz, Deputy Secretary General, Water and Environment Division, Union for the Mediterranean (UfM)
- Esse Nilsson, Senior Programme Manager, Unit for MENA, Swedish International Development Cooperation Agency (Sida)
- Oyun Sanjaasuren, Chair of GWP
- H.E. Abdallah Rebhi, State Secretary, Ministry of Agriculture, Water Resources and Fishery, Tunisia

Moderator: Vangelis Constantianos, Executive Secretary, GWP-Med

11:25 **Reflections & findings from ongoing work in the MENA/Mediterranean**

- The Governance & Financing Nexus for sustainable water services
Anthi Brouma, Deputy Regional Coordinator, GWP-Med
- Non-conventional Water Resources – experience from Mediterranean islands with replication potential in the MENA
Konstantina Toli, Senior Programme Officer, GWP-Med

11:40 **Facilitated Panel Discussion**

- Natasha Carmi, Policy Advisor, Water, Environment, Agriculture and Energy, Palestinian Negotiations Support Project
- Ali Subah, Secretary General Assistant, Ministry of Water and Irrigation, Jordan
- Dionysia Avgerinopoulou, Chair, Circle of Mediterranean Parliamentarians for Sustainable Development (COMPSUD)
- Richard Abdounour, Advisor to the World Bank Vice President for the MENA Region
- Souad Farsi, Programme Management Analyst, Mediterranean Hot Spots Investment Programme (MeHSIP), European Investment Bank (EIB)
- Delphine Clavreul, Policy Analyst - Water Governance Programme, Regional Development Policy Division, Centre for Entrepreneurship, SMEs, Local Development and Tourism (OECD)
- Anja Taarup Nordlund, Gender Expert & Managing Director, NCG Sweden

Facilitators: Tassos Krommydas, Senior Programme Officer, GWP-Med & Anthi Brouma, Deputy Regional Coordinator, GWP-Med

Open Q&A section

12:25 **Conclusions and key messages**

- Miguel Garcia-Herraiz, Deputy Secretary General, Water and Environment Division, Union for the Mediterranean (UfM)
- Esse Nilsson, Senior Programme Manager, Unit for MENA, Swedish International Development Cooperation Agency (Sida)
- Vangelis Constantianos, Executive Secretary, GWP-Med