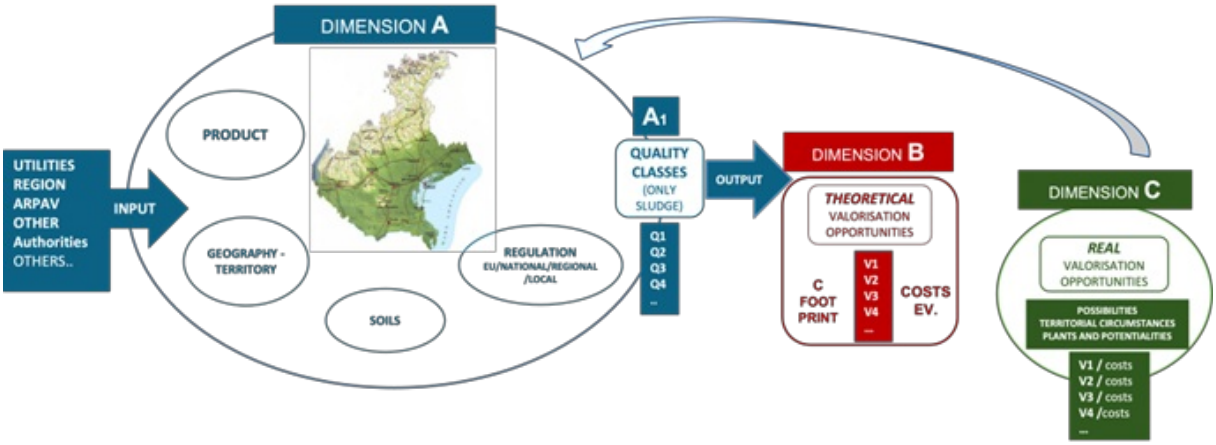
Product factsheet

Water reuse strategic platform

Software solution



Description

The overall aim of the **water reuse strategic platform** is to enable freshwater saving and wastewater reuse (WWR). It will be an evaluation support system for identifying the optimum reuse opportunities of the treated municipal wastewater based on context and territorial data.

Three main functional areas are available to the users. Such functionalities can be used individually or in combination:

- **Context awareness** (dimension A): this area is to be considered a place were collecting and making available to the users the key information related to the territory, including quality and quantity of water, producers, treatment plants and destinations; characteristics of the territory related to climate, urbanization, industrial plants, cultivated lands, state of soil, regulations at different levels, with information about barriers and drivers.
- **Theoretical valorisation opportunities** (dimension B): this area is dedicated to the potential technologies and treatments to be applied to the reuse opportunities identified in the previous area. The user can get a ranked list of valorisation opportunities (that are theoretically applicable) with some insight with respect to general sustainability and costs of the related treatments.
- **Real valorisation opportunities** (dimension C): using data specific of the territory, the user is able to filter opportunities with respect to what is actually feasible with the available plants, infrastructures and potentiality.

Target audience

Producers (i.e. utilities): they will get information about: i) the state of the art related to use/destinations opportunities of water; ii) regulatory framework in terms of general and local leverages and barriers; iii) ranked valorisation alternatives depending on product quality. The tool will support them in planning together with a long-term perspective by exploiting the potential existing synergies that just throughout this method could easily be identified. Authorities (Regions, Municipalities, environmental authorities): they will get scientific, standardized and reliable information about variables, characteristics, quality and reuse opportunities of water, especially in terms of actual risks connected. Then they will get evidence for defining/revising regulations and plans towards fostering the best practices in the water sector, avoiding an excessively precautionary approach. End-users (such as sectoral associations e.g. for agriculture; industries/industrialists; urban areas managers): they will get a synthetic vision of the state of the art of reuse opportunities and shortcuts for reuse conveniences. Technologies providers (i.e. technology producers and distributors): they will get a high territorial point of view of the distribution of necessities and individuate potential synergies and market shortcuts.

Actors, their roles and interactions

Users of the platform (producers, authorities, end-users/destinations, technology providers) will have access to data visualization interfaces for getting context information (context awareness). Producers will also get access to workflow features that will allow the estimation of theoretical/real valorisation opportunities.

Unique selling points

Situational awareness is a key success factors for enabling decision-making processes, but the heterogeneity and dispersion of the relevant data leads to partial knowledge and difficulty in sharing key information among the actors of the water chain in the territorial context. The water reuse strategic platform acts as a diagnostic instrument and one-stop-shop where users can easily access data and information in order to highlight issues and opportunities that otherwise would be difficult to identify.

Technical requirements

The water reuse strategic platform is a web application that can be accessed and used on any web browser. It can be delivered in an “As a Service” mode. In addition, the software will be provided as a docker container in order to make the installation process as easy as possible.

Software data

- Operating environments:
  - SaaS - Web application
- License: Open Source

Technology applied by the product

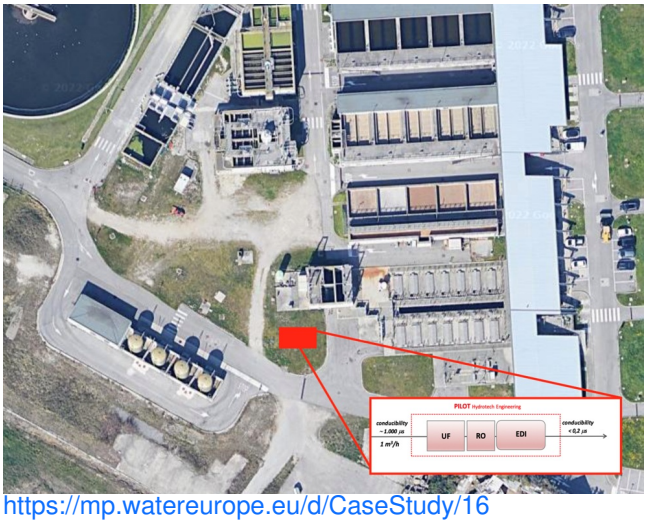
- **Wastewater treatment technologies for water reuse**

Costs

Not yet defined.
Last update: 2022-10-26

Case Study applying the product

Venice, Italy



https://mp.watereurope.eu/d/CaseStudy/16

Related tags

wastewater | Reuse | Treatment | Quality | Valorisation

Downloads

The following file can be downloaded from the online page of the product: https://mp.watereurope.eu/d/product/60

- Training material of the tool