

## FIVE TRAINING COURSES IN THE FIVE REGIONS FOR UTILITIES PARTNERS AND STAKEHOLDERS ON PILOT ACTIVITIES

### AUSTRIA

D.T2.2.1

## 1. Executive Summary

The main goal of this deliverable is to capture the most relevant information about the first set of trainings (D.T2.2.1) carried out in all five of the pilot countries in 2018. The document will be composed of an agenda and a description of the training's key parts; a participant list complemented by a group picture; and a list of the materials provided to the participants. The trainings have the main purpose to present and interactively test the Integrated Sustainability Assessment (ISA) tool that can be used to systematically assess technical innovations for energy optimisation of wastewater treatment plants (WWTPs) on different sustainability criteria. In this way it helps potential users such as utility operators or decision-makers in municipalities to determine whether and how the implementation of measures to increase energy efficiency and renewable energy production are useful. This is done by making predictions about potentials to improve energy efficiency, the economic feasibility or the environmental sustainability of the REEF 2W solutions.

## 2. Agenda

Tab. 1: Agenda of the training/meeting

Time	Description
10:00	Presentation of the REEF 2W Project
10:15	Presentation of the REEF 2W Excel tool
10:45	RHV Data-input and tool application
11:15	REEF 2W evaluation and feedback
11:45	Discussion
12:00	Lunch
13:00	Project Presentation at Eurotherme Bad Schallerbach
13:30	Presentation of spatial analysis in both case municipalities
14:00	Discussion about potential district heating network between the WWTP and the thermal spa
14:45	End of Meeting

It was intended to carry out the training in two parts: The first part (morning session at the WWTP) focused on a detailed tool application and discussion. Consequently, it

only involved the local WWTP operator. The second part (afternoon session at the local thermal spa) additionally involved a potential case study partner and a local planning office. Therefore, the focus was more on a general presentation of the REEF 2W project ideas and goals as well as on a follow-up discussion concerning the potential REEF 2W application in the specific local context.

### 3. Training and project discussion

Franz Zach (AEA) and Peter Lichtenwöhrer (BOKU) moderated the meetings in Wallern an der Trattnach (at the WWTP RHV Trattnachtal) and Bad Schallerbach (at the thermal spa in Bad Schallerbach). The training course during the morning was attended by Harald Bala (CEO of RHV Trattnachtal), which resulted in detailed and constructive discussions. At the beginning, the REEF 2W project approach was presented and discussed in detail, also including other pilots in the REEF 2W project. Based on the project presentation the ISA approach was clarified and thoroughly described. Based on the ISA, the REEF 2W tool was presented using a powerpoint presentation and later by directly presenting the Excel tool (also the concept was reflected). While presenting the Excel tool, data from the WWTP pilot site was directly put into the tool. Data input and final results in the “report” section of the tool were discussed and verified. Continuous feedback was given on-the-go during the tool application. After the tool application the questionnaire was used and further issues were discussed.

After the lunch Harald Bala, Franz Zach and Peter Lichtenwöhrer met with the head of facility management at the thermal spa (Herbert Aigner). Additionally, Hannes Linninger (M&P; engineering company) joined for the discussion at the spa. The goal of the meeting was to discuss the case study application of a potential district heating network between the WWTP and the thermal spa in the Trattnachtal (valley of the river “Trattnach”). At the beginning Franz Zach and Peter Lichtenwöhrer presented the general REEF 2W approach and the research project. Based on the general presentation further technical and energetic aspects, including potential district heating network configurations, were discussed. Thus, also challenges were addressed. Additionally, first assessments concerning the urban compatibility in the Trattnachtal were presented and reflected upon together. After the official meeting, we also got the chance to present the REEF 2W project to the new CEO of “EurothermenResorts”, who is the head of multiple thermal spas. He gave a very positive feedback on the project approach. At the end of the meetings Harald Bala introduced Franz Zach and Peter Lichtenwöhrer to the WWTP, by presenting the facility in detail.

The following pictures were taken during the meeting/training in Wallern an der Trattnach.



Fig. 1: Presentation of the research project at the WWTP



Fig. 2: Presentation of the research project and gathering data for input at WWTP Trattnachtal





Fig. 3: Picture of participants at the training course



Fig. 4: Excursion to the WWTP in Wallern an der Trattnach

## 4. Participants and speakers list

Number	Name	Surname	Company	Country	e-mail address	Signature
1 (S)	FRANZ	ZACH	Austrian Energy Agency	Austria	franz.zach@energies.at	Frans Zach
2 (S)	PETER	LICHTENWÄNGER	IKV BOKU	AUSTRIA	peter.lichtenwaenger@boku.ac.at	Peter Lichtewänger
3 (P)	HERBERT	AIGNER	EUROTHERMENWERKE	AUSTRIA	aigner@eurothermen.at	Herbert Aigner
4 (P)	BARBARA	LINDENBERGER	KEP	AUSTRIA	lindenberger@kep.at	Barbara Lindenberg
5 (P)	BARBARA	HANALD	RIV-T	AUT	h.bal@riv-t.at	Barbara Hanald

(S)...Speaker  
(P)...Participant

Fig. 5: Scan of the list of attendees

## 5. Training Materials

Tab. 2: Training material used

Type of material	Description
PowerPoint on REEF 2W project	Introduces the project, its objectives, potential benefits, and country partners as well as the different pilot sites and the specific potential technological upgrades and their differences among one another.
PowerPoint on REEF 2W tool	Introduces the tool by showing snapshots of its key components and the ISA approach of the excel version, allowing the participants to understand the methodology step by step.
Prototype of REEF 2W tool (Excel)	Used to show structure and content of the REEF 2W-tool and to fill in values together with participants in order to gain feedback on strengths and weaknesses.
REEF 2W rollup, flyers, USB-sticks and bags	Information and promotion material concerning the REEF 2W project
ISA Poster	Visualising the methodological approach for integrated sustainability assessment

The training material is based on training curricula DT1.5.5 and the ISA approach.