

in collaboration with its member, UN ESCWA, held a virtual webinar on Desalination Using Renewable Energy on 7 June 2021. More than 80 participants attended from all regions around the world across various sectors including national governments, NGOs, private sector, academic institutions, IGOs and UN system. The objective of the webinar was to discuss and Mr. Kharraz then explained the desalination technologies advantages in Morocco such as competitive implementation costs, technologies adapted to country's energy type, low specific energy consumption and proven development. Mr. Kharraz then stressed upon the main challenge of RE Desalination and how they are solved by adjustments for continuous supply and variable operations.

The presentation concluded with the presentation of DESSOL systems in Morocco that

cattle farming and the Moroccan implementation of the roadmap (2021-2030) related to hydrogen, biomass & natural gas.

- b. Mr. Nadjib Drouiche, Senior Researcher (Algeria) explained Algeria's growing demand for water driven by population growth and rural-to-urban migration as well as little rainfall and an uneven spatial distribution of water resources. Mr. Drouiche then presented large-scale desalination plant projects in Algeria such as those in Maqtaa and Hassi-Khebi. A feasibility/case study was also explained for each of the desalination projects with their interlinkages to sustainability and economic growth. The presentation closed off by explaining that desalination is an energy-intensive technology, with the main drivers being economic requirements and population growth. The substitution of fossil energies by renewable energy can be achieved but must be strengthened from a policy and investment perspective.
- c. Mr. Kamel Fethi, Water Treatment and Desalination Expert (Tunisia) described the countries' suffering of limited water resources and the importance of the non-conventional water resources and renewable energies needed for water supply at domestic, industrial, and agricultural levels. He then explained Tunisia's ambitious programs and gave an outline of Tunisia's water resources. One very important topic discussed was the need for the development of non-conventional water resources since they increase the rate of wastewater reuse, consider aquifer artificial recharge, and support wastewater recycling.

The presentation closed off by explaining that the priority to move forward should be the management of water mobilization, the promotion of water saving, and the intensity of water demand management.

- d. Mr. Yonay Concepcion, Head of Hydraulic Resources Division at Gran Canaria Water Council (Spain) began the presentation explaining that

MASDAR pilot projects at Ghantout and the new 200MIGD RO project at Taweelah were presented and technically analyzed.

- f. Mr. Mahmoud Elwan, Business Development Manager at IDWT first began by introducing the company as a whole and then explained the company's role related to Mobile SWRO Solutions. The presentation then focused on the problems faced with SWRO plants related to brine injection, existing technologies and electrical consumptions.
4. Discussion and Questions: The panel was followed by an interactive Q&A session. The participants thanked the speakers for the contribution and several questions were asked. The discussion mainly focused on the implementation of renewable energy technologies for desalination plants supported through policy and financial perspectives. Focus on cooperative efforts between countries to interlink different sectors through desalination projects was also discussed alongside the contribution to economic growth, employment, equality and energy access.
5. Closing Remarks and Way Forward: Ms. Radia Sedaoui, Chief of the Energy Section at UN ESCWA provided the closing remarks. She thanked the speakers for their contribution and insightful input with future efforts for a follow-up webinar that will give an update onto the progress of the discussed projects. The need for collaborations and partnerships was also highlighted alongside the promising future ahead enabled through renewable energy technologies.

