AdvanceETV

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Coordination Action on Environmental Technology Verification

NEWS

A COORDINATION ACTION FUNDED BY THE 7TH FRAMEWORK PROGRAMME OF THE EUROPEAN UNION

SEVENTH FRAMEWORK PROGRAMME

EDITORIAL

ETV – Building a framework for international cooperation

A European goal is to protect and to improve the environment because its intactness is essential for keeping up the wealth in Europe and beyond in a long-term point of view. This includes also the aim to limit the rise of the global average temperature to two degrees Celsius in comparison to the temperature of the pre-industrial era. Supporting the establishment of innovative Environmentally sound Technologies (EsT's) on the market is one way to support the achievement of the goal.

An independent proof of the performance of a product assures its reliability and can raise confidence of decision-makers since vendors of innovative EsT's face difficulties in guaranteeing by their own that their products work well. While the U.S., Canada, Japan, and other countries have established so-called "Environmental Technology Verification (ETV)" systems that provide an independent proof of technology performance, the European Commission (EC) is currently developing a corresponding European ETV scheme in order to give vendors more reliability and customers more confidence. Hence, the EC funded several projects within the 6th Framework Programme (FP6) that aimed to support the development of a EU ETV system for different environmental technology sectors.

Now, AdvanceETV is the launched project, which sustains the movement of a EU ETV scheme towards its implementation by bringing together the results of former ETV projects. AdvanceETV, which is funded by the EC within FP7, is running since January 2009 and will end in July 2012. The consortium consists of 12 institutions from 10 countries within the EU, the U.S. and Canada. The overall goal of AdvanceETV is to show and demonstrate that the already proposed schemes and protocols prepared within the related ETV projects can be used in the EU and have the potential to be recognized internationally, and furthermore sustain the implementation of the scheme in Europe. A further goal is the harmonisation of the upcoming European ETV scheme in respect to ETV systems that are well established in the U.S., Canada, and the Philippines. The realisation of the objects require a European basis for mutual recognition, coordination requirements for co- and joint verification, the building of an international framework for cooperation and mutual recognition by supporting the cooperation of the European Commission and the international ETV activities, e.g. an International Working Group on ETV (IWG), and developing of a framework for international harmonisation. Mutual recognition of the different ETV systems shall be valuable for enterprises that intend to enter foreign markets and for vendors due to the access to information on tested and verified technologies from the domestic and foreign markets. Especially small and medium sized enterprises (SME) will benefit from the verification tool because they do not have the resources for large advertising programs or market studies. Vendors shall be able to follow the method "Verified once, accepted everywhere", so, there would be no further need for another verification on the different involved markets.

This newsletter gives only a summary of the project. Please visit the web site www.eu-etv-strategy.eu in order to learn more about AdvanceETV, ETV in general and to get detailed information on upcoming events, e.g. stakeholder workshops and conferences, related to ETV and how AdvanceETV proceeds.

The AdvanceETV partners

Towards mutual recognition and harmonization of ETV

Providing the European basis for mutual recognition of Environmental Technology Verification (ETV) Schemes

On 22nd September 2009 the first AdvanceETV stakeholder workshop was held in Brussels.

Within different sessions the participants discussed and commented on the the recent developments within AdvanceETV, previous FP6 projects related to ETV and the systems running in the U.S. and Canada. Furthermore the stakeholders were asked to formulate their expectations and demands concerning a European ETV system and mutual recognition of the U.S. and Canadian system.

During one of the sessions a set of questions was briefly introduced to the workshop group and discussed among the participants to ensure a common understanding. The following conclusions could be drawn from the evaluation of the completed questionnaires:

- The questionnaires reveal that obviously, consideration of the European ETV development is an issue for representatives of the supply side of the market and for potential test labs or verification bodies. From 18 questionnaires received back, only one of the participants considers himself as a representative of the demand side of the market. But 4 representatives of potential testing labs or verification organisations attended, the others coming from the supply side of the market. This clearly indicates that strong efforts are needed to further include stakeholders from the demand side of the market to future stakeholder involvement activities in ETV.
- The **main expectation** to mutual recognition is facilitation of the market entrance of innovative technologies. This facilitation includes aspects of fast entrance to the market, lower costs for verification and demonstration and the ETV itself functioning as a kind of marketing tool.
- **Main barriers** to be tackled under the mutual recognition efforts of ETV are related to a lack of confidence and acceptance.
  - Little political/legal/administrative acceptance of ETV in the different countries, partially in competition to existing national "approval systems", is considered the most prominent barrier.
  - Setting a profound political/legal basis in the participating states seems to be prerequisite for the success of an international ETV standard. This international standard requires well defined criteria and responsibilities, links or clearly defined interfaces to other systems like IPCC and BAT, and should ensure a high level of transparency.
  - Further, widespread scepticism against foreign suppliers or foreign technologies, foreign verification bodies etc. is hampering the internationalisation of the market.
    - Coping with scepticism against foreign technologies, the awarding of national (or in our case a European) ETV logos based on well defined mechanisms linking to existing foreign verification seems to be preferable compared to "one international" ETV logo. "Verified once verified everywhere" – based on clear and well defined international standards.

During the workshop (Photo: DECHEMA e.V.)

Relation to the US and Canadian ETV system:

- A majority of the participants would accept a US or Canadian verification statement in Europe. However, five participants said no and further two would at least not accept a Canadian verification statement. This scepticism against the more vendor driven Canadian system also indicates, how difficult a mutual recognition will be achieved.
- The general tendency so far among the ETV specialists in favour of a "vendor driven" system, as it is less costly and would be easier to be handled by SMEs, has intensively deal with these scepticisms. Reflecting that purchasers are nearly completely missing in the audience makes clear, that it will be a long way to general acceptance. Profound information about these systems is a must.

ETV conferences "Accelerating Eco-innovation through Environmental Technology Verification" & "4th International Forum on Environmental Technology Verification (ETV)": Outcomes and conclusions

Main issues impacting the **overall market value** of the ETV system are

- the costs to run the system and to be paid by the vendors,
- the profitability of the verification itself (impact on sales) and
- its success regarding the participation of SMEs. As big international industrial groups do not really need an ETV scheme it should be tailored to the needs of SMEs.

Further aspects to be considered are

- confidentiality,
- the general environmental benefit and
- how to operate such a system including testing labs and verification centres whilst respecting public procurement rules.
- It is also considered important to keep the system dynamic. It must be able to learn from feedback of beneficiaries and stakeholders and to adapt its procedures accordingly.
- Notwithstanding, any elements required for mutual recognition, a European ETV system should reflect specific European conditions ensuring a wide acceptance in Europe.

Considering the arguments of transparency, information and gaining wide acceptance, the workshop session concluded that a kind of a "European guide to internationally accepted ETV" as a master document is needed. This could be a brochure format as a short laymen's report to inform purchasers and political level and an additional coffee-table book providing required information for the expert level. Future efforts of AdvanceETV related to its stakeholder platform should be aiming at involving further stake-holders from the demand side of the market, which means potential purchasers and the regulating bodies.

Thomas Ertel (et, Esslingen, Germany), Katja Wendler (DECHEMA e.V., Frankfurt am Main, Germany)

Throughout the ETV conference "Accelerating eco-innovation through environmental technology verification", held in Brussels, Belgium, in October 2009 and the 4th International Forum on ETV, held in Manila, Philippines, in November 2009, different kinds of European, international and global ETV activities were introduced and discussed.

The Brussels event was also the final conference of the project AIRTV – Testing network for verification of air emissions abatement technologies –, which was funded within the 6th framework programme (FP6) by the EU. Hence, the ETV conference was mainly focussed on the dissemination of AIRTV project results and furthermore on the introduction to the coordination action AdvanceETV. AdvanceETV supports the development of a EU ETV system and its implementation and tries to integrate previous and on-going RTD efforts and their results. It also shall bring forward the development of an international recognition and harmonization framework, e.g. through co- and joint verifications. During preceding projects in respect to ETV manifold consultations with stakeholders and pilot verifications as well as the discussions hold in the frame of the meeting resulted in recommendations for the planned European ETV system. So, consensus of the ETV conference in Brussels was that ETV has the potential to become a very strong tool for promoting innovation on the environmental technology market in Europe and realizing ecological and economical benefits from an early stage. The potential to ease the access to global markets was seen as major benefit.

The system promises to be a success if the following recommendations will account in the development:

- A European system must be uncomplicated, time and cost efficient – especially for SME's.
- ETV has to be voluntary; as a mandatory system may decrease innovation.
- ETV should help opening markets and realizing ecological benefits – in Europe and beyond.
- A link between ETV and the BREF documents should be established.

Panel discussion at the ETV conference in Brussels (Photo: DECHEMA e.V.)

- Overcoming language barriers is a major factor for a successful European ETV system.
- The system shall ease to market innovative Environmentally sound Technologies (EsT's) in foreign countries.
- Available data have to be considered carefully and do not necessarily lead to a reduction in time and cost efforts.
- Testing performed by different organisations must not differ.
- Discover opportunities to connect similar labels in order to avoid confusion or doubling of work.
- To guarantee trustworthiness, the system needs clear criteria for being eligible at an adequate level.
- A definition of key terms is important in order to have a good communication.

The main objective of the 4th International Forum on ETV in Manila was to serve as a floor for exchange of ideas and sharing of experiences among participants on issues related to implementing an ETV program and how this interfaces with climate change subject. Some specific topics were to outline of key challenges of climate change at regional level, identify programs developed and innovative technologies to mitigate and adapt climate change, highlight the importance of ETV as a tool in accelerating the development of EsT's, build alliances among participating countries towards mutual recognition of verification processes and international acceptance of ETV, and develop a plan of action among interested participants for future cooperation. The Forum was followed by the 6th meeting of the International Working Group on Environmental Technology Verification (IWG-ETV) and focussed on the raison d'être of ETV and the efforts on international harmonization and acceptance of ETV. One core consensus was the need of the consistency in the terminology, e.g. that ISO language should be applied where possible.

Dennis Krämer
(DECHEMA e.V., Frankfurt am Main, Germany)

BRIEF FACTS ABOUT AIRTV

Objectives:

AdvanceETV is a coordination action on Environmental Technology Verification (ETV). The overall target of AdvanceETV is to bring together the already proposed schemes and protocols prepared within the previous EU ETV activities and to link them with outcomes of already existing ETV systems worldwide.

Furthermore AdvanceETV aims at building an international framework for cooperation and mutual recognition by supporting the cooperation of the European Commission and the international ETV activities, e.g. the International Working Group (IWG) on ETV.

Approach:

To achieve these aims AdvanceETV will consolidate stakeholder feedback of RTD and EC activities and integrate experiences out of the CEN workshop agreement (CWA) elaboration and use. To foster recognition by harmonisation, a standardisation framework will be identified for international recognition of the different verification procedures. Cross cutting issue workshops ensure feedback and exchange between these different areas. An expert board with ETV system representatives from Canada, U.S., South Korea, Japan, and other provide the direct link to international ETV activities and the IWG on ETV, which is crucial to bring forward mutual recognition, to support cooperation by co-/joint verification and to promote harmonisation.

Time frame:

01/2009 to 07/2012

Finances:

Total project volume: 1.325 million Euros; ~ 75,4 % EU funding within the 7th Framework Programme

Organisations

DECHEMA e.V. – Society for Chemical Engineering and Biotechnology
Frankfurt / Main, Germany (www.dechema.de)

IVL – Swedish Environmental Research Institute
Stockholm, Sweden (www.ivl.se)

DHI, Hoersholm, Denmark (www.dhigroup.com)

IPTS – Institute for Prospective Technology Studies, Seville, Spain (www.jrc.es)

Fundación LABEIN
Derio, Spain (www.labein.es)

UK EA – UK Environment Agency, Bristol, UK (www.environment-agency.gov.uk)

IETU – Institute for Ecology of Industrial Areas
Katowice, Poland (www.ietu.katowice.pl)

Deltares – Stichting Deltares
Delft, Netherlands (www.deltares.nl)

OCETA – Ontario Centre for Environmental Technology Advancement
Mississauga, Canada (www.oceta.on.ca)

CEN – European Committee for Standardization, Brussels, Belgium (www.cen.eu)

Battelle – Battelle Memorial Institute
Columbus, Ohio, United States (www.battelle.org)

et – environment and technology
Esslingen, Germany (www.et-ertel.de)

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