

## Climate change and water desalination in MENA – World Bank involvement

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Received 10 September 2008; Accepted 7 January 2009

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### ABSTRACT

This paper presents the water sector challenges and the expected impact due to climate change in the Middle East and North Africa (MENA) region. The World Bank and other international funding agencies recognized the already existing water crisis in many places around the world. As an outcome to an integrated water resources management there will be a need for proper supply and demand management. However, the enhancement of the existing water resources via wastewater reuse and brackish and seawater desalination is eminent. It will be even applied at a larger scale when the adverse effect of the climate change on water resources will be considered. The World Bank is allocating billions of dollars to mitigate for the climate change and reduce the global warming effects via the improvement in the energy efficiency, energy conservation and enhancement of renewable energy resources. Some mechanisms where established that the water resources enhancement can benefit from. These include the Clean Development Mechanism and the Joint Implementation in relation to the Carbon Financing. The paper will touch base on the wide perspective of the Bank's initiatives and mechanisms aiming at securing water supply under expected increasing scarcity.

*Keywords:* Desalination; Climate change; Kyoto Protocol; Efficiency; Carbon finance; Reverse osmosis; Water scarcity; Demand; Supply

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