

EU ETV pilot programme

Frequently Asked Questions

What is ETV?

Environmental Technology Verification (ETV) is a new tool for companies developing innovative environmental technologies. On a voluntary basis, ETV provides the verification by qualified, independent organisations of the performance of new environmental technologies. This will help manufacturers to prove the reliability of performance claims and it will help technology purchasers to identify innovations fitting their needs.

Who will benefit and how?

- **Companies** developing innovative environmental technologies will benefit from a 'Statement of Verification' providing objective and reliable evidence on the performance of new eco-technologies that they are bringing to the market, in order to convince investors and potential customers about the merits of the technologies; **Small and Medium-sized Enterprises** may be particularly interested by ETV to differentiate their technologies from larger competitors and ensure the credibility of related performance claims;
- **Companies and public authorities** purchasing or using environmental technologies will be able to base their decisions on sound information, widely recognised as scientifically valid and acceptable as proof of evidence in tendering and purchasing procedures; choosing new technologies on the basis of solid information will enable them to benefit from innovative, more performing technologies fitting their needs better and therefore with a lower risk of failure or discrepancies from expected results;
- **Citizens, policy-makers and regulators** will benefit from reliable information on the performance achievable by emerging technologies in preventing or remediating environmental damages; this will facilitate the definition of more accurate environmental policies by policy-makers, the formulation of better informed opinions by citizens organisations, and a more cost-efficient implementation of environmental legislation by regulators;
- **The society as a whole** will benefit from the faster dissemination and application of innovative environmental technologies, which is likely to stimulate the economic growth and the creation of new jobs in sustainable economic sectors.

What technologies are concerned?

The ETV pilot programme is open to all technologies ready for the market and presenting a potential for innovation and environmental benefit in these 3 areas initially:

1. Water treatment and monitoring (monitoring of water quality, treatment of drinking water and of waste water)
2. Materials, waste and resources (separation and sorting of solid waste, recycling of materials, end-of-life products and chemicals, products made of biomass)
3. Energy technologies (renewable sources of energy, energy from waste, energy efficiency technologies)

How does it work?

The process of verifying a technology under ETV is managed by an accredited **Verification Body** (VB) competent for implementing ETV in the relevant technology area. The VB is

therefore the 'single-stop shop' for technology manufacturers willing to use ETV: the VB receives the proposal from the manufacturer, defines the parameters to be verified and the tests necessary, guides the manufacturer throughout the process and drafts the final documents.

During the verification process, a test body or analytical laboratory may also be involved in case further tests are needed to verify the technology.

The main steps of verification are as follows:

- (a) **Proposal Phase:** first contact with VB, quick assessment of the technology, advise on whether to undertake the verification or not, cost estimate
- (b) **Specific verification protocol preparation:** definition of technical parameters to be verified, requirements on tests and test data quality
- (c) **Assessment of existing data,** checking whether existing data fulfil all requirements or further tests are necessary
- (d) **Testing:** if necessary, definition of test plan, testing and reporting on tests
- (e) **Assessment of all data and Verification:** final assessment of test data and verification requirements
- (f) **Reporting** and publication of **Verification Statement**

What is the final output of verification under ETV?

The verification of an environmental technology under ETV concludes with a complete **verification report** and a summary called the **Statement of Verification**.

The **verification report** includes the detailed assessment and conclusions of the verification process and all the reports produced during the verification process (quick scan, verification protocol, test plan, test report...) It can be made public on the ETV website if the technology manufacturer agrees.

The **Statement of Verification** contains the main information necessary for the technology users and purchasers in a summarised form (normally 3 to 5 pages): the description of the technology, consolidated test results showing the technology performance, the conditions of testing and use under which these results were obtained, a summary of the tests and procedures followed to verify the technology. The content of the Statement should be approved by the technology manufacturer before it is published, so as to avoid the release of confidential information. All Statements of Verification are publicly available on the ETV website.

The **added-value of the Statement** is the assurance of the credibility of the claim as to the performance of the relevant technology, thus facilitating subsequent recognition by purchasers across and beyond the European Union. Under the current practice performance claims are stated by the technology manufacturer without third-party verification. In the best case the technology manufacturer provides a test report supporting the claims, but the value of a test report depends on the design and quality of the tests and on the competence and independence of the testing laboratory. Unverified test reports may not be recognised on foreign markets or may not be understood beyond a circle of technology specialists.

What is the purpose of publishing the Statements of Verification?

There are two objectives as to the public release of verification statements:

1. **Information:** it makes the results of verification available to potential purchasers and users by supplying reliable information on technologies.
2. **Credibility:** customers, users and investors are able to check the information and see exactly how the verification process was carried out. Credibility is enhanced when information with regards to verification is easily accessible.

In addition to the Statement of Verification, manufacturers are encouraged to publish also the complete verification report in order to provide full transparency on ETV results, but owing to the possible risk of release of confidential data, the decision is left to the technology manufacturer.

What is the difference with existing certification and labelling schemes?

The main difference between verification and certification is the starting point: in the case of certification, this is a standard or legislation or any pre-defined set of specifications; the technology is evaluated and eventually certified as conforming to these specifications. In the case of verification under ETV, the starting point is the performance claim provided by the technology manufacturer. This makes a big difference for innovations not fitting with existing standards, for example when they perform beyond the requirements of applicable standards or when they have technical characteristics not covered by existing standards. Under ETV, the technology is evaluated and stated as conforming to the performance specifications announced by the manufacturer.

Labelling schemes present also a fixed set of criteria, deemed essential for the objective of the label, against which the technology is evaluated. In addition, labels are generally intended for consumers, whereas ETV is intended for business-to-business relations.

If an existing standard or label is considered by the technology manufacturer as giving a correct idea of the new technology, then the corresponding certification or labelling schemes may be an adequate choice. If not, the technology manufacturer should consider if a performance claim verified under ETV would give a more adequate idea of the technology and its innovative features.

Please note that some legislation, for example the Directive on the eco-design of energy-using products and the Energy Labelling Directive, impose the provision of specific information in the technical documentation and on products websites. In this case, merely repeating the same information in the ETV Statement of Verification would have no sense.

Can I use the ETV logo on my products after verification?

Because ETV is not a labelling scheme (see previous question), the ETV logo cannot be used on products. Technology manufacturers can use the Statement of Verification, which is the summary of the complete verification report and the main result of a successful ETV process, in their business-to-business relations with clients or investors.

Statements of Verification can for example be included or referred to (with the complete reference and link) in the technical documentation of the new technology. It can be used in tendering procedures to prove the performance of the technology proposed. It may be useful in particular on export markets such as Northern-American or Asian markets where the ETV approach is known and recognised (see ETV website for more information).

How much does it cost?

Costs can vary considerably depending on the technology and the quality of existing data.

In order to have an order of magnitude of costs, we can consider the example of the DANETV verification centre, which has been active in Denmark in 5 technology areas since 2009. Based on 21 verifications finalised in 2009-2010, the average cost for the testing and verification of technologies was €53,000, of which €28,000 was attributable to the verification procedures per se (the rest is related to testing).

The ETV pilot programme is supported by the EU budget and by participating countries, with the aim of limiting the average final contribution of participating Small and Medium-size Enterprises to around €20 000 for verification.

Direct support to technology manufacturers, in particular SMEs, for verifications under the ETV pilot programme could also come from larger funding programmes, established at EU and Member State levels:

- Verification under ETV may be proposed as the last step in research and development projects, for example in R&D programmes aimed at developing environmental technologies to the point where they are ready for the market;
- Under EU programmes such as LIFE+ and CIP eco-innovation, ETV procedures could be integrated into larger projects including, for example, industrial investments, industry-research partnerships or prototypes;
- A number of SME-support schemes in Member States include support to product certification, authorisation procedures or marketing of new products and services. A study¹ commissioned by the Commission in 2009 concluded that many of them could cover support to individual verifications under ETV with little or no modification to their policies.

Who can participate?

Any company manufacturing or marketing environmental technologies or organisations acting on their behalf, established in the EU or not, can submit proposals to the ETV pilot programme.

Any organisations competent in evaluating or testing environmental technologies in the fields covered by the ETV pilot programme, may participate in the ETV pilot programme either:

- By seeking accreditation as ETV Verification Body by national accreditation bodies; the accreditation is based on ISO standard 17020 for inspection bodies and on a technical reference specific to ETV: the General Verification Protocol (available on ETV website²); or
- By participating in ETV verification procedures as test body or analytical laboratory and applying ETV rules and procedures of the General Verification Protocol; accreditation is not required for test bodies but certification under the ISO standard 9001 would facilitate the participation in ETV; for analytical laboratories (analysing test samples), accreditation to the ISO standard 17025 is required.

Seven EU Member States participated in the design of the EU pilot programme and will continue to steer its implementation: Belgium, the Czech Republic, Denmark, Finland, France, Poland and the United Kingdom. In these countries, ETV may be linked to national programmes (for example innovation funds or green procurement programmes) or extended to other fields of technologies on a national basis. National contact points in these countries may help interested organisations (see the information note³ for the list of national contact points).

This is in no case a limitation for the organisations not established in these countries: access to the ETV pilot programme is granted on the same conditions for all.

Can an organisation apply to become both a Verification Body and a Test body?

¹ See AEA report on funding for SMEs, available on the ETV website at:

http://ec.europa.eu/environment/etv/key_projects.htm

² http://ec.europa.eu/environment/etv/etv_preprog.htm

³ Available on the ETV website at http://ec.europa.eu/environment/etv/etv_preprog.htm

There is no application for becoming a Test body but only for becoming a Verification Body (through accreditation: see previous question). It should be noted that there are thousands of test bodies in Europe, which can potentially participate in ETV, whereas it is expected that the number of Verification Bodies will only amount to 15-20.

If an accredited Verification Body proposes also testing services, the two functions need to be separated: the staff responsible for testing shall not be the same as the staff responsible for the evaluation of the test results in the verification body and shall not be dependent upon these.

The separation between verification and testing is intended to give to the technology manufacturer the maximum choice regarding test bodies. The choice on Verification Bodies is also entirely free, but the probable number of Verification Bodies competent in a given technology field will presumably limit this choice.

Why an EU pilot programme? Does verification by the ETV pilot programme has the same value as verification by a definitive ETV scheme? When will the EU ETV programme become definitive?

The ETV initiative is launched as a pilot programme because there is no certainty yet on the exact potential of the ETV approach and on the organisational framework needed to implement it. After two to three years of operation, the Commission and the Member States steering the initiative will evaluate its results, in particular its market potential, its efficiency in helping eco-innovations reach the market (especially innovations developed by SMEs) and they will then decide the best way to mobilise ETV potential.

From the point of view of technology users, the value of ETV products is ensured by applying rigorous and scientifically-sound procedures and by the formal accreditation of the Verification Bodies responsible for applying them. Any ETV scheme that could follow on from the pilot programme would aim to ensure the same credibility. The value of the ETV pilot programme is therefore the same for the environmental technology market as would be the case under any eventual definitive scheme.