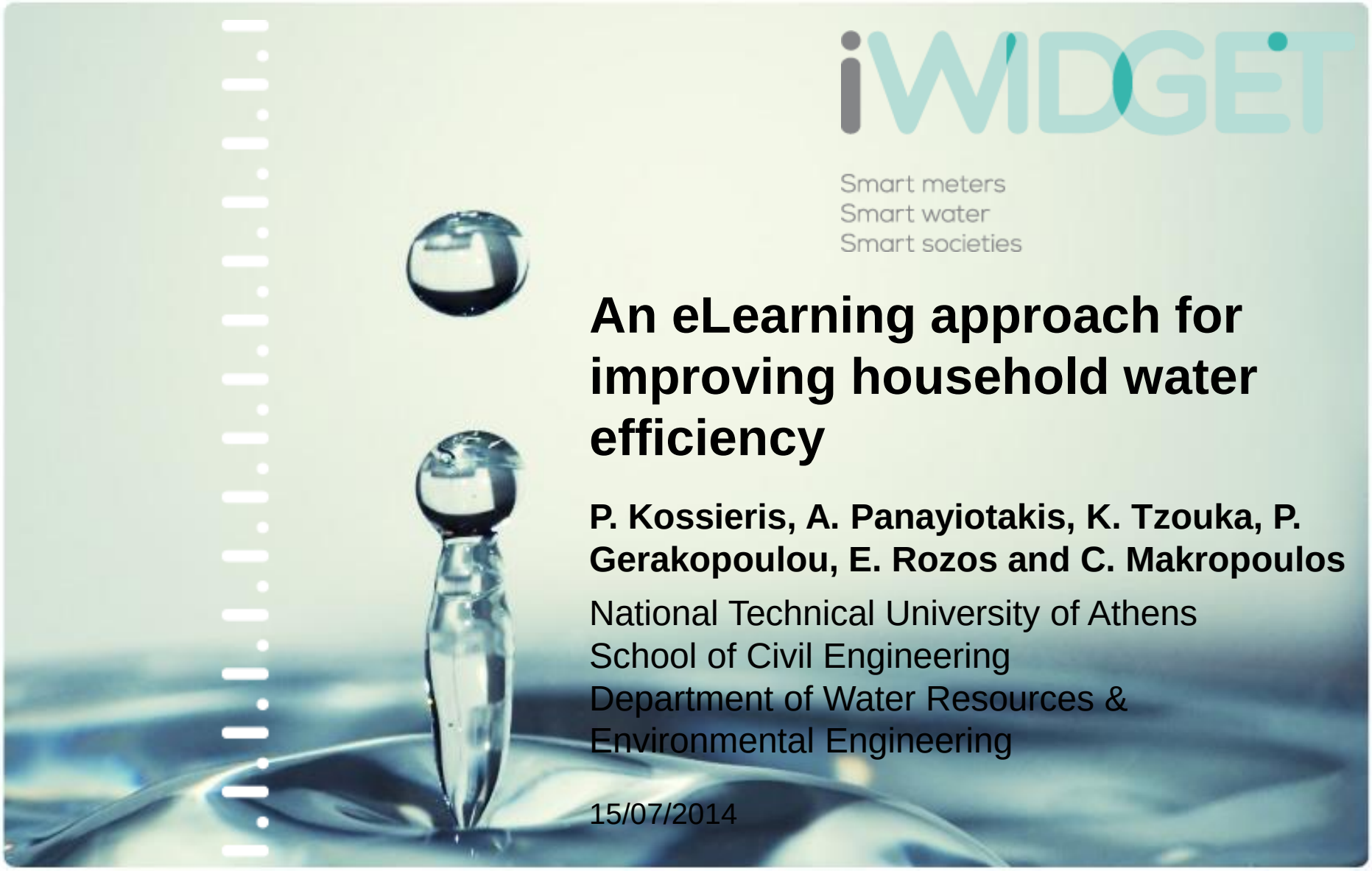

Smart meters
Smart water
Smart societies

An eLearning approach for improving household water efficiency

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Developing the eLearning facilities

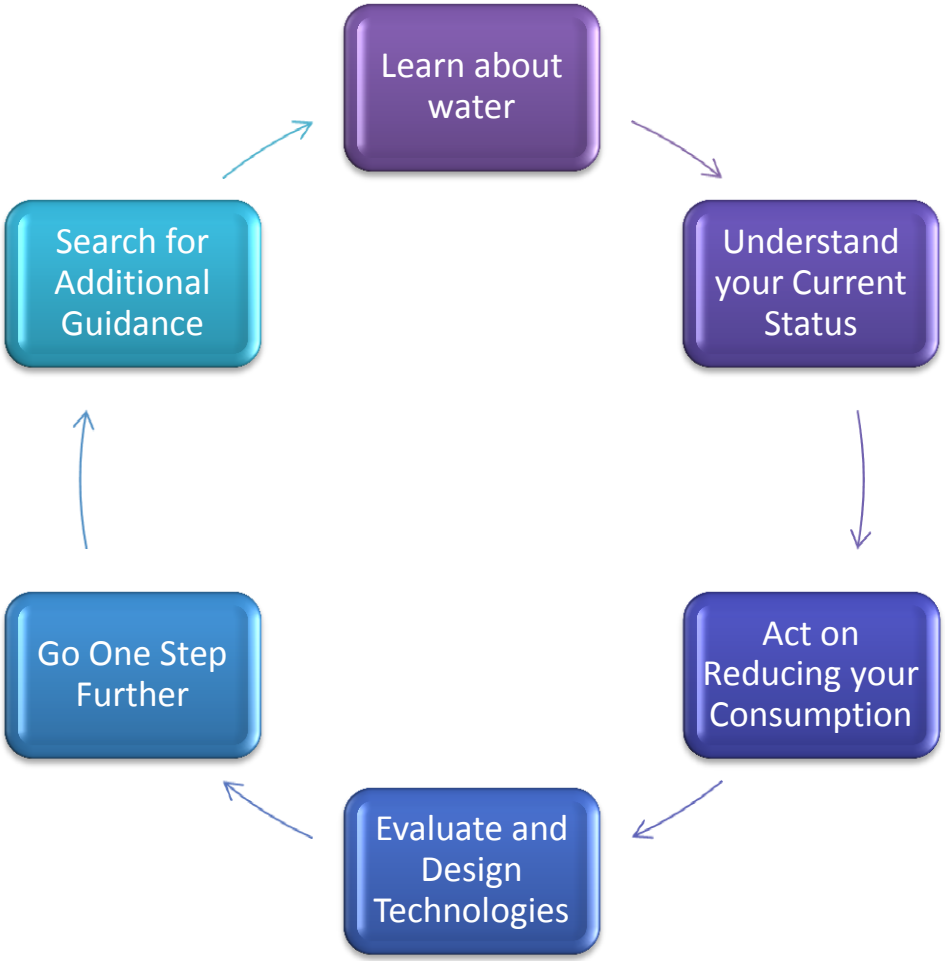
- The **eLearning facilities** aim to **support** and **motivate** end-users to improve their domestic water-efficiency, bringing new awareness on household level and bridging the gap between customers and new ICT services.

- The platform is mostly developed around ***Moodle*** online suite which was extended in order support additional add-on web applications and facilities.

Towards an eLearning approach

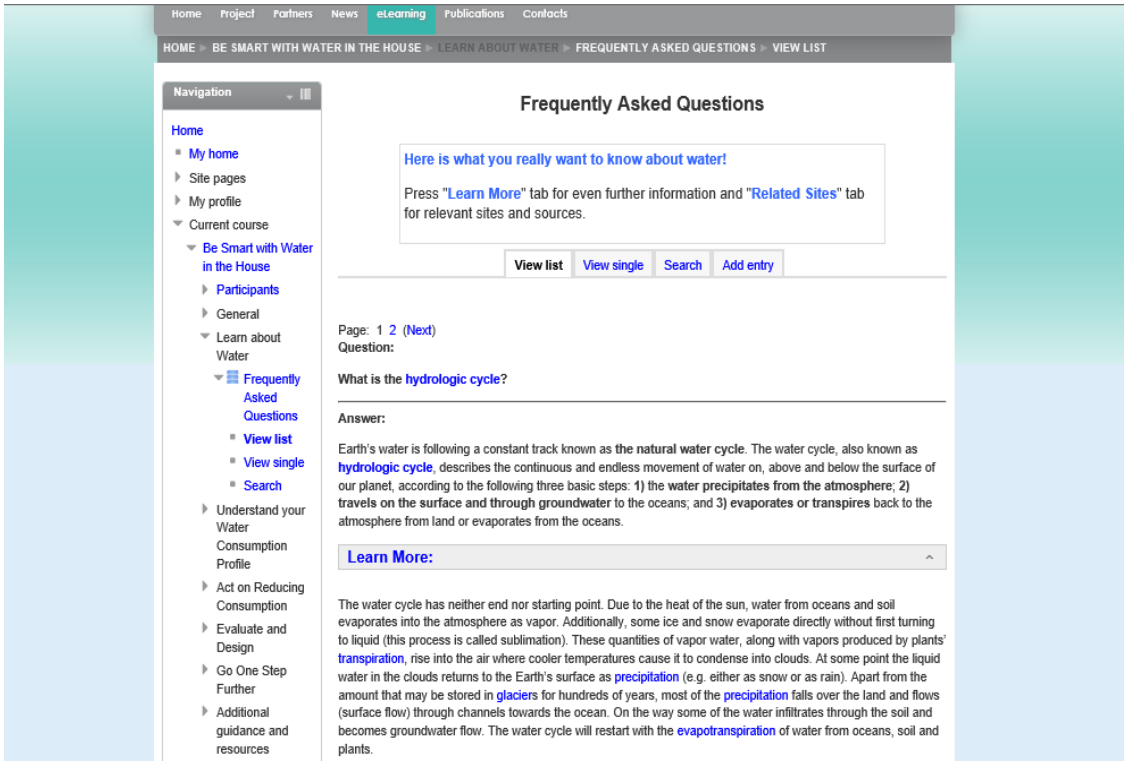
- **Aspects of guided, but flexible, learning process**
  - Sense of control and self-direction
  - Specific goals to achieve
  - Practical knowledge and experience
  - Sense of group and social networking
- **The course structure and platform's front-end were further supported by a social research in Athens on consumers' cognition on the potential use of ICT services in water sector.**
  - **Dominant forms of information:** tips, interactive material (games, FAQ's, quizzes), narratively or visually water stories
  - **Dominant means of presentation:** graphics, comprehensive tables and figures, videos and animations, images and sketches of appliances, sort and easy messages
- **Adoptions of a flexible knowledge cycle that incorporates the above characteristics and implements the various applications**

The eLearning knowledge cycle



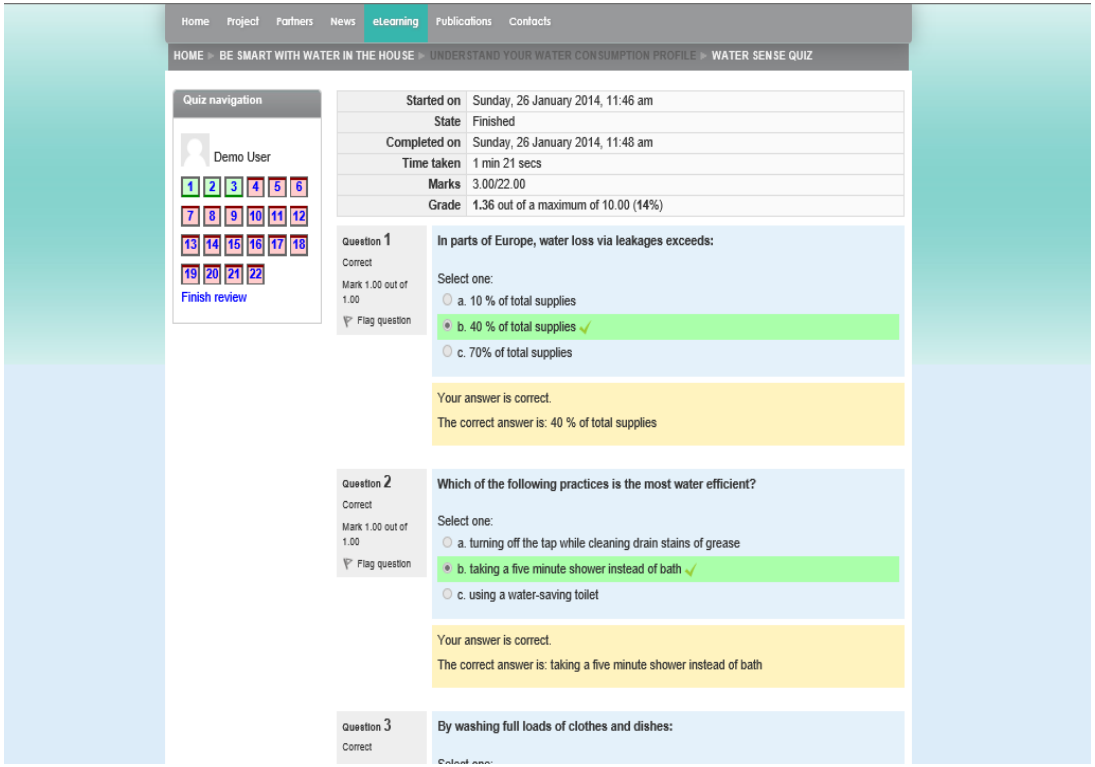
Learn about Water

- **Information on "water identity"** with special focus on domestic water, through a series of **questions & answers**.
- The user can opt the **level of detail** of the presented feedback and resources.

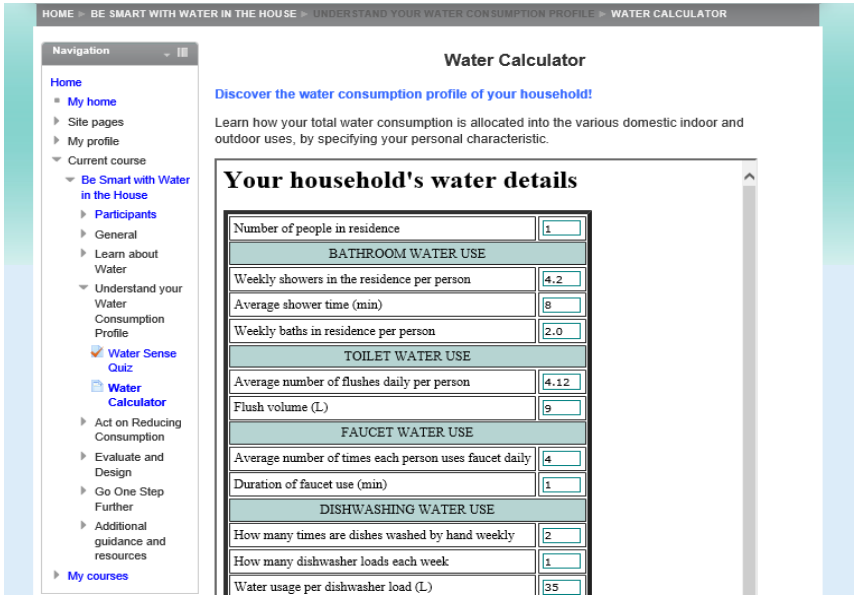


Test “Water Sense”

- Through a **multiple-choice quiz** the users can evaluate their behaviours related to domestic water consumption and test their knowledge on “water issues”.
- The platform highlights the correct answers and ranks the performance, offering the **sense of competition**.

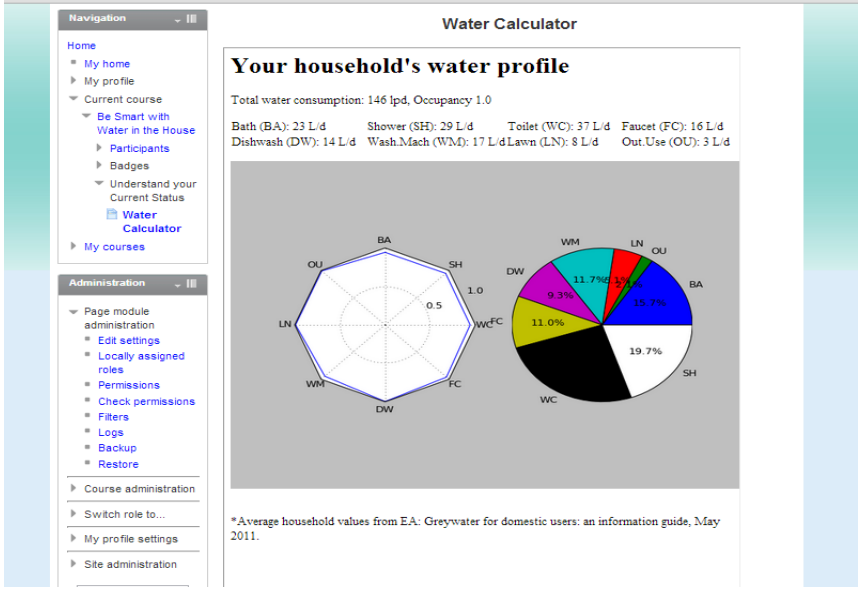


Explore “ Water Profile”

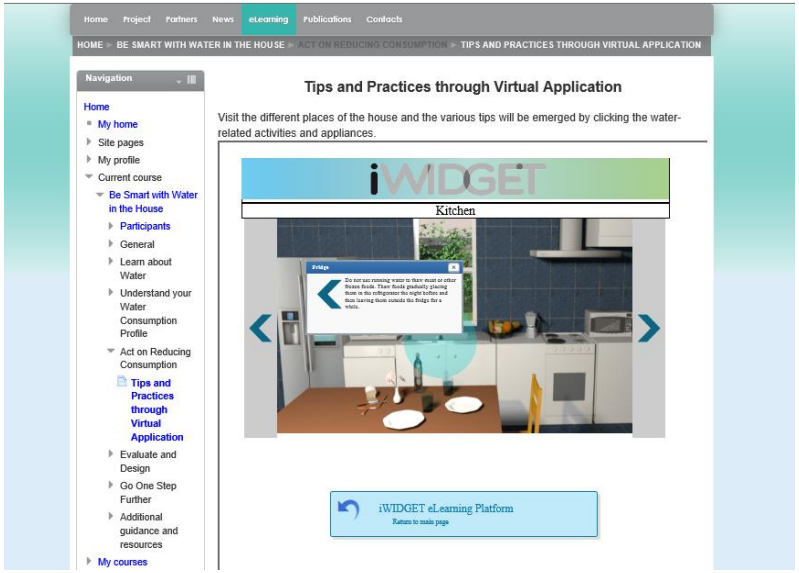


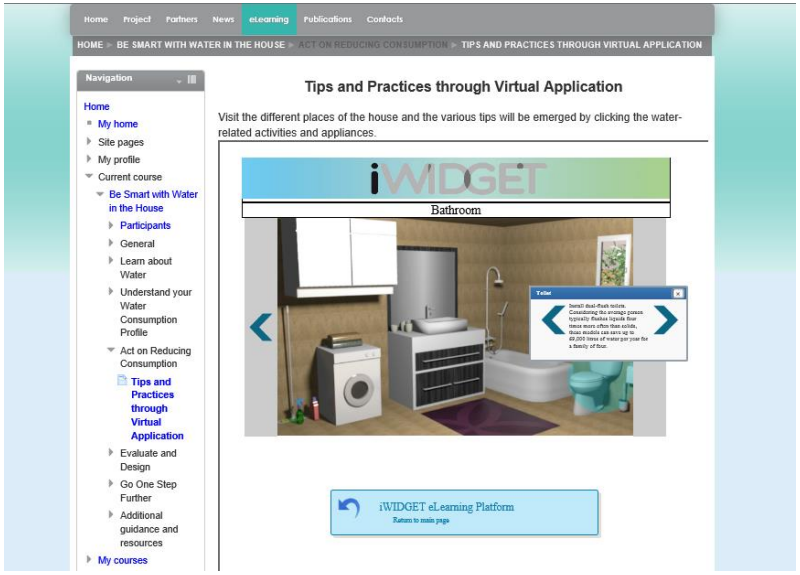
- The **on-line Water Calculator** provides detailed information on the water consumption profile of the household.
- As **input parameters**, the application takes information about **daily habits** and **property characteristics**.

- The results are presented in the form of a **report** and **pie charts** that depict the breakdown of total water consumption into main indoor and outdoor water uses.

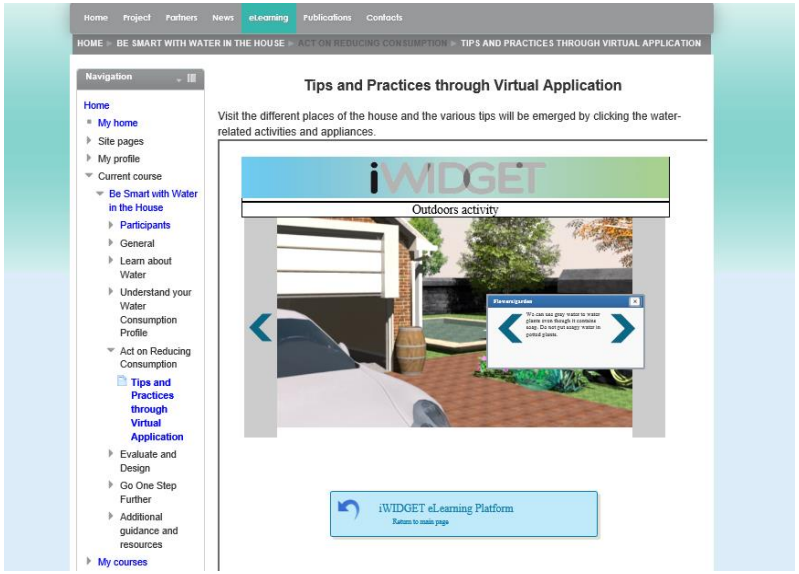


Improve “Water Efficiency”

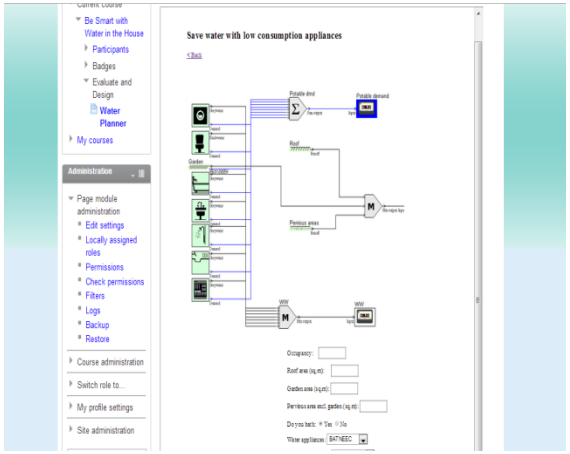


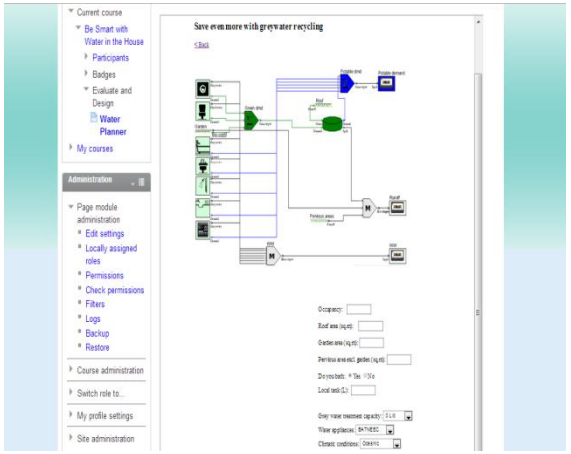


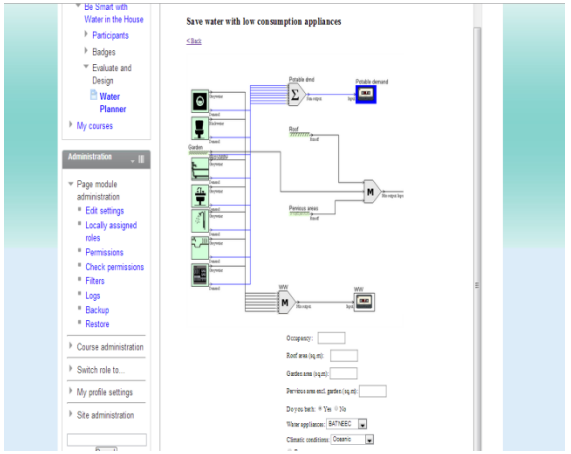
Through the **online application** the user can navigate at different places within **a virtual house**, and the various **tips and practices** will emerge by clicking on an activity or appliance.



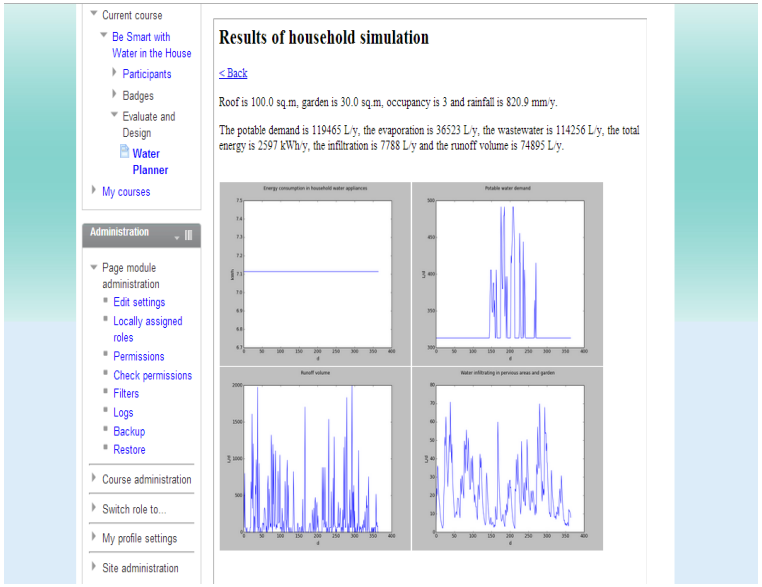
Evaluate and Develop



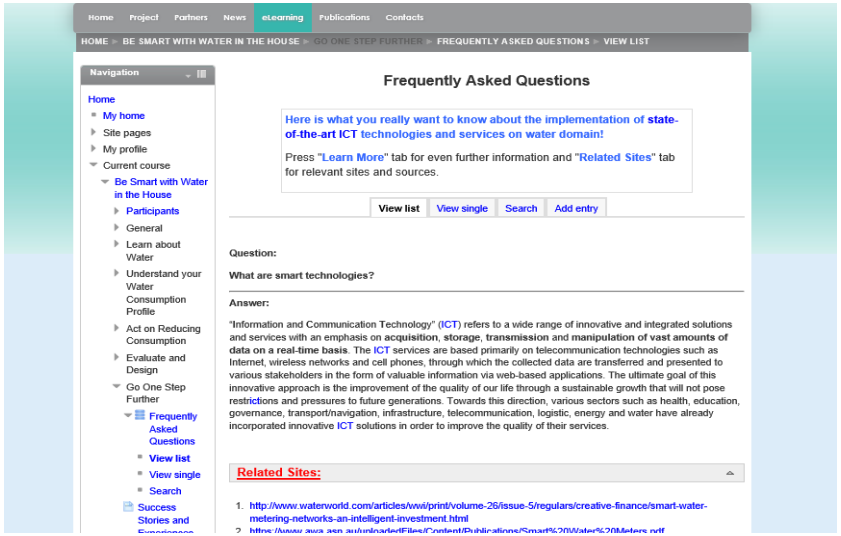


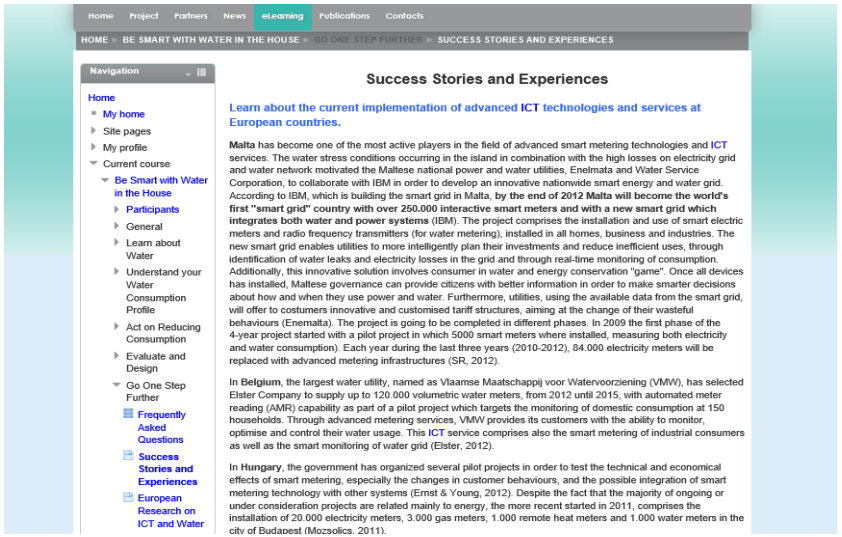


- The **"Water Planner"** is a what-if modelling tool, based on ***UWOT model***, that simulates the domestic water network with both **BAU** and/or **BATNEEC** appliances and advanced **WDM infrastructures**.
- The portal presents graphs of annually potable demand, wastewater, energy consumption etc.

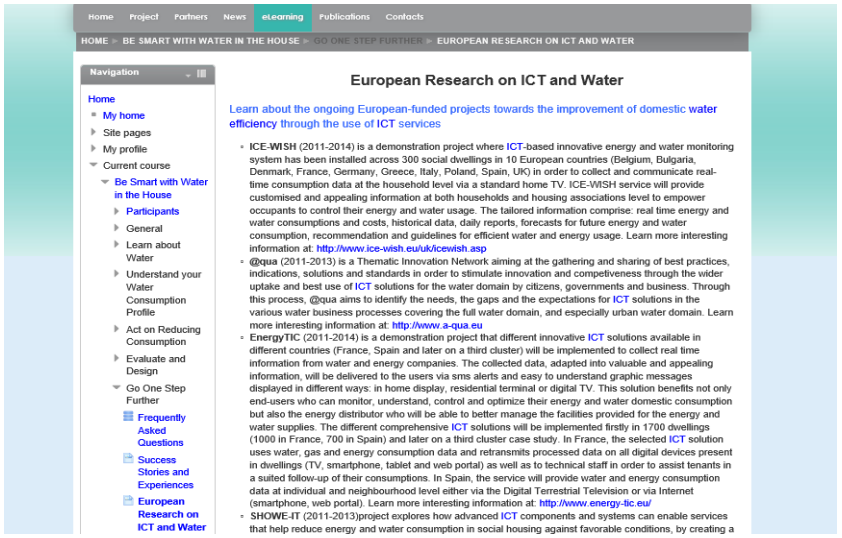


Getting familiar with Smart Technologies





The platform aims to bring user closer to the various **state-of-the-art smart technologies**, promoting their role and benefits. Towards this direction, success stories of their implementation and **ongoing EU research on ICT and Water are also presented.**



Giving a sense of group

The platform promotes the active participation of the user.

- **Discussion forum** about water efficiency. The user could share his personal experience and practices on water saving.
- **Pool of links** with resources and relevant sites or videos.
- **Online dictionary** with basic water-related terms.

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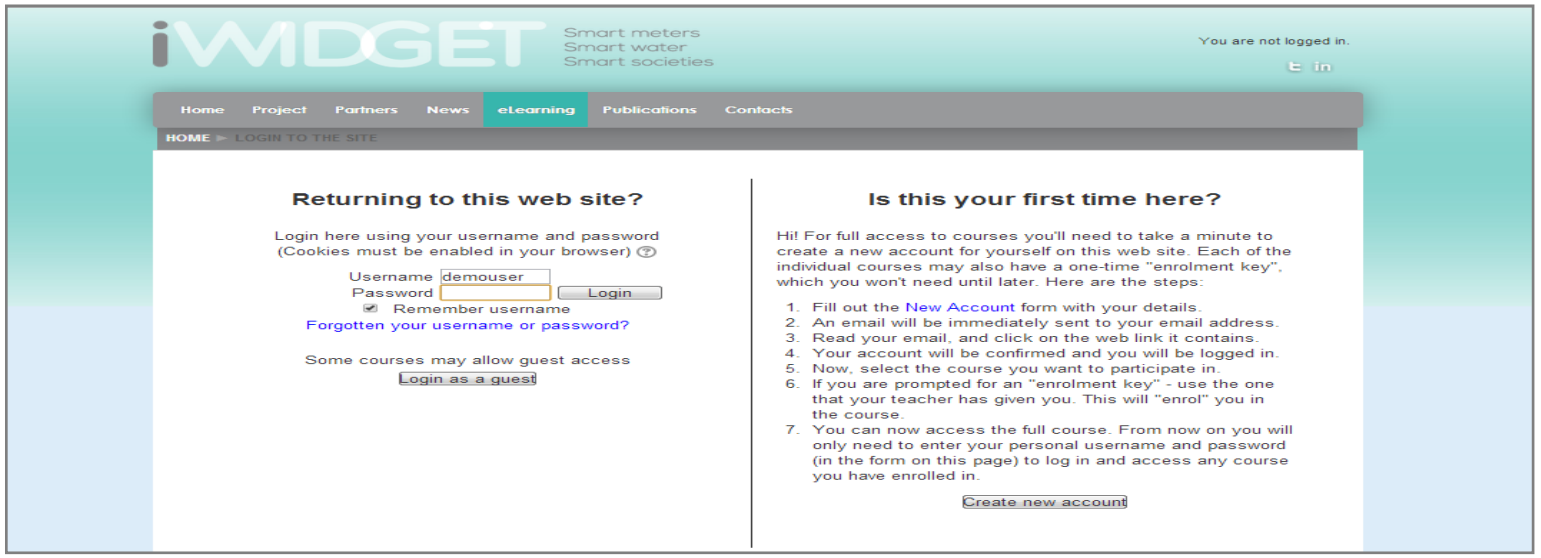
Live demonstration

iWIDGET eLearning platform is available at:

http://www.i-widget-elearning.eu/iWidget/

For a demo experience use:

username: **demouser**, password: **demo**



For video demonstration visit:

http://www.youtube.com/watch?v=s1zQ4KQI1SQ&feature=youtu.be