



**Engagement**

**MALTA WATER DEMAND**

Countries	Project value (€)	% by EPSILON	€ by EPSILON	Engagement	Funding by	Date	Partners
Malta Greece	75,000	100%	75,000	Tender	Government of Malta EWA/Energy & Water Authority	26/7/2018	EPSILON NTUA (Consultant)

**Description**

The objective of this proposal has been to assess sectoral water demand in Malta and Gozo under the LIFE 16 IPE/MT/008 initiative and to establish an integrated framework for the optimized management of all water resources in the Maltese Islands. The assessment of water demand serves as a key management tool and a prerequisite for effective water resources planning.

This action aimed to characterize both present and future national water demand across the four most significant water use sectors in the Maltese Islands: domestic, agriculture, industrial, and tourism. Each sector was analyzed based on historical data, and a demand forecast was proposed for the next 50 years.

The LIFE-IP RBMP-MALTA project aimed to:

- Assist water managers and policymakers in identifying long-term trends in water demand for the Maltese Islands.
- Support long-term water resource planning by considering key trends, including demographic, socio-economic, environmental, and technological factors, as well as land use and climate change.
- Provide relevant training to stakeholders



**Outcome**

**Data gathering & data analysis**

The data gathering and analysis was based on existing data, reports, scientific publications, and databases from national, European, and international organizations, considering both demand and supply.

**Development of an econometric water demand model**

The model would forecast and assess future water demand for each of the four main sectors over a 50-year period (with a 5-year basis). It would consider socio-economic and environmental parameters to accurately estimate water demand across these sectors, helping managers and policymakers with optimal water management. Trends in socioeconomics, climate change, land use, and technological advancements will be incorporated.

The econometric demand model would be constructed using a double-log specification, combining time-series and cross-sectional data to establish statistical relationships between water demand and key drivers. It was aimed to consider approaches applied through existing water demand management tools and be interfaced with ArcGIS, then delivered to the Authority.

