



Facilitating the use of ETV to increase energy efficiency in water sector

Why ETV4Water project?

New goals and approaches

Implementing the goals of circular economy poses new challenges to the water sector:



potential to recover resources
wastewater is the source of valuable resources (including energy) for recovery and further use



a shift in paradigm
a new role of a wastewater treatment plant (WWTP) as a resource manager



more efficient energy use
energy consumption may account for as much as 25-30% of operating costs of a WWTP

Innovative technologies play an important role in facing these challenges ensuring resource recovery and efficient use of energy.

Market uptake of innovations in water sector

- Technology buyers and users do not trust innovations
- Technology providers need to implement costly performance tests for their clients
- Limitations of the public procurements
- Market failures of innovations because proven technologies with a solid track record of implementations are too strong competitors
- Lack of trustful offers of innovative technologies meeting the needs of the market
- Insufficient knowledge of technology users about the opportunities and benefits offered by innovations

What is ETV4Water about?

ETV4Water is to provide information on the aspects of using environmental technology verification (ETV) as a tool in the market practice of the water sector in Poland and Norway.

The objectives:

- ✓ promote Environmental Technology Verification (ETV) as a tool supporting implementation of innovative solutions to improve the energy efficiency of municipal WWTPs
- ✓ build a Polish-Norwegian capacity to provide quality testing and a performance verification service in a form of a cooperation network of test bodies and verification bodies in the water sector for successful market uptake of innovations developed under a new perspective of the Norwegian Grants

What is ETV?

Environmental Technology Verification (ETV) is a standardized process providing a credible and impartial verification on the performance of innovative environmental technologies and the benefits from their application as declared by the technology provider. Transparent, robust verification procedures and high quality test data ensure the credibility of ETV, while the competence of the verification bodies ensures impartiality.

ETV outputs:



a verification report

that includes verification results including the verified performance, test conditions, constraints and limitations under which they are met



a verification statement

which is a summary of the verification report presenting the verified performance of the technology and the conditions under which it is met

ETV provides great benefits to innovation leaders:

technology providers: ETV helps overcome barriers and avoid potential market failures related to initial market entry of a new technology by providing robust, factual information on its performance that is relevant to the users

technology purchasers: ETV provides reliable and comprehensive data on the performance and key environmental aspects of a technology and the benefits of its implementation allowing to make informative choices of solutions that fit best purchaser's needs

ETV in the European Union

In the European Union, ETV has been implemented on a pilot in 2011 with the participation of Poland in 3 technological areas: water treatment and monitoring; materials, waste and resources; energy technologies. The program is coordinated by the European Commission. Verifications are carried out by accredited verification bodies based on the quality assurance procedures and plan outlined in the European Union common General Verification Protocol (GVP). The Statements of Verification are registered and published by the European Commission on a dedicated website.



More on EU ETV:

www.ec.europa.eu/environment/ecoap/etv_en

Why ETV can be trusted?

The impartiality, credibility, quality of ETV are ensured by:

Competence of verification bodies

confirmed by accreditation for compliance with the ISO 17020 Conformity assessment – *Requirements for the operation of various types of bodies performing inspection.*

Reliable test data and factual approach

generated in processes that meet the ISO 17025 *General requirements for the competence of testing and calibration laboratories* are the basis for performance verification.

Clear, robust and efficient verification procedures

specified in General Verification Protocol of EU and in technical standard ISO 14034 *Environmental Management: Environmental Technology Verification.*

What provides the ETV4Water project?

Analysis of potential and possibilities

The ETV4Water report „*Pathways for recovery and energy savings at wastewater treatment plants*” indicates to operators and plant designers:

- ✓ what are the possibilities of implementing appropriate technological improvements, in particular in primary, secondary and tertiary treatment processes to increase energy efficiency of the treatment plant
- ✓ which process parameters and technical solutions influence energy efficiency of a plant
- ✓ how to set up a strategy of a wastewater treatment plant to improve its performance in terms of energy use and resource recovery taking into account the possibilities offered by innovative technologies

Awareness rising about ETV and the benefits of verification

technology providers:

- ETV facilitates market entrance of a new water technology confirming its innovative features that cannot be proven by certification
- ETV is a tool for building a competitive advantage
- ETV serves to distinguish technology among competitors

technology purchasers:

- ETV provides evidence proof on the performance of the technology for procurements in public sector
- ETV is a tool to minimize technological and investment risks associated with the implementation of an innovative technology
- ETV is a comprehensive source of information enabling comparison of technologies according to user's needs

ETV4Water provides a platform for Polish-Norwegian cooperation in the water innovation sector offering:



A network of test bodies from Poland and Norway conducting research, technology testing and analyses relevant for water and wastewater technologies in accordance with the ETV requirements



Technical support and consulting for performing verifications provided by the Environmental Technology Verification Body at the Institute of Ecology of Industrial Areas in Katowice and Aquateam COWI in Norway

ETV4Water seeks cooperation with:



providers of innovative environmental solutions from Poland and Norway interested to verify their technologies for water and wastewater sector



purchasers of water and waste-water technologies interested in implementing innovations and getting a credible offer of innovative technologies



research units, test bodies and accredited laboratories interested to perform testing and analyses for the needs of verifying innovative water and wastewater technologies to join a network offering quality test data generation



Polish- Norwegian consortia working on or planning cooperation on the development and implementation of new solutions for water sector in the upcoming financial perspective of the Norwegian Grants

Join the Polish-Norwegian network for ETV in the water sector

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