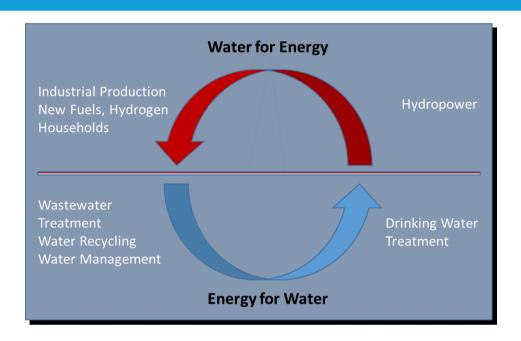


# MENA Webinar on

# Water-Energy-Nexus in MENA region

Part I – Thursday 15 October 2020 Part II – Wednesday 21 October 2020



# **KEYNOTE SPEAKERS**



Prof. Raja Ben Amary University of Sfax, Tunisia



Prof. Chris Buckley University of KwaZulu-Natal, South-Africa



Prof. Zekai Sen Technical University of Istanbul, Turkey



Prof. Driss Ouazar
Director of the College of
Environmental, Land and
Water Sciences and
Techniques, Morocco









# INTRODUCTORY NOTE

Water and energy are fundamentally linked. At a basic level energy conversion requires water, and water treatment and transportation use energy (electricity). Historically, there has been little reason to understand the nature of these links, due largely to the presumption that water was not a threat to energy security, nor was electricity a threat to water security. This presumption is now being challenged. Industry reforms, increasing demand, and more recently climate change – are bringing into sharp focus the links between water and energy (electricity) in unprecedented ways. General awareness of the links between water and electricity is increasing daily, as the ramifications of the links are being felt the world over. Particularly in developing countries where the pressure will be the most severe, it is critical to identify where future infrastructure development will take place.

That is why the Water-Energy-Nexus approach is becoming increasingly an issue among practitioners and scientists.

The reason for this increased attention lies in production and consumption trade-offs that have emerged with the increase in water scarcity and global economic competition in recent decades.

The Nexus emphasizes the need to rationally study the use and management of both resources and to define future opportunities and risks in resource requirements and to seriously consider both environmental and economic issues.

Although water and energy can be analyzed independently, there are many interdependencies that have a joint impact on mutual sustainability.

The objectives of the Webinar are to share case studies and tangible examples of Water-Energy-Nexus, share lessons learnt and create a common understanding of challenges and opportunities.

The Water-Energy-Nexus approach provides an important framework for promoting a coherent, holistic and integrated implementation of the related Sustainable Development Goals (SDGs), given the interdependencies among these sectors. In the Middle East and North Africa (MENA), stress on natural resources is increasing due to a variety of factors – demographic changes, improved living standards, socio-political transformations, climate change impacts – that affect all productive sectors. Among the resulting challenges, the energy costs for water production and distribution steadily increase while environmental status remains challenging.

#### ORGANISATIONAL NOTE

The webinar will take place online on 15/10/2020 and 21/10/2020 from 10:00 am to 12:30 pm and will be conducted in English. The attendance is free.

To attend the webinar kindly *register to get a certificate of attendance.* The link to the online platform will be provided after registration. We recommend you check your time zone here. Feel free to share this invitation with your colleagues.

### ORGANISING COMMITTEE

Prof. Zeinab Abou Elnaga (MENA Regional Coordinator), Mansoura University
Prof. Souad El Hajjaji, Mohammed V University in Rabat
Prof. Eyüp Debik, Yildiz Technical University
Prof. Abbas Al Omari, University of Jordan
Prof. Cheima Fersi, National Institute of Research and Physical-chemical Analysis INRAP
Prof. Andreas Haarstrick, Technische Universität Braunschweig







# **SCHEDULE**

Thursday, 15 October 2020					
Date	Time	Activity	Details		
Part I	10:00	Welcome Address	Prof. Zeinab Abou Elnaga Prof. Souad El Hajjaji Prof. Andreas Haarstrick		
	10:10	Introduction (Webinar Briefing)	Prof. Andreas Haarstrick		
	10:25	<ul> <li>Keynotes:</li> <li>"Hydrologic Cycle and Dam Combination Significance under Climate Change Impact for Hydroelectric Energy Generation" (Prof. Zekai Sen), 25 min.</li> <li>"Water for Energy Perspective-Challenges" (Prof. Driss Ouazar), 25 min.</li> </ul>	Part I <b>Water for Energy</b>		
	11:15 11:40	<ul> <li>Contribution from Mena Colleagues about the webinar topic</li> <li>Questions, Discussion, Summary (20 min.)</li> </ul>			
	12:30	Closing			

Wednesday, 21 October 2020					
Date	Time	Activity	Details		
Part II	10:00	Welcome Address	Prof. Zeinab Abou Elnaga Prof. Souad El Hajjaji Prof. Andreas Haarstrick		
	10:10	Introduction (Webinar Briefing)	Prof. Andreas Haarstrick		
	10:25	<ul> <li>"Zero external energy domestic wastewater treatment systems" (Prof. Chris Buckley), 25 min.</li> <li>"Energy saving ceramic membrane production for water treatment using low cost natural materials" (Prof. Raja Rekik Ben Amar), 25 min.</li> </ul>	Part II Energy for Water		
	11:15 11:40	<ul> <li>Contribution from Mena Colleagues about the webinar topic</li> <li>Questions, Discussion, Summary (20 min.)</li> </ul>	_		
	12:30	Closing			

#### Registration

Please register under:

http://mena.exceed-swindon.org/announcements/mena-webinar-registration/

# **MENA Regional Network Members**

Agronomic and Veterinary Institute Hassan II (Morocco)

Ain Shams University (Egypt)

Akdeniz University (Turkey)

Institute of Agronomic Sciences of Chatt-Meriem

(Tunisia)

Mansoura University (Egypt)

Mohammed V University in Rabat (Morocco)

Mutah University (Jordan)

National Institute of Research and Physical-

chemical Analysis INRAP (Tunisia) Necmettin Erbakan University (Turkey)

Tübitak (Marmara Research Centre, Turkey)

University of Jordan (Jordan)

Yildiz Technical University (Turkey)

Zagazig University (Egypt)





