

REEF 2W



WHAT WE DO

The project tackles the challenge of developing and implementing solutions for increasing energy efficiency and renewable energy production in the waste water sector. This is achieved by combining and integrating relevant public infrastructures of the municipal solid waste chain and waste water treatment plants (WWTP), and by enhancing the organic input mix and energy outputs.





TAKING COOPERATION FORWARD

Austria

BOKU - University of Natural Resources and Life Sciences of Vienna RHV - RHV Trattnachtal

Croatia

REGEA - North-West Croatia Regional Energy Agency ZCH - Zagreb Holding Ltd.



WHO WE ARE

Partners from five central European countries join forces to improve environmental management in urban areas.

Czech Republic

UCT - University of Chemistry and Technology Prague VEOLIA - VEOLIA CESKA REPUBLIKA, a.s.

Germany

- adelphi adelphi research gGmbH
- KWB Berlin Centre of Competence for Water

Italv

- ENEA Italian National Agency for New Technologies, Energy and Sustainable Economic Development
- UCV Association of Chambers of Commerce of Veneto Region
- MS MONTEFELTRO SERVICE LTD

Who funds us

Our project is funded by the Interreg **CENTRAL EUROPE Programme that encourages** cooperation on shared challenges in central Europe.

With 246 million Euro of funding from the European Regional Development Fund, the programme supports institutions to work together beyond borders to improve cities and regions in Austria, Croatia, Czech Republic, Germany, Hungary, Italy, Poland, Slovakia and Slovenia.

DISCOVER MORE ABOUT **REEF 2W**

www.interreg-central.eu/reef-2w

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REEF 2W

Increased renewable energy and energy efficiency by integrating, combining and optimising urban waste water and organic waste management systems

www.interreg-central.eu/discover

FACTS AND FIGURES



Outputs planned until June 2020

S 9,5 M€

Investment value for involved regions in Euro

Objectives

The main objectives of REEF 2W are the following:

- Establishing a common understanding about REEF 2W systems. This is achieved by collecting experiences about existing technologies, knowledge and models in order to verify the sustainability of the proposed new systems;
- Creating conditions conducive to increasing energy efficiency as well as the production and usage of renewable energy on the basis of experiences with the REEF 2W systems in the target regions. Policy recommendations and other measures will be developed to set up suitable framework conditions for implementing REEF 2W systems, and for removing existing barriers;
- Developing regional implementation strategies, based on the project's pilots and insights gained from engaging with political decision-makers. The final objective is to create a service to be integrated with other public services that enable WWTPs, in addition to purifying water, to become energy self-sufficient or even producers of renewable energy. This is a critical step for ushering in a new paradigm for waste water and urban waste management.

STRATEGIES AND ACTION PLANS

An action plan will be developed to exploit the experiences with the five REEF 2W pilots. Project partners in charge of the pilots will create an action plan to share this new knowledge on a "REEF 2W-platform". The platform will feature "pioneers" of urban waste water treatment, who have become "energy-positive" companies by optimising energy efficiency and renewable energy production. Training courses will be organized in the five target regions. Participants will learn how to use the REEF 2W tools and about methods to assess the technical feasibility of the REEF 2W solutions. The target group of the training courses includes technical utility staff, their partners and other relevant stakeholders.



TRAINING

TOOLS

PILOT ACTIONS

5

The project develops tools for assessing improvements in energy performance and for identifying location factors critical for implementing REEF 2W solutions. Software tool N.1 will estimate the potential for improving energy efficiency and renewable energy production. Software tool N.2 will assess the locational suitability which is determined by urban features such as demographics and energy infrastructures. These tools will be applied in the feasibility studies of the five pilots and in additional activities.

2

Five pilot studies deploying different REEF 2W models will be carried out. The pilot studies will demonstrate how the new REEF 2W solutions will lead to a reduction of energy demand and to a significant increase of renewable energy production. This way, the pilots will help WWTPs in becoming energy self-sufficient or even "renewable energy positive", ideal for a supply of smart cities with green energy.

25