

Ensuring economic efficient drinking water supply in the future: Economic assessment of alternative water supply strategies

Project:

Water supply strategies: Development and techno-economic assessment of alternative drinking water supply scenarios under changing conditions.

Client:

Energy and water suppliers, industry/site operators with water supply facilities

Trigger and Motivation:

Acting strategically and economically optimal is accompanied with decision making in a complex environment for any water utility or operator of water supply facilities. Asking for the current water supply strategy such as the current technical system and the intended mode of operation should be a mandatory task. Economic aspects can determine whether long-lasting technical water systems are financially sustainable under current and future conditions. For instance, a climate change induced diminishing raw water availability that caused a reduction in the utilisation level of the water extraction and water treatment plants triggered a water utility to undertake a joint project with IWW. In other cases it was mainly the necessity of adapting a utilities water systems capacity to the predicted water delivery and required performance in the future that motivated water companies to ask IWW for support.

Project description:

An utility's business development is strongly connected to future changes in its environment and its decisions made today. Considering given uncertainties, an initial estimate of the potential development can be derived from scenario analyses simulating possible supply concepts of the future based on the current supply systems, current and future business figures, and predicted changes in the business environment. For this purpose, IWW considers several possible supply variants by technical analyses and economic assessment. This techno-economic analysis finally enables the decision maker to compare and decide on alternative scenarios of supply in a dynamic environment based on robust results.

Particularities:

The IWW department Water Economics & Management and Water Technologies closely cooperate in such projects in order to identify a technically feasible and economically sustainable supply strategy that ensures price stability in the future. Close collaboration with the persons in charge on-site is a mandatory and very welcome working attitude for us to achieve this goal.

Project duration:

from experience app. one year

Contact at IWW:

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