



Digital Transformation for Advancing the WEF E Nexus

**7th Arab Water Week
4th – 6th May 2025
Session on 4th of May 2025
Time: 1:30 – 15:00
Dead Sea, Jordan**

In partnership with Arab Countries Water Utilities Association (ACWUA) and The Middle East Water Forum (MEWF), we are inviting you to **Digital Transformation for Advancing the Water-Energy-Food-Environment (WEFE) Nexus High-Level Session.**

Organized by: MEWF & ACWUA

Chair of the Session:

H.E. Dr. Hazim El-Naser, Founder and Chair of the Middle East Water Forum

Session Description: The increasing interdependencies of water, energy, food, and environmental systems (WEFE Nexus) demand innovative solutions to tackle the challenges of resource management in a world facing population growth, climate change, and technological advancement. Digital transformation offers unprecedented opportunities to optimize the WEFE Nexus through data integration, smart technologies, and decision-support systems. This session will explore how cutting-edge digital tools and technologies can revolutionize resource management, improve efficiency, and foster sustainable development in the Arab region.

This session brings together distinguished experts and thought leaders to discuss the latest advancements and practical applications of digital transformation for the WEFE Nexus. By presenting case studies, successful examples, and innovative technologies, the session aims to provide actionable insights and foster collaboration among stakeholders.

Objectives:

- 1. Highlight the Role of Digital Technologies:** Showcase how emerging technologies, such as artificial intelligence (AI), big data, IoT, and digital twins, can drive sustainable management of water, energy, food, and environmental resources.
- 2. Discuss Challenges and Opportunities:** Identify the barriers to digital adoption in the WEFE Nexus and explore solutions to overcome them, emphasizing the role of policy, governance, and capacity building.

3. **Promote Collaboration:** Encourage partnerships among governments, private sector, academia, and international organizations to accelerate the digital transformation of the WEFE Nexus.
4. **Inspire Regional Action:** Demonstrate how digital transformation can address specific challenges in the Arab region and align with regional and global sustainable development goals (SDGs).

Session Structure: The session will be structured to maximize engagement and knowledge exchange through the following:

1. **Opening Remarks (10 minutes):**

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Introduction to the importance of digital transformation for the WEFE Nexus and setting the context for the discussion.

2. **Panel Discussion (40 minutes):**

- **H.E. Prof. Dr. Hani Sewilam**, Minister of Water Resources and Irrigation, Egypt (TBC).
- **Dr. Amgad El Mahdi**, Regional Manager for the Middle East and North Africa at the Green Climate Fund
- **Mr. Ziad Khayat**, Senior Sustainable Development Officer, ESCWA.
- **Dr. Hassan Aboelnga**, Lecturer at Cologne University of Applied Sciences and Chair of the Water Security Working Group at the International Water Resources Association (IWRA).
- **Eng. Ahmad Abu Soud**, Technology and Information Systems Director at Aqaba Water Company

3. **Panel Discussion and Q&A (40 minutes):**

Moderated discussion focusing on practical applications, success stories, and challenges of implementing digital solutions in the Arab region.

4. **Conclusion and Recommendations (10 minutes):**

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Summary of key takeaways and call to action for stakeholders.

Expected Outcomes:

1. Increased awareness of the potential of digital transformation to address challenges in the WEFE Nexus.
2. Practical recommendations for policymakers, practitioners, and researchers to adopt digital solutions.
3. Strengthened collaboration among stakeholders in the Arab region and beyond to leverage digital technologies for sustainable development.
- 4.

Target Audience:

- Policy makers and government officials
- Water, energy, and agricultural sector professionals
- Researchers, academics, and students
- Technology providers and private sector stakeholders
- International and regional organizations

Join us to explore the transformative potential of digital technologies in advancing the WEFE Nexus and shaping a sustainable future for the Arab region!

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