



Role of ETV in meeting the EU Green Deals objectives through the assessment of environmental technologies performance

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The Zero Pollution Ambition

The **zero pollution vision for 2050** is for **air, water and soil pollution** to be reduced to levels no longer considered harmful to **health and natural ecosystems**, that respect the boundaries with which our planet can cope, thereby creating a **toxic-free environment**.



Key targets of Zero Pollution for 2030

- Air: reducing the number of premature deaths caused by air pollution by 55%
- Water: reducing plastic litter at sea by 50% and microplastics released by 30%
- Soil: reducing nutrient losses and the use of chemical pesticides by 50%
- Waste: significantly reducing waste generation, and residual municipal waste by 50%

New technologies are needed to achieve these targets.

- ✓ New production processes emitting less pollutants to air, water and soil
- ✓ New energy technologies saving resources and/or reducing emissions
- ✓ New agricultural technologies controlling better the use of fertilisers and pesticides
- ✓ New water treatment techniques integrating the removal of microplastics
- ✓ New recycling techniques, reuse of industrial by-products and used products

Environmental Technology Verification (ETV)



- A proven, robust **process to verify the performance** of environmental technologies
- A source of **credible information** on innovative technologies
- More **flexible** than certification, adapting to technology characteristics
- Gives **credibility** to technology developers
- **Reduces the risk** for technology purchases and users

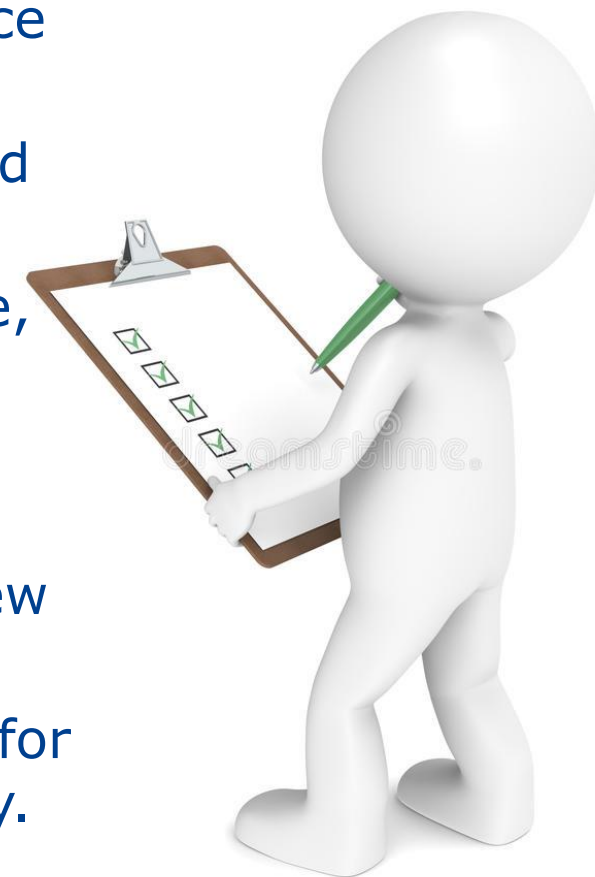
How does ETV work?

- ETV implemented by **Verification Bodies**, accredited by National Accreditation Bodies as inspection bodies (ISO 17020)
- Verification Bodies accredited for **specific technology areas**: water, energy and/or materials and waste
- EU **ETV process** based on ISO Standard 14034, described in the ETV General Verification Protocol
- Coordination by a **Technical Group** providing guidance on quality and procedures
- The result is a **Statement of Verification** published on the ETV website on Europa



How does ETV reduce risks?

- ✓ Technologies arriving on the market lack records of performance in use. Tests under controlled condition may compensate.
- ✓ Technology developers may not have the internal validation and control systems ensuring the quality of in-house tests.
- ✓ In the absence of established standards or certification scheme, third-party assessment may be not available or not reliable.
- ✓ ETV provide a reliable third-party assessment based on tests under controlled quality.
- ✓ ETV provides a source of information on the performance of new technologies.
- ✓ Harmonised ETV process and EU guidance ensure high quality for verification procedures for any accredited ETV Verification Body.



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

Example II: Airport runoff and perched water treatment EFFE[®] GX

- The water treatment plant EFFE[®] GX increases the amount of dissolved oxygen in water, reduces foul odour by treating the gaseous substances and reduces emissions into water bodies of airport surroundings. The technology reduces the amount of solids and dissolved metals and other compounds that affect the water quality.
- The results can be achieved under normal winter conditions. The water flow can vary from 0 m³/h to 15 m³/h (range of storm water flow).



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Thank you for your attention!

<https://ec.europa.eu/environment/ecoap/etv>