



**Project no. 4CE439P3**

**URBAN\_WFTP**

**Introduction of Water Footprint (WFTP) Approach in Urban Area  
to Monitor, Evaluate and Improve the Water Use**

**WP 5.5.3**

**Corrective actions and improvement**

**Lead contractor for deliverable WP 5.5.3: ENEREA**

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**Start date of project: 1 November 2012**

**Duration: 25 months**

**Submission date: October 2014**

Output 5.5.2 previously describes the experience with the implementation of the improvement plan. In order to ensure a successful and continuous future improvement of the water footprint the following corrective actions and improvements should be considered.

### **Targeted results**

To achieve the targeted results (output 5.2.3) it would be beneficial to include more teachers and more schools and thus to reach a larger number of pupils, alongside with their families. This will increase the sample size and allows a more comprehensive overview on the citizens' water consumption behaviour. By reaching more citizens, more water consumption reductions measures would be implemented and more water could be saved.

### **Effectiveness of measures**

As described above, the effectiveness could simply be increased by reaching a larger number of participants. Additionally, the monitoring of the water footprint could be further improved. The existing monitoring sheets focused on the amount of direct and virtual water, which was consumed at home. For future improvements this monitoring should be extended to include all water consumptions during the entire day. Furthermore, the items (categories) which were to be monitored could be more detailed. This will help to break down direct and indirect water more exact. For this a smartphone application could simplify the monitoring process. People who use this application would be able to compare their personal consumption and motivate each other to improve their water footprint. The results can easily be shared via social networks and encourage friends to join in. Even more, a smartphone application is a great opportunity to reduce the effort of evaluating these data. Data can be provided in real-time and can be processed automatically. This way a more detailed analysis is possible, e.g. on daily distributions, differences between weekdays and weekends.

**Difficulties and risks**

As we were confronted with some coordination difficulties with the major water service provider, we additionally started the cooperation with the water service provider of a smaller municipality. For future continuation, it would be beneficial, to cooperate with a number of smaller water service providers. This way the Urban Water Lab would gain flexibility and increases insight into the individual differences between the companies.

Limitations in budget and staff also lead to difficulties in the work of a future Lab. Applying for several funding programmes may help to acquire additional financial resources.

**Time horizon**

As stated in 5.5.2, the project duration of 25 months was quite ambitious. More time would have been necessary, e.g. to set up and conduct a complete post-awareness evaluation.

In order to carry out a more in-depth monitoring approach, which also includes a smartphone application, additional time for development and implementation will be required. However, these approaches will be worth the additional time spent, as they give deeper understanding and more precise data on the water footprint. Evaluating these data will be simplified with the help of a smartphone application in order to develop even more effective improvement measures for reduction.