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# **Reuse of Treated Wastewater for Irrigation Purposes in the Northern Jordan Valley**

The treated wastewater of two rehabilitated Waste Water Treatment Plants (WWTP) and of a newly constructed WWTP in the region of Central Irbid shall be used for the irrigation of agricultural land in the Jordan Valley. As part of the project, the utilisation of the available hydropower potential of the treated wastewater was analysed, a Small Hydropower Plant was designed and its implementation was tendered.



## **Country:**

Northern Jordan Valley, Jordan

**Project Period:**

2011 to 2013

**Services Provided:**

**Backstopping & Technical Advice**

- Conceptual planning and design of the facilities for hydropower production

**Name of Staff involved and functions performed:**

[Martin Bölli](#), technical expert

**Name of Partner Organisation(s):**

AHT Group AG

**Name of Client(s):**

KfW Bankengruppe

**Description of the Project:**

Discussion of the general concept of reuse alternatives in a workshop, conceptual planning and preliminary design of the hydroelectric facilities, examination of technical and economic feasibility, workshop to present results; finalisation of feasibility study, detailed design, cost estimates and tender documents including BoQ, tender evaluation and review of contractors final design.

Results: The exploitation of the hydropower potential in an irrigation system with treated waste water is demonstrated as a showcase for the optimisation of water and energy resources (and nutrients).