Towards COP27: Arab Regional Forum on Climate Initiatives to Finance Climate Action and the SDGs

Project Fact Sheet

Aqaba-Amman Water Desalination & Conveyance Project (AAWDCP)

*Renewable Energy Component*

JORDAN

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**Description**

Jordan is one of the most water scarce countries in the world and the need for potable water continues to grow. This is the combination of an increasing population, the decrease of water supply, the negative impact of climate change, and the growth of the economy. The AAWDCP is the largest national desalination project in Jordan. Upon completion, it will provide Jordan with 300 million cubic meters of desalinated Red Sea water per year.

The project main objectives are to secure future supply of drinking water in the Aqaba, Amman, and other Areas, to achieve the desired supply of desalinated water at reasonable costs, to support economic growth and activity in Jordan and to promote private sector involvement in the water sector.

The project includes the following components: Marine works, Desalination facility, Freshwater Conveyance System around 450 kilometers of pipelines, Booster pump stations and regulating tanks to convey freshwater to the Abu Alanda and Al Muntazah Reservoirs in Amman, and Renewable Energy Facilities, e.g., a solar PV plant necessary to supply the Project’s power requirements from its own renewable energy resources.

The National Water Strategy, NDCs, and all other national water strategy documents reference the AAWDCP.

**Beneficiaries**

4.2 – 5 million people as the direct beneficiaries of the project, as well as people who will benefit from the mitigating benefits of the renewable energy component.

**Climate rationale**

The UNFCCC estimates 13.6% reduction in rainfall by the year 2040, groundwater and surface water resources are estimated to be reduced by 100MCM/yr; existing dams are running dry in summer months. A gap in water availability is projected at 323 MCM/yr in 2030 and 423 MCM/yr in 2040, which is equivalent to the average demand of over 5 million people. This will lead to continued and increased strain on social and economic growth and national health as well as lost opportunity to enhance other sectors, e.g., tourism industry etc.

The Ministry of Water and Irrigation (MWI), and upon the Cabinet decision, is committed to increasing the renewable energy use of the project by limit the greenhouse gas (GHG) emissions from electrical energy generation in the AAWDCP to a maximum of 3.2 kgCO2e/m3 of desalinated water delivered to Amman.

**Expected outcomes**

- Increase the resilience of the water supply by substantially increasing water production by providing up to additional 300 million cubic metres of water per year to Amman
- Adapt to and potentially mitigate the impacts of climate change, and limit greenhouse gas (GHG) emissions from electrical energy generation in the AAWDCP to a maximum of 3.2 kgCO2e/m3
- Create jobs both during construction and operation
### GHG reduction target

As confirmed by Cabinet decision, the Ministry of Water and Irrigation is committed to increasing energy efficiency in the project by requiring Bidders to limit GHG emissions from electrical energy generation in the AAWDCP to a maximum of 3.2 kgCO2e/m3 of desalinated water delivered to Amman.

### Project implementation period

- **Planned start date:** 12/2023
- **Planned end date:** 31/12/2026

### Total Project Cost *(For RE Component only)*

- **Amount in National Currency:** JD 283,687,943
- **Amount in US$ equivalent (per 1 August 2022 exchange rate):** USD 400,000,000

### Financing requirement *(For RE Component only)*

- **Amount in National Currency:** JD 283,687,943
- **Amount in US$ equivalent (per 1 August 2022 exchange rate):** USD 400,000,000

The Government of Jordan has already committed to a total contribution of USD 452,500,000 of the USD 3 billion for the Total Desalination Project.

### Expected Tenor / Duration of financing:

- 20 years

### Project Status:

- Tendered

### Contractual Structure:

- Time-bound concession

### Project proponents

- Ministry of Water and Irrigation, Winning Bidder (from 5 prequalified consortiums)

### Contact persons

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### Emblem

Change in temperature compared to the reference period based on RICCAR Mashreq Domain Ensemble for SSP5-8.5

Change in precipitation compared to the reference period based on RICCAR Mashreq Domain Ensemble for SSP5-8.5

### AAWDCP Project Video available at: [https://m.facebook.com/watch/?v=715426156291155&_rdr](https://m.facebook.com/watch/?v=715426156291155&_rdr)