

How can ETV support the implementation and maintenance of certification in other voluntary environmental schemes?

Izabela Ratman-Kłosińska, www.LIFEproETV.eu Project Coordinator
Institute for Ecology of Industrial Areas, Katowice, Poland

Let's talk about ETV: ETV as a tool for internalizing the performance of green innovations in the environmental footprint of products and organizations
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This project has received funding from the European Union's LIFE Programme under Project Number LIFE19 GIE/PL/000784 and is co-financed by National Fund for Environmental Protection and Water Management, Poland and Ministry of Agriculture, Hungary



Our ambition is to **make ETV the EU leading scheme accelerating market uptake of green innovations** with strong market acceptance and recognition

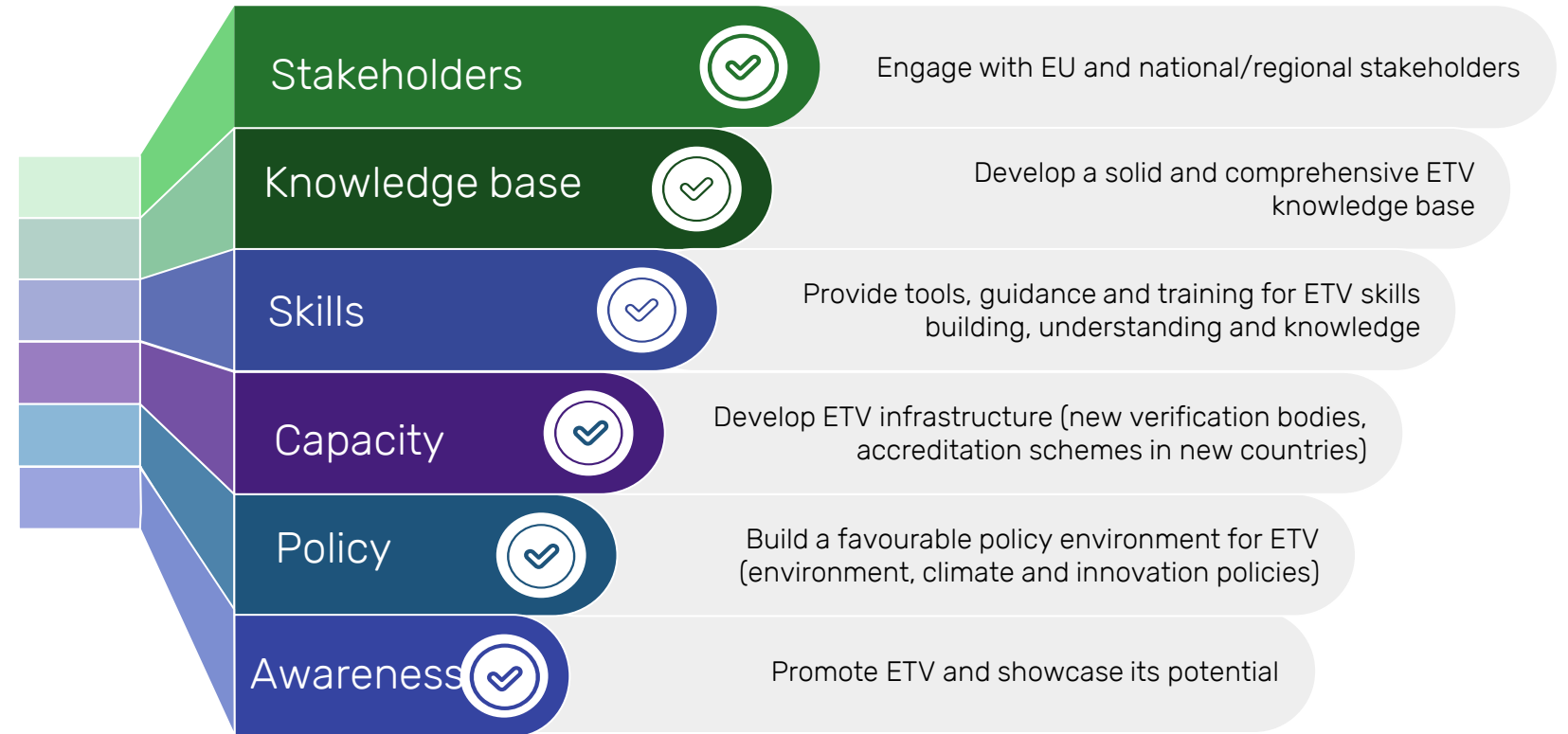
Total budget: €1.876,282

% EC co-funding: 52,68%

Duration:

Start : 1 September 2020

End : 31 December 2023



BENEFICIARIES

Coordinating Beneficiary



Associated Beneficiaries



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What is ETV?

ETV is a voluntary environmental scheme dedicated to boost market uptake of new environmental technologies through :

providing an opportunity for a third party assessment of their performance

delivery of objective, credible and market relevant information about their performance and environmental benefits

to all actors of environmental technologies market:

technology providers, buyers, regulatory and permitting bodies, investors and policy makers,

as a basis for benchmarking with conventional technologies and informative decision making about what they buy, permit to or put their money into.



What is ETV?

ETV proves in an **impartial and credible way** that the **claims about an environmental technology performance** made by providers **are true and based on sound scientific data**



ISO standardised

- Robust and transparent verification procedures based on ISO 14034 standard : *Environmental Management: Environmental Technology verification*
- EU and global recognition



Quality and impartiality assured

- Performance test data must be generated compliant to requirements of ISO 17025 *General Requirements For The Competence Of Testing And Calibration Laboratories*
- Bodies performing ETV are accredited for compliance to ISO 17020 *Conformity assessment — Requirements for the operation of various types of bodies performing inspection* for type A inspection bodies



Fit for early market stage innovations

- Provides flexibility in the choice of parameters to be verified
- Enables proving performance claims of innovations which performance falls outside regulations or standards or which do not fit into existing legislative, labelling or standardised performance frameworks



What does ETV offer?



A proven, robust process to verify the performance environmental technologies

A source of credible and transparent information of on innovative technologies

More flexible than certification, adapting to technology characteristics

Gives credibility to technology developers

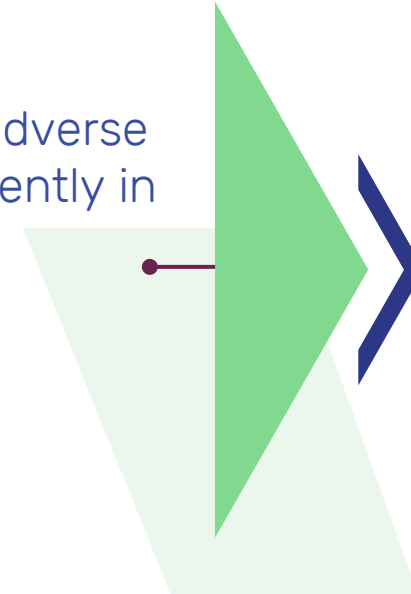
Reduces the risk for technology purchases and users



Which technologies ?

Environmental technologies are all technologies (products, processes, services) which:

- **demonstrate environmental added value** i.e. more beneficial or less adverse environmental impact with respect to the technologies applied currently in a similar situation
e.g. water treatment technologies, recycling technologies, secondary raw material based products
- **measure parameters that indicate environmental impacts**
e.g. monitoring technologies



Solutions with an environmental objective behind them:

- Solving an environmental problem
- Creating a new opportunity based on the solution of an environmental problem



Key eligibility requirements



TRL OF MINIMUM 7 LEVEL DEMONSTRATED BY:

- Stable performance in normal conditions of operation typically demonstrated by test data
- Defined variables that influence the performance – parameters of input material, operational/process conditions, constraints and limitations on use etc.
- Defined maintenance and operation requirements – may be associated with environmental impacts



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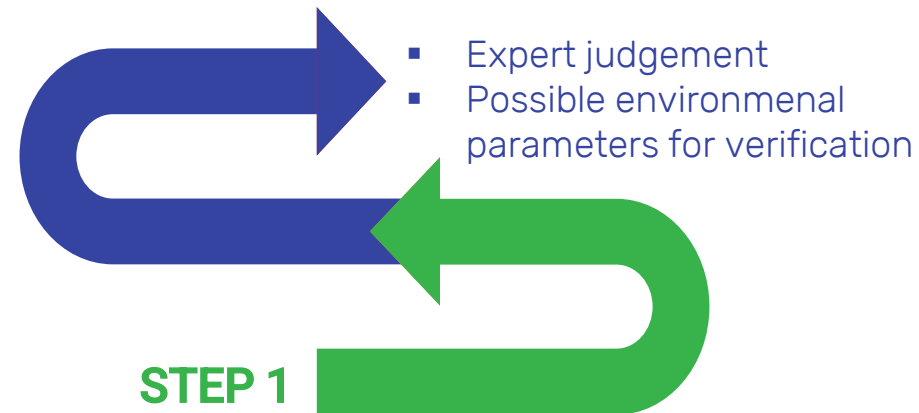
Key eligibility requirements

COMPLIANCE TO DEFINITION OF AN ENVIRONMENTAL TECHNOLOGY

i.e. **demonstration of an environmental added value:** reduced impact on environment compared to the solutions currently used in similar situation or better performance in measuring parameters reflecting environmental impacts (measurement equipment)

STEP 2
Define, possibly in quantitative terms the impact/difference

APPROACH



STEP 1

Define the life stage/stages of a technology for which the highest differences in environmental impact (both positive or negative/less adverse occur) compared to technology used currently in similar situation

Environmental impact parameters considered:

- Emission of greenhouse gases
- Emission of pollutants to the air, water and soil
- Use of resources
- Use of energy (incl. from renewable sources)
- Water consumption and associated processes
- Generation of waste incl. hazardous waste



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Central elements of ETV



Performance claim

Performance claim means a **set of technical specifications** that are representative of the technical and environmental performance of a technology in a specified application and under specified conditions of testing or use.



Test data on performance

The verification of the performance of a technology is based on the assessment of test data that is :

- independently generated
- quality assured and quality assessed (meets requirements of ISO 17025)
- relevant, sufficient and valid for the claim i.e.:
 - generated for a specific application of the technology consistent with the intended use as in the claim
 - include concrete and defined operational conditions of technology use
 - taking into account all measurement uncertainties and other assumptions

How does ETV work?



SPECIFIC VERIFICATION PROTOCOL

Verification Body develops the specific verification protocol including a detailed plan of the verification together with specification of the parameters to be verified and test data requirements, assesses the existing data and decides whether further tests are needed.



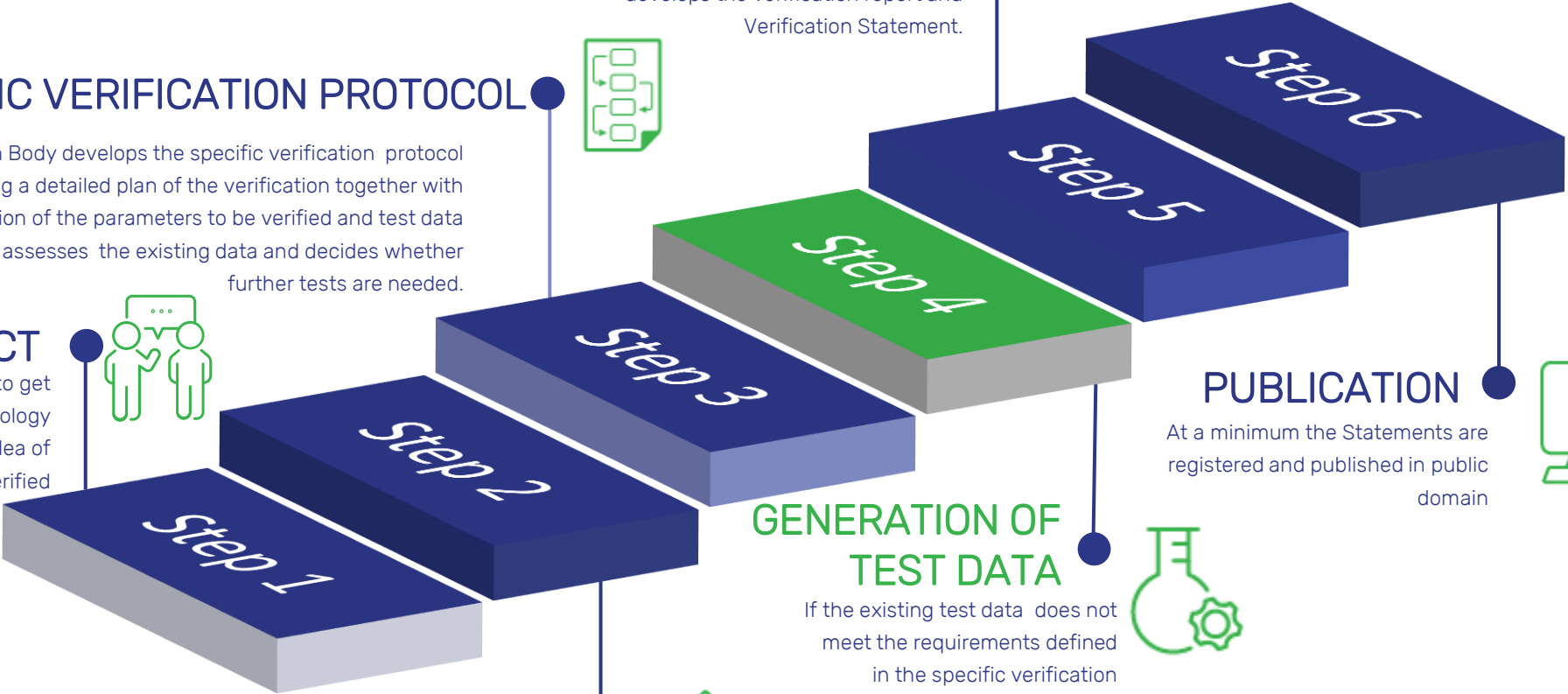
VERIFICATION OF PERFORMANCE

Verification Body reviews the final set of data, concludes on the verified performance and develops the verification report and Verification Statement.



CONTACT

Proposer contacts a verification body to get information on the process, check if the technology is a good candidate for ETV together with an idea of the performance claim to be verified



GENERATION OF TEST DATA

If the existing test data does not meet the requirements defined in the specific verification protocol, the proposer is requested to perform additional testing typically with an appropriate test body



APPLICATION

Proposer submits an application file detailing information about the technology together with the performance claim and existing test data. Verification body decides on the eligibility of the technology for ETV and revises the performance claim to be verified.



PUBLICATION

At a minimum the Statements are registered and published in public domain



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Who verifies?

ETV Bodies in EU:

Competences confirmed by accredited by national accreditation bodies for complinace to ISO 17020 type A inspection body to perfrom verifications accoding to ISO 14034 standard



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What information ETV provides?



2 key outputs of ETV:

- **Verification Report** = inspection report in the meaning of ISO 17020
- **Statement of Verification** = Inspection certificate in the meaning of ISO 17020

The ETV Statements of Verification meet the criteria of a document issued by an 'independent third-party certifier' or 'an independent third-party body' i.e., a body that performs conformity assessment activities accredited either in accordance with Regulation (EC) No 765/2008 of the European Parliament and of the Council or an accreditation body signatory to the multilateral recognition arrangement (MLA) for product certification of the International Accreditation Forum (IAF).



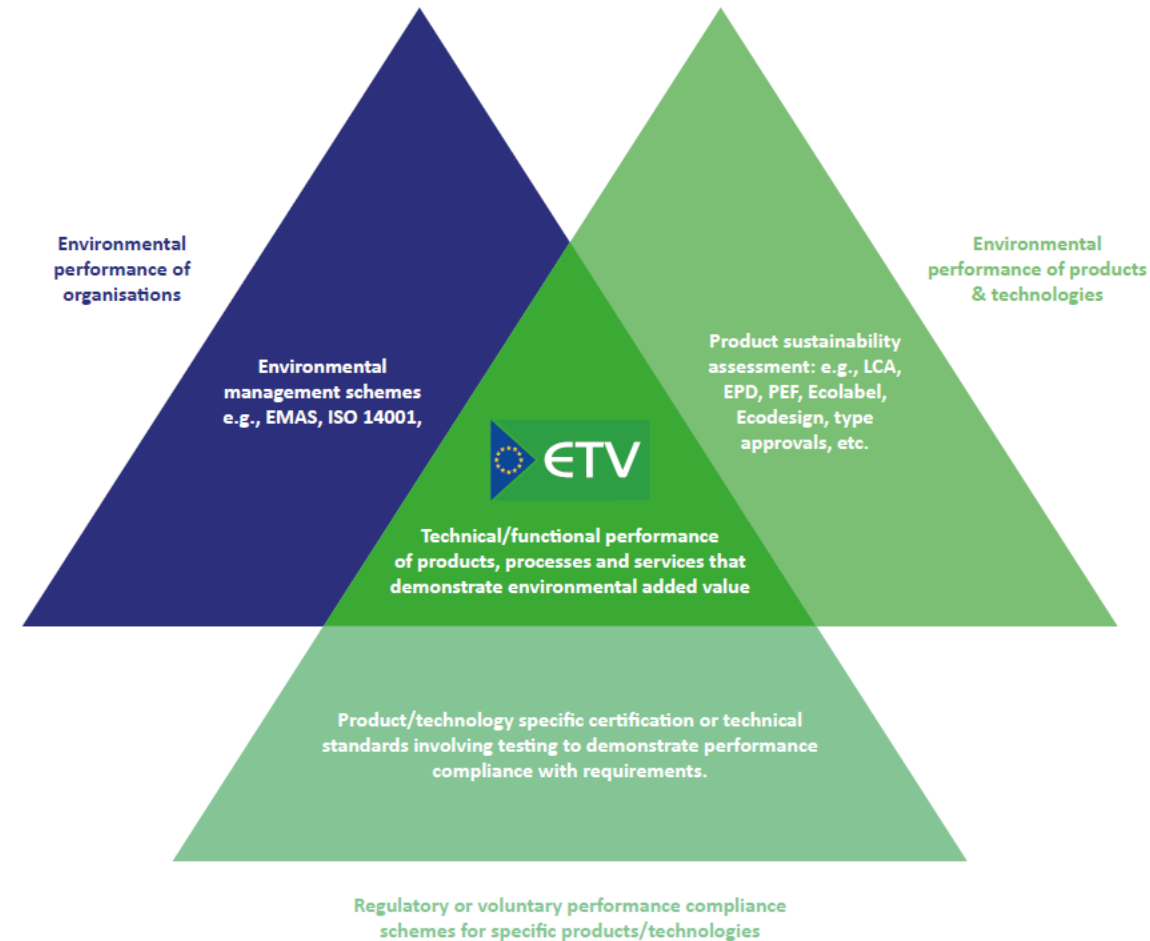
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What information ETV provides?

ETV fills a gap in the landscape of environmental certification schemes because it integrates three aspects of technology assessment:

- **AS A PERFORMANCE BASED SCHEME** it deals with **technical/functional performance of an environmental technology** i.e. how effectively a technology is able to deal with an environmental problem or create a new opportunity
- **AS AN ENVIRONMENTAL SCHEME** it addresses the **environmental performance of a technology** using life cycle perspective to determine if the **environmental problem or a new opportunity** are addressed with a **reduced environmental impact** compared to current solutions used in similar situation
- **AS GREEN INNOVATIONS SCHEME**, it focuses on the **environmental added value of a technology** resulting from the **application of innovative solutions** to its design, raw materials and energy involved, production process, use/ operation, recyclability or final disposal.



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What information ETV provides?

Example of verified technology: RECYOUEST



- Treatment of plastic used in agriculture, such as the nets used for round straw bales made of high-density polyethylene (HDPE) and twines of polypropylene (PP).
- RECYOUEST innovative process is based on recycling techniques used in the textile sector and can separate plastic from impurities without the use of water.
- Verified parameters:
 - Physical and mechanical performance parameters in dispersion, compared with virgin material;
 - Operational parameters of the recycling process

- Environmental problem
- New solution with a reduced environmental impact
- Verified performance at reduced environmental impact

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ETV for environmental performance schemes for products



The objectives of ETV and specialised environmental tools based on life-cycle information such as Environmental Product Declaration (EPD) or Product Environmental Footprint (PEF) are different.

EPD, PEF: provide a final/complete environmental impact of a product from the life cycle perspective

ETV : provide a verified claim concerning the technical/functional performance of an environmental technology (product, process, service) that may contribute to reducing the environmental impact at the stage of design or manufacturing of a product to be certified:

- Engineers and product designers get data to be able to choose the most sustainable option for their product project (in line with the new Ecodesign directive)
- With a choice of an environmental technology offering a reduced environmental impact, manufacturers are able to optimise the impact of their products and market their environmental impact transparency (in line with Green Taxonomy).



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ETV vs environmental management schemes

ETV does not address the management of the environmental performance of organisations.

EMAS, ISO 14001: the goal is to create an Environmental Management Scheme enabling identifying and controlling the environmental impact of organisation's activities, products and services. Continually improving its environmental performance.

ETV delivers information on the performance of technologies and their environmental benefits that may be useful to **facilitate innovation processes/promote technological modernisation and guide investments** towards improving the environmental performance of their activities relevant to:

- achieve key environmental objectives/targets in such areas as e.g., energy efficiency, resource productivity reduced waste generation
- ensure compliance or go even beyond all regulatory requirements relevant to the environment



Thank you for your attention

Questions?

Contact: Izabela Ratman-Kłosińska

LIFEproETV Coordinator

Institute for Ecology of Industrial Areas, Katowice, Poland

e-mail: i.ratman-klosinska@ietu.pl

www.lifeproetv.eu



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