



EU Environmental Technology Verification pre-programme

The EU ETV pre-programme



Pierre Henry

Policy Officer

DG Environment
European Commission





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ETV Objectives

ETV to generate independent and credible information on new environmental technologies, by verifying that performance claims are complete, fair and based on reliable test results.

- help technology developers and vendors market new technologies
- support technology purchasers and users make informed decisions
- facilitate implementation of environmental policies and regulations





Example of performance claim

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Is the designation T precise enough to refer to only one technology?

Is the intended application clear enough to identify precise user needs?

Technology T, whose intended application is A, operated under conditions O, performs in such a way that

parameter $a < \text{or} = a_0$,
parameter $b > b_0$ and regulated
parameter $c < \text{or} = c_0$ in compliance with
Standard S.

Are operating conditions clearly known and unambiguous?

Are the regulatory framework and applicable standards known, specific to particular markets?

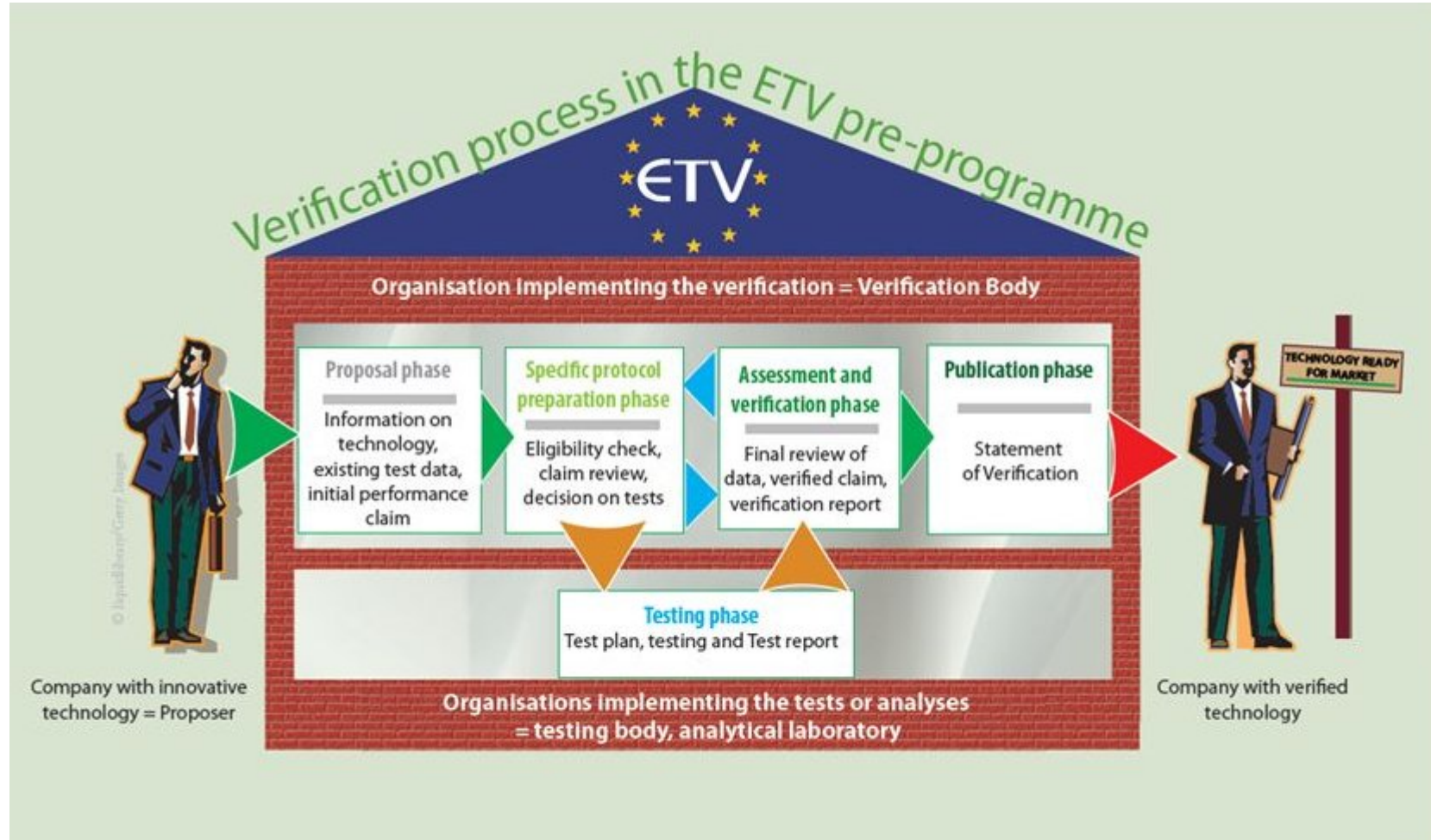
Are parameters quantified, verifiable by testing, representative of user needs and key environmental factors, enabling comparisons?





Outline ETV process

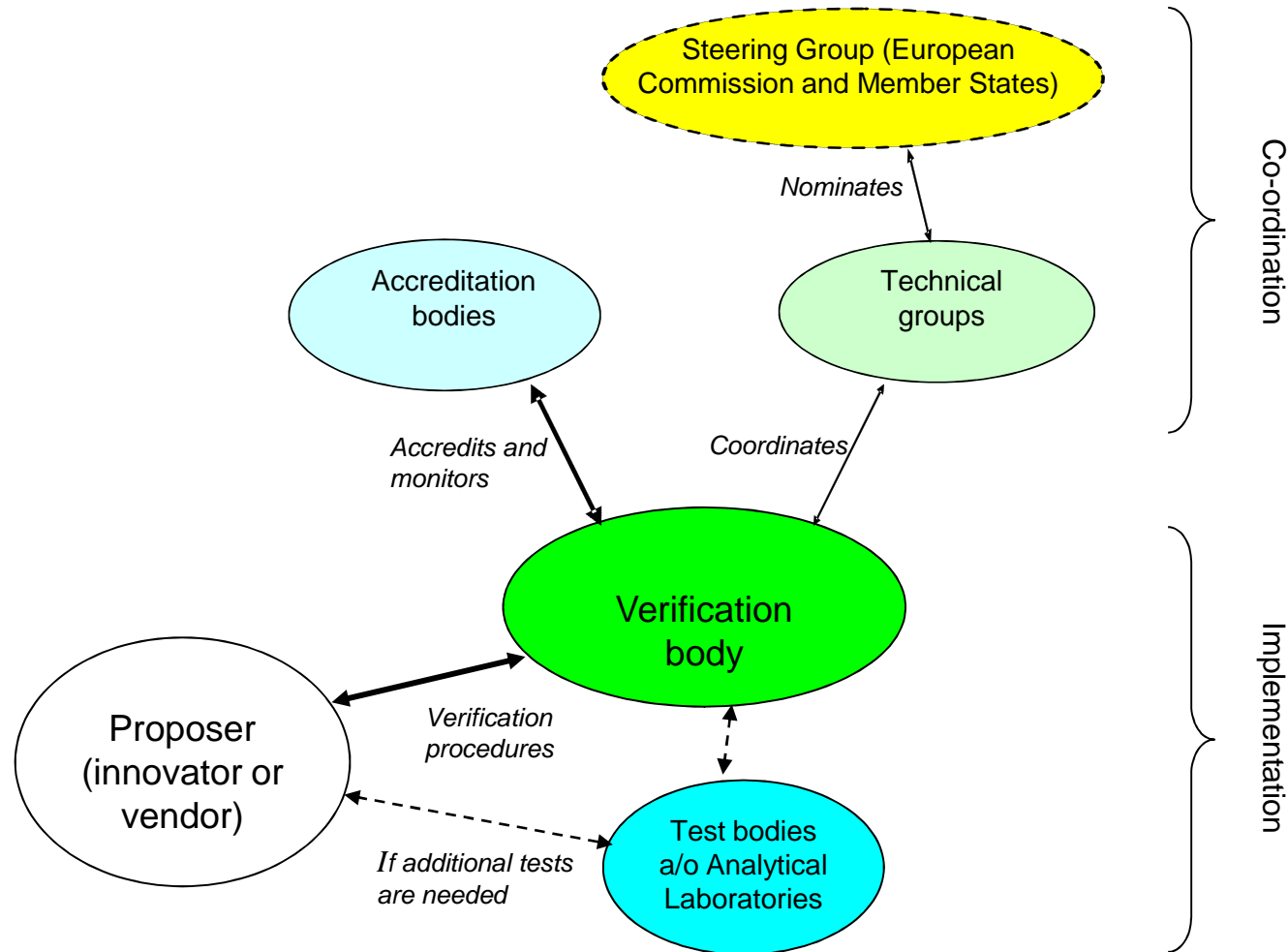
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Organisation of ETV process

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Verification Bodies

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Accredited for ETV by national accreditation bodies

Compliance with ISO 17020 and ETV General Verification Protocol (GVP)

Responsible for the verification of individual technologies in a specific technology field

Assistance to SMEs during the ETV process

Coordinated by thematic technical groups

From 2011 to 2013, Partnership Agreements with the Commission (1st call in 2011)





Testing Bodies and Analytical Laboratories

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Test bodies are responsible for planning and implementing tests where needed for ETV

No specific accreditation but requirements on qualification – any test body can participate

Analytical Laboratories: accreditation under ISO 17025 required

Existing data: strict requirements on the quality of test data

From producer or test bodies (before submission to ETV)





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Technology scope

ETV open to all technologies ready for the market, presenting a potential for innovation and environmental benefit, in three initial areas:

- 1) **Water treatment and monitoring** (monitoring equipments, treatment of drinking water, waste water treatment...)
- 2) **Energy technologies** (renewables, waste to energy, CHP...)
- 3) **Materials, waste and resources** (sorting of solid waste, materials recycling, products from biomass...)

Possible extension of the technology scope to one or more areas

- Soil and groundwater monitoring and remediation
- Cleaner production and processes
- Environmental technologies in agriculture
- Air pollution monitoring and abatement





Market assessment study

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Study by EPEC (GHK, Technopolis) Nov. 2010 – May 2011

Objective: assess the likely demand, cost-effectiveness for technology developers, identify technology areas with the highest value added and benefits

Approach:

- Literature review + consultation with stakeholders in parallel
- Analysis of market & structural characteristics
- Identification of business cases, detailed assessment of cost and demand for ETV





Market assessment study (II)

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Business cases

- 1) Low carbon building materials – Insulation
- 2) Materials, waste and resources – Biobased products
- 3) Land remediation – Site investigation tools
- 4) Water monitoring – In-line water monitors
- 5) Energy efficiency – Micro CHP
- 6) Renewable energy – Solar hybrid technologies
- 7) Water treatment – Anaerobic digestion

Key features: high EU market potential; varying degrees of market maturity; large scope for innovation; strong SME supply base; high environmental impact potential.





Market assessment study (III)

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Value added for ETV

- Facilitates entry into home market, **into EU27 markets** and/or non-EU (insulation, site characterisation, water monitoring, micro CHP, solar hybrids, anaerobic digestion)
- Allows products to compete against rivals (water monitoring, anaerobic digestion)
- Increases speed to reach market and/or market acceptance by customers (Insulation, site characterisation, micro CHP, solar)
- Provide insights on environmental impacts (anaerobic digestion) and/or facilitates regulator approval (site charact.)
- Limited benefit from ETV for biobased products





Market assessment study (IV)

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Cost and willingness to pay

- Testing: €10-25,000 (complexity, highest for discrete products)
- Verification/Certification: €10-50,000 (highest for integrated)
- Administration in firms: €16,000 average
- Willingness to pay: €10,000 average (SMEs value ETV most)

Key factors for ETV success

- Marketing the ETV programme and brand
- Communicating ETV operational requirements
- Complementarity with existing certifications
- Institutional buy-in from environmental regulators
- Number and location of Verification Bodies
- Possible funding support mechanisms





**European Commission
DG Environment**

Thank you !

ENV-ETV@ec.europa.eu

<http://ec.europa.eu/environment/etv/index.htm>