

Appraisal of institutional and policy framework conditions for the use of autonomous desalination units in Jordan

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ABSTRACT

Jordan is one of the most water-scarce countries of the world. This scarcity is driven by low rainfall rates and sudden increases in population due to several armed conflicts in the region. Jordan imports almost all of its energy needs. More attention is being currently given to renewable sources of energy especially with the concerns about climate change and volatile fossil fuel prices. Desalination of brackish water is part of Jordan's water strategy. However, autonomous desalination units powered by renewable energy systems represent a new concept in Jordan, albeit, they can have great potential as a decentralized water manufacturing option. Institutional and policy framework conditions in Jordan's water sector are reviewed in order to establish how accommodating the set-up is to the introduction and development of such new technologies. Analysis of pertinent laws and a questionnaire completed by relevant officials and managers revealed the need for a water law to replace the current legal framework and policies, addressing, inter alia, the issues of tariffs and embracing new water technologies.

Keywords: Autonomous desalination; Decentralization; Institutional framework; Jordan; Renewable energy; Tariffs; Water policy

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