

Call for Proposals - 2020

Monitoring water quality, water security and environmental safety

- Methods for the rapid identification of chemical contaminants, pathogens and indicators in the field, in the laboratory and continuously in water supply systems.

Water treatment

- Proven, innovative technologies (at least TRL 6-7) that can be implemented for potable water and that removes the following contaminants: volatile, organic contaminants (VOC such as vinyl chloride, trichloroethylene, tetrachloroethylene), nitrates, sulfides, explosive residues, fuel residues, chrome.

Tools and models to support decision-making processes in the field of water quality

- Integrated hydraulic-water quality model for the monitoring and tracking of water quality, and alerts regarding water quality levels in water provided through consumer connections and alerts regarding trends and changes.

Sewage Treatment and Waste Water Reclamation

- Innovative technologies to remove dissolved organic materials from treated wastewater (with an emphasis on organic micro contaminants, hormones and drugs) to IPR (Indirect Potable Reuse) quality levels.

Desalination and membrane systems

- Technologies that enable desalination with a higher recovery ratio for raw water with high concentrations of silica.
- Treatment of effluent concentrate/brine (after treatment in a UF-RO facility) and especially for the removal of all organic materials.

Energy

- Production of renewable energy in water facilities while exploiting Mekorot's relative advantages and the dual use of facilities and areas.

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Engineering services

- Innovative technologies to improve the safety of soil reservoirs and technologies for assessing the quantity of water leakage through the reservoir's sealing and their location.
- Technologies and models for predicting drilling behavior during earthquakes.
- Technologies and decision support systems for monitoring the state of tensioning cables in 66" and 108" diameter prestressed concrete pipes.
- Methods for reducing energy consumption in pumping systems.

Information systems

- Tools at least at a prototype level for optimizing maintenance operations based on a fault history analysis.

Command and control

- Remote control, control technologies, support for advanced control and communication protocols, and the ability to interface with existing controllers.