

Detailed Assessment of the Market Potential, and Demand for, an EU Environmental Technology Verification Scheme

Stakeholder Questionnaire – Technology Developers

Environmental Technology Verification (ETV) is a **voluntary** scheme developed by the European Commission under the Environmental Technologies Action Plan¹ (ETAP) to generate independent and credible information on new environmental technologies, by **verifying that environmental performance claims put forward by technology developers and vendors are complete, fair and based on reliable test results**. Building on the success of similar schemes established in the United States and Canada, the objectives of the EU ETV are threefold:

- **To help developers and vendors**, especially SMEs, provide objective and reliable evidence on the environmental performance of new environmental technologies arriving on the market, in order to convince first investors and customers on the merits of these technologies;
- **To support technology purchasers** (public or private) in basing their decisions on sound information, widely recognised as scientifically valid and acceptable as proof of evidence in tendering and purchasing procedures;
- **To facilitate the implementation of public policies and regulations** by providing citizens, regulators and decision-makers with solid information on the level of performance achievable by new environmental technologies ready for the market.

More information on the EU ETV pre-programme that was launched in November 2010 can be found at

<http://ec.europa.eu/environment/etv/pdf/ETV%20pre-programme%20presentation.pdf>.

The European Policy Evaluation Consortium (EPEC) led by GHK Consultants has been contracted by DG Environment to assess the market potential and demand for an EU ETV scheme by technology area. This will consider not only the potential benefits of such a scheme, but also the costs of establishing and operating a scheme for those organisations involved.

The outcome of the study will be used to understand what technology areas would benefit most from the EU ETV and what measures could encourage more businesses to participate in such a scheme.

How You Can Help

Your organisation has been identified as potentially benefiting from an EU ETV scheme. We would greatly appreciate it if you could complete the following questionnaire which will help the Commission in its development of ETV. The questionnaire consists of multiple-choice questions and can be completed online at your convenience (a word version for printing out is available upon request). It should take no more than 15-20 minutes to complete. Where questions ask for additional information, you may reply either in English or in your native language, if this is more convenient.

¹ EC (2004): Communication from the Commission to the Council and the European Parliament, '**Stimulating Technologies for Sustainable Development: An Environmental Technologies Action Plan for the European Union**', COM(2004)38 final, Brussels 28.01.2004, available at: http://ec.europa.eu/environment/etap/files/com_2004_etap_en.pdf

If you feel that the multiple-choice questions do not fully represent either your organisation's views or fully reflect the development and commercialisation process for your particular environmental technology, please contact us at the address below (in your native language by email, if you prefer) and we will be happy to discuss your views.

Please note that your responses will be treated confidentially and care will be taken to ensure that specific responses cannot be linked to individual organisations. We would like to receive your completed questionnaire by 1st March 2011; however, if you would like to respond to this survey but are unable to do so before 1st March 2011, please let us know. All responses should be submitted online or sent to the address given below by e-mail, fax or post. **If you are unable to answer a question (or a component of a question), please leave it blank.**

To fill in the survey please use this interactive Adobe Acrobat document. You can save a partially completed survey and circulate via email if inputs from more than one person are needed. You can enter as much text as is necessary for each descriptive response.

When you have finished, please click the 'Submit' icon at the top right of the page. If you subsequently want to make changes then please resubmit the entire form. Alternatively, if you fail to locate this icon in your form, please save the questionnaire and return it to etv@ghkint.com as an email attachment.

SECTION A: ORGANISATION DETAILS

Organisation name:

Name of contact person:

Position:

Address:

Telephone number:

Fax number:

Email address:

Q1. Please provide the following company details:

What is the size of the company for which you are responding?

Micro company (turnover equal to or below €2m, below 10 employees)

Small company (turnover between €2m and €10m, 10-50 employees)

Medium company (turnover between €10m and €50m, 50-250 employees)

Large company (turnover over 50m, more than 250 employees)

Is your company part of a larger company?

Yes

No

If yes, please specify the parent company:

In which countries is your company located? *(Please tick all that apply)*

European Head Office

Other Sites in Europe

Non-EU Sites

Please specify in which year your company was first registered for tax purposes in an EU Member State and the age of your company.

Year 1st tax registered:

Age of company:

1-2 years

3-5 years

6-10 years

11-20 years

More than 20 years

Q2. Please indicate your company's principal technology area(s) of activity. (Please tick all that apply)

Water Treatment & Monitoring:

Monitoring of water quality for microbial and chemical contaminants

Treatment of drinking water for microbial and chemical contaminants

Treatment of wastewater for microbial and chemical contaminants

Desalination of seawater or groundwater

Soil & Groundwater Monitoring & Remediation:

Soil and groundwater monitoring

In-situ soil and groundwater pollution remediation

Ex-situ management and de-pollution of sediments, sludge and soils

Cleaner Production & Processes:

Savings of material resources (resource efficiency) , including savings of chemicals or carbon

Improved energy efficiency in industry

Improved energy efficiency in buildings

Prevention and reduction of pollution and waste from industrial processes

Materials, Waste & Resources:

Recycling of industrial by-products and waste into secondary materials, recycling of construction waste into building materials

Separation or sorting techniques for solid waste, materials recovery

Recycling of batteries, accumulators and chemicals

Reduction in mercury contamination from solid waste

Products made of biomass

Environmental Technologies in Agriculture:

Reduction of air contamination and odour, efficient use of water

Recycling of nutrients and organic carbon from manure, reuse of sewage sludge and re-use of waste water after treatment

Reduction of pesticide use and contamination, prevention of pollution from nitrates and phosphates

Air Pollution Monitoring & Abatement:

Air emissions monitoring

Abatement of pollution from stationary sources

Energy Technologies:

Production of heat and power from renewable sources of energy (e.g. hydro, geothermal, wind, biomass, solar PV/thermal, landfill gas)

Reuse of energy from waste (e.g. combustion technologies covering mass burn incineration, plasma incineration, pyrolysis and gasification)

Conversion of biomass to fuel

Energy efficiency technologies (e.g. micro-turbines, hydrogen and fuel cells, heat pumps, combined heat and power production, logistics, etc.)

SECTION B: ENVIRONMENTAL TECHNOLOGY RESEARCH, DEVELOPMENT & DEMONSTRATION ACTIVITY

Q3. For the purposes of this survey, PLEASE CHOOSE ONLY ONE TECHNOLOGY AREA for which to respond on all subsequent questions:

Water Treatment & Monitoring

Soil & Groundwater Monitoring & Remediation

Cleaner Production & Processes

Materials, Waste & Resources

Environmental Technologies in Agriculture

Air Pollution Monitoring & Abatement

Energy Technologies

Q4. Please indicate how many new products you are currently developing in this technology area; how many of these are market ready; and the number that have been successfully commercialised in this technology area:

Technology area	Number of products currently under development					Number of market-ready technologies not yet on market					Number of products already placed on market				
	0	1	2	3-5	5+	0	1	2	3-5	5+	0	1	2	3-5	5+

As specified in Q3

Q5. If you are currently selling products in this technology area, please indicate the relative proportion of your sales into these markets:

Technology area	Yet to sell products (%)	Domestic market (%)	Other EU countries (%)	Non-EU countries (%)
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As specified in Q3

Q6. Of those market ready technologies you have yet to get to market, how many might be sold or licensed solely to one end user?

0 1 2 3-5 5+

Q7. What proportion of your company's annual turnover is represented by the annual R&D expenditure covered by this technology area?

Technology area **% Turnover**

As specified in Q3

Q8. Does your company collaborate on product RD&D with key customers in this technology area?

Yes (we collaborate with key customers on RD&D but we fund all the research ourselves)

Yes (we collaborate with key customers on RD&D and we receive some funding from them)

Yes (we collaborate with key customers on RD&D and we generally enter into a joint development agreement funded by both parties)

No, we do not collaborate on RD&D with key customers

Q9. Please indicate your company's total annual budgets for product testing, customer validation and certification procedures, to develop the next generation of product in this technology area.

	Product testing	Customer product validation procedures (e.g. alpha/ beta prototyping)	Product certification (including labelling)
€0			
€1- € 5,000			
€ 5,001- € 50,000			
€50,001-€100,000			
€100,001- € 250,000			
€ 250,001- € 500,000			
€500,001-€1 million			
€1 million+			

Q10. What level of improvement in environmental performance are you aiming to achieve for your next generation of products?

<10% improvement in environmental performance

10 - 25% improvement in environmental performance

26 - 100% improvement in environmental performance

100%+ improvement in environmental performance

Q11. Besides environmental performance improvements, are you also aiming to achieve cost reductions from these new products?

Yes, we envisage cost reductions of <10% of current prices

Yes, we envisage cost reductions of 10-25% of current prices

Yes, we envisage cost reductions of >25% of current prices

Yes, potentially, but we are currently uncertain about the level of cost reduction

No

Q12. With respect to the level of knowledge you have vis-a-vis the next generation of your new products, please rate each of the following parameters from very low (1) to very high (5)

Parameter

Rating

The level of knowledge you have about the technical performance of your product in real operating conditions

The level of knowledge you have about the technical performance that is required for your product to reach market acceptance

The level of knowledge you have about the real production costs of your product in the first years of market introduction

The level of knowledge you have about the technical performance reached by your main competitors for the same product

The level of knowledge your potential customers have about the technical performance of your product in real operating conditions

SECTION C: BARRIERS TO MARKET ACCEPTANCE OF ENVIRONMENTAL TECHNOLOGIES

Q13. What are the 5 main barriers that affect market acceptance / adoption by customers of your new technologies? Please rank in order of importance (1 being highest and 5 lowest)

Barriers to market acceptance/ adoption of new technologies

Rank

1. We have limited or no track record of sales
2. Our company is of insufficient scale (e.g. turnover) to provide credible guarantees to customers
3. Our new product price is higher than incumbent technologies
4. Customers are uncertain about our product's environmental performance
5. Customers are uncertain as to how suitable our product is to their operations (i.e. fitness for use)
6. We lack legitimacy for our environmental performance claims
7. We are unable to demonstrate the performance of our technology in real world operational conditions
8. Our customers are highly risk averse and prefer to buy market proven technologies
9. Validation procedures for this new technology are very onerous
10. Our company must comply with stringent health, safety, and environmental standards as a condition of sale
11. We have yet to achieve the right quality standards / accreditations (e.g. ISO9001/14001) to satisfy customers
12. Lack of mutual recognition and harmonised standards prevents market access
13. Other barriers (*please specify in the space provided below*)

Q14. What methods do you currently use for proving your performance claims to potential customers? (Please tick all that apply)

1. Previous sales to customer
2. Company reputation in the market
3. Test data from a credible testing organisation
4. Use of an existing ETV scheme
5. Joint development with potential future customers
6. Demonstration at customer site
7. ISO certification
8. Other forms of certification scheme relevant to the technology area
9. Other (please specify in the space provided below)

If so, please state scheme:

Q15. Is verification of environmental performance always a requirement of market access for the technologies you are developing?

Yes

Rarely required

Never required

Q16. Have you already used an existing certification scheme to help you access international markets?

Yes

No

Don't know

If yes, please state scheme:

Q17. Has a lack of verification and/or certification restricted your international market access to date?

No

Yes (into other EU markets)

Yes (into non-EU markets)

Yes (into both EU and non-EU markets)

If you answered No, please go to Q18 (on the next page).

If you answered Yes, please provide more details and provide an indication of the extent of lost sales:

If you answered Yes, do you expect your access to international markets to improve over time due to sales, experience etc.?

Yes

No

Potentially

SECTION D: POTENTIAL BENEFITS OF ENVIRONMENTAL TECHNOLOGY VERIFICATION (ETV)

Q18. Please indicate which of the following are likely to be the benefits of an effective ETV scheme* for the environmental product you are closest to bringing to market (* meaning a scheme that would generate independent and credible information on your key product performance):

<i>Benefit</i>	<i>No benefit</i>	<i>Insignificant benefit</i>	<i>Significant benefit</i>	<i>Highly significant benefit</i>
1. Facilitates market entry for our product into our home market				
2. Facilitates market entry for our product into other EU markets				
3. Facilitates market entry for our product into non-EU markets				
4. Increases the speed at which our product reaches market				
5. Increases market acceptance of our product by customers				
6. Reduces risk for our company when investing in RD&D				
7. Allows our product to compete with market leading/rival products				
8. Enables our company to secure finance from third parties				
9. Clients gain insights on environmental impacts from our product				
10. Other <i>(please specify in the space provided below)</i>				

Q19. Irrespective of any public support you might use to access the ETV scheme, it is important that we assess the level of finance you are ready to commit in order to benefit from the ETV scheme. Given the list of benefits previously identified, please could you indicate for the environmental product which is closest to market, what fee for an ETV would be economically viable for your company.

(Note that under the ETV all product testing costs - if required by the verification body - will be charged separately to the ETV fee and borne by the product developer. You should therefore take account of this in identifying the likely fee that you would be prepared to pay)

<€5,000	€5,000-€9,999	€10,000-19,999	€20,000-€49,999	€50,000-€100,000	>€100,000
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Q20. Please provide a simple description of the first environmental product you would like to put through the ETV scheme:

Q21. Please specify which Member State and European funding schemes your company is aware of, or would consider to support your ETV application:

Member State support schemes

European support schemes

Q22. What is the maximum time period for product verification under ETV which you would accept?

<6 months

<1 year

<2 years

SECTION E: OTHER ISSUES

Q23. Finally, if you feel that we have missed anything important in relation to the reasons for applying an ETV or the issues that affect your company in bringing new products to market, please let us know below (and continue on a separate sheet as required).

Thank you very much for your assistance.

All responses will be treated confidentially and reported in a non-attributable format.

Key contacts for this study:

GHK (lead consultant): The GHK project manager for this study is Mark Peacock (mark.peacock@ghkint.com ; +44 207 611 1100; GHK Consulting Ltd, 67 Clerkenwell Road, London, EC1R 5BL, UK)

DG Environment, European Commission: The official monitoring this study at DG Environment is Mr Pierre Henry (Pierre.Henry@ec.europa.eu).

Completed questionnaires may be sent to etv@ghkint.com as email attachments if you fail to locate the 'Submit' icon to the top right.