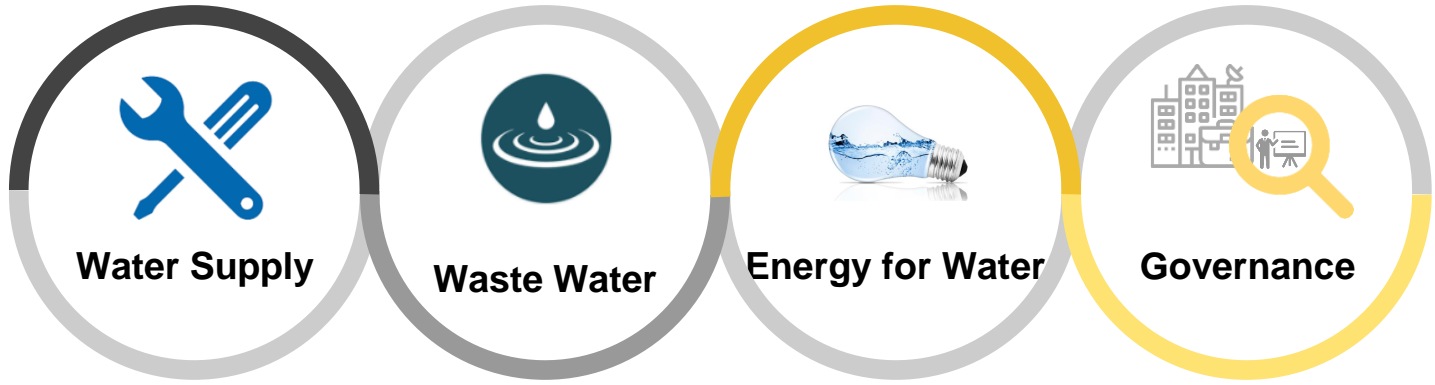




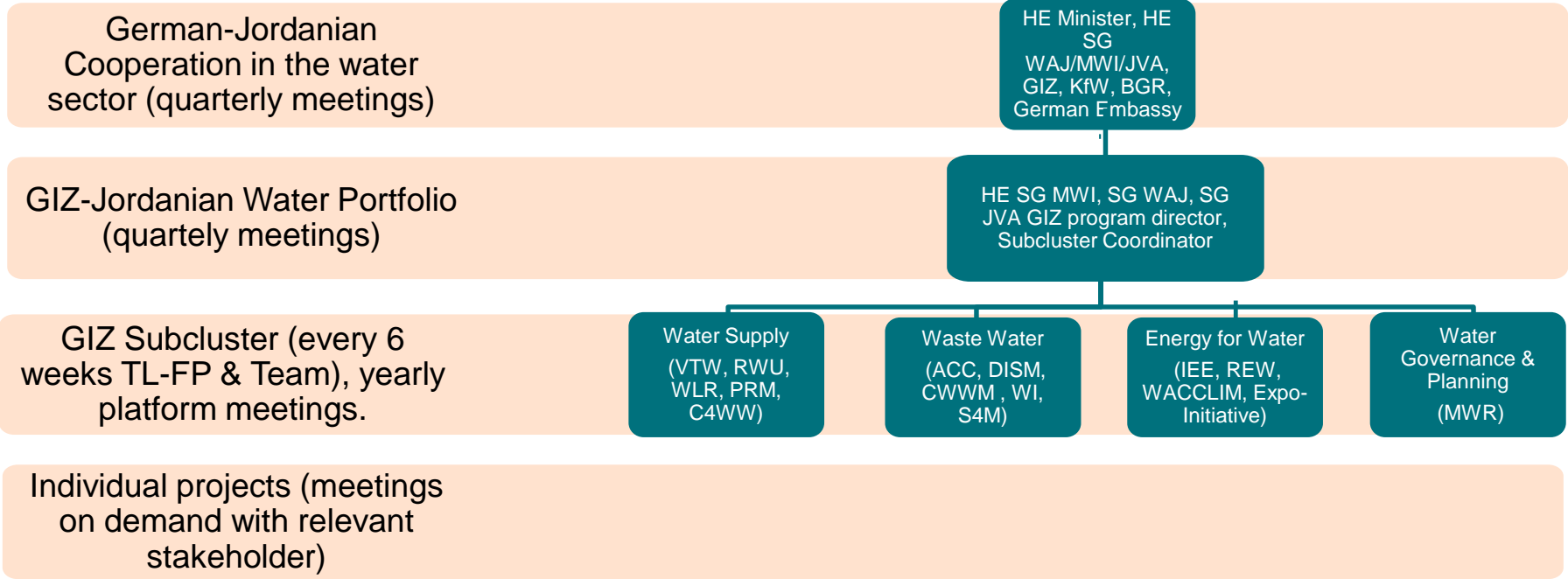
# GIZ Water Portfolio Jordan



# Steering and Monitoring Structure



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*Water for Life*  
*Jordan's Water Strategy*  
*2008 - 2022*



Rev. 10.270309

# Sub Cluster Water Governance and Planning



# Our approach of improving governance in the water sector



## Develop Strategies and Policies

Come up with a clear strategic orientation for the water sector..

## Improving the water resources modelling and planning

Improve modelling capacities and integrated planning to allow for an efficient and sustainable use of limited resources

**1 GIZ Project**  
MWR

## Support effective irrigation in the Jordan Valley

Support the reform for decentralized irrigation management. Strengthen capacities of WUA to take over full responsibility for water allocation and maintenance.

**9.0 Mio. EUR**  
current budget of  
MWR project

## Strengthen leadership and management skills

Support institutions to apply the KAA principles

## *Effective Regulation and Private Sector Participation*

Support regulatory framework conditions and PSP to improve sector performance.



## Major achievements and future milestones

- Sector policies approved, Action Plans for implementation and monitoring drafted (MWI)
- Modelling unit established in MWI, basin model and country-wide model operational (MWI)
- Vision and Action Plan for decentralized irrigation management approved (JVA)

### Future joint milestones

- WEAP Model is further improved and used for **strategic planning** and forecasting (linked to groundwater model MODE FLOW)
- Updated **Master Plan** in place.
- Irrigation in **South Shouna is efficiently managed** (operation and maintenance) by **one** water user association > significant reduction in water losses and illegal water connections.
- **Strengthened regulation** and oversight function. Strong and effective performance monitoring of utilities in place.
- At least two further O&M contracts with the **private sector** concluded.

An aerial photograph of a wastewater treatment plant. In the foreground on the left, a large, cylindrical tank with a corrugated metal exterior is visible, featuring a prominent spiral staircase. To the right, several large, white, cylindrical tanks are arranged in a row. In the center, there are circular aeration basins. The facility is surrounded by a paved road and a concrete wall. The background shows rolling green hills under a clear blue sky.

# Sub-Cluster Wastewater



# Our approach of improving wastewater sector in Jordan



## Improving Operation and Maintenance

Improving wastewater management competencies in WWTP to secure the safe disposal / reuse of treated wastewater.

## Improving Sludge Management

Improving collection, transport, and treatment of sludge from sanitation systems

## Decentralized Wastewater Management

Promote decentralized wastewater management in densely populated areas where a proportion of population is not connected to a sewerage network.

## Institutional & Human Capacity Building

Support institutional and individual capacity development in the wastewater / sanitation sector

## Awareness Raising

Communicate and improve the image of wastewater management with focus on different target groups.

## 5 GIZ Projects

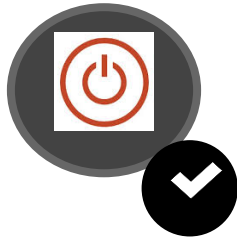
are currently ongoing  
(ACC, CWWM,  
DISM, S4M, WI)

## 22.7 Mio. EUR

current budget of  
wastewater projects  
in Jordan



## Major achievements and future milestones



- ✓ **Sludge assessment** conducted
- ✓ **Co-digestion concept** developed
- ✓ **Concept for reuse** and decentralized wastewater treatment plants developed
- ✓ **Training** for operation and maintenance delivered



- ✓ Technical sustainable management (**TSM**) is implemented in wastewater treatment plants
- ✓ Improved **Operation and Maintenance** of waste water management in YWC
- ✓ 100 % of **operational staff** in YWC is trained and **certified**
- ✓ **Co-digestion plant** is operational in Mu'ta
- ✓ **Greywater treatment and Hausmeister-concept** in mosques operational (awareness raising)
- ✓ **Sludge is used** in range lands
- ✓ **Decentralised WWTP Feynan** is operational



**YARMOUK  
WATER**



**مياه  
اليرموك**

**إدارة مياه محافظة المفرق**

**Subcluster Water Supply**

10:32 21/MRZ/2017



# Our approach of improving the water supply in Jordan



## Improving O&M, Infrastructure

Introduction of more efficient processes and work flows as well as improving supply infrastructure to improve operation and maintenance to reduce NRW.

## Improving the Economic Performance

Introduction of more efficient commercial management processes like metering, billing & collection of water bills, to increase revenues and reducing accounts receivables.

## Institutional & Human Capacity Building

Objectives are to improve the capacities of sanitation professionals and experts in the water sector in Jordan.

## Awareness Raising

Establishment and conducting of stakeholder dialogues between water providers and water users.

## Water Resources Protection

*Protection of Dams through improving the living conditions of Jordanian and Syrian families*

## 4 GIZ Projects

are currently ongoing  
(VTW, PRM, RWU,  
WLR, C4WW)

## 42.5 Mio. EUR

current budget of  
Water supply projects  
in Jordan



## Major achievements and future milestones

- Operational staff of WAJ is certified (100), successful water skills competition implemented (winner team 6<sup>th</sup> place at IFAD, methodology of a Training Needs Analyse in WAJ is anchored
- Installation of 1890 water roof top tanks and 1900 water saving devices in Bait Ras, Ebder & Doaqarah.
- *Reduction of NRW in communal water infrastructure by 25% through networks rehabilitation (25 km)*
- *Mafrq increasing collection by 39% (1.2 Mio JOD ), BWA collection efficiency in 2017 reached the level of 93%.*

## Future joint milestones

- Marka Training centre (WAJ academy) is rehabilitated and starts its work
- Rehabilitation of 75 km of the drinking networks in 6 communities in Irbid, expected NRW reduction from 46 % to 25%
- Erosion control measures at dam sites in place
- Preparation of a proper handover of all tasks to Mafrq staff, preparing BWA for the taking over of Miyahuna.

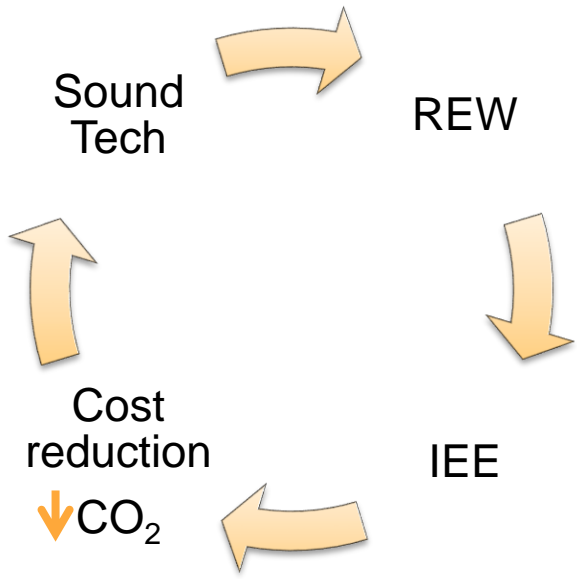


# ENERGY *for* WATER





# Our approach to improve “Energy for Water” balance in Jordan



## Advancing RE in Water Sector

Improving conditions for adopting RE in water utilities

## Improving EE in Water Sector

Improving balance of energy in water services to reduce costs

## Towards Carbon Neutral Water Utilities

Implementing measures to reduce carbon throughout the water cycle

## Promoting Sound Environmental Technologies

Communicate and improve adoption of sound technologies for EE and carbon reduction

## 4 GIZ Projects

are currently ongoing  
(REW, IEE,  
WaCCliM, ExI)

## 10 Mio. EUR

current budget of  
Energy for Water  
projects in Jordan



## Major achievements and future milestones

- Energy efficiency (EE) assessments were undertaken in the past and piloted EE in water pumping with private sector participation e.g. in Wala / Lib
- Energy efficiency and Green House Gases GHG reduction (targets) are embedded in utilities e.g. in Miyahuna
- Tools for assessing GHG reduction potentials and improving EE are in place and accordingly measures are implemented such as retrofitting Madaba Pump Station.
- Sustainable technologies are being introduced at Wadi Musa, Kufranja and Ramtha WWTPs to reduce energy and thus improve overall performance.

### Future joint milestones

- **Database for operations in the water sector** is developed and supports decision making and planning processes
- Standard **Energy Management System** is developed for jor. water sector and implemented in selected utilities
- **New renewable energy projects** are developed and ready for implementation to serve water sector
- Feasibility of using **Renewable Energy for Water Desalination** is investigated
- **Further RE/EE measures are adopted by water utilities** and for certain measures via climate financing