

Verify Once, Accept Everywhere

Creating a level playing field for innovative water technology providers and early adopters.

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TODAY'S GLOBAL ECONOMY presents many challenges for the developers and users of new and innovative technologies and processes. Independent technology performance verification provides reliable information to support sound decisions and creates a level playing field for both proponents and users of innovative water technologies around the world. Simply put, verification provides purchasers and users with the assurance that the technology will perform as its developers and vendors say it will. The value is in the demonstration of that performance through independent testing.

For water technology stakeholders in particular, the confluence of innovative technology demonstration and verification has significant long-term benefits. For example, it can give regulators the confidence to embrace innovation in a sector where non-compliance has serious implications. Investors can use reliable, quality-assured performance information to reduce the risks typically associated with innovative clean water technologies.

Ultimately, the success of technology performance verification programs is determined by the commitment of a broad range of stakeholders, including organizations that:

- Incorporate sustainability into their operations for the benefits of the environment, their employees, and the communities in which they operate;
- Take greater responsibility for the full environmental impacts of their products and services throughout their supply chains;
- Demand proof of environmental performance and incorporate procurement and purchasing guidelines as part of their sustainability strategy;
- Transcend green labels to deliver greater value by demonstrating the performance of their technologies, products and services.

Canada is moving ahead with a plan. Earlier this year, Environment Canada completed a national consultation focusing on stakeholder support for the Canadian Environmental Technology Verification (ETV) Program and a proposal for an ISO ETV standard (ISO is the International Organization for Standardization based in Geneva, Switzerland). Environment Canada chairs the International Working Group (IWG) on ETV and is leading

the development of the proposed ETV standard in collaboration with the other members of the IWG.

Developed in conjunction with the Standards Council of Canada (SCC) and the European Commission AdvanceETV Project, the proposed international ETV standard aims to improve the credibility of independent performance verification and market acceptance of verified technologies, while reducing potential risk to buyers, investors, and users of environmentally sound technologies.

The consultation

For the Canadian consultation, Environment Canada contacted more than 300 stakeholder organizations,

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including industry associations, testing/verification/standardization organizations, municipal and provincial

Moving Forward in Europe

IN SUPPORT OF the process towards mutual recognition of Environmental Technology Verification (ETV) programs, the European Commission AdvanceETV Project conducted water technology verifications jointly with the Danish ETV Program (DANETV), the U.S. Environmental Protection Agency ETV Program, and the Canadian ETV Program. One technology company, HACH-LANGE, had two instruments verified for wastewater toxicity detection. Development of the verification test plan and the actual performance testing were done by DANETV at the DHI laboratories in Hørsholm, Denmark. Review of the test plan and testing results was done in cooperation with the US EPA and Canadian ETV programs. The three ETV programs signed a joint verification statement for each of the two tested technologies. Reports with complete test and verification details are available from DANETV.

Through this type of cooperation, technologies verified under one ETV program can be recognized by other operating ETV programs, thereby providing greater access to other national and regional markets. **wc**

governments, technology vendors, universities, and not-for-profit organizations interested in how reliable performance information can be used to support decision making.

During two national conference calls in December 2011, Environment Canada presented background information on performance verification and the rationale for the proposed international ETV standard. Following this in January and February 2012, regional meetings were held in Vancouver, Calgary, Toronto, Ottawa, Montreal, St. John's, Halifax, and Regina to increase awareness of the Canadian ETV Program and the Canadian Performance Measurement and Verification Partnership (PMVP); present the Canadian proposal for development of an international ETV standard; obtain support from key Canadian stakeholders for both the PMVP and the proposed international standard for ETV; and, provide feedback on next steps.

More than 50 organizations attended the regional meetings. In addition, one-on-one discussions are continuing with key organizations that have expressed an interest in the initiative. Driven by the need for transparent, quality-assured performance measurement and verification, many organizations should be receptive and engaged in the future.

Other ETV programs

Europe

Europe's ETV Pilot Program, launched in December 2011, requires accreditation of verification organizations based on the European General Verification Protocol and ISO 17020, the existing conformity assessment standard for inspection bodies. Organizations are moving forward to promote the program in Asia, and recently completed a mission to four countries (Japan, Korea, China, and the Philippines). The Europeans are also pursuing joint verification projects. A European ETV Conference (AdvanceETV) will take place in May 2012 in Brussels, in parallel with the annual European Commission Green Week, which this year focuses on water.

United States

Designed as a public-private partnership, the U.S. ETV Program aims to become

self-supporting so that it no longer requires funding from the U.S. Environmental Protection Agency (EPA). In 2007, the program began its evolution to a fully "vendor-and-other-collaborator-paid" program with a US EPA commitment to provide in-kind technical, quality assurance oversight, program evaluation, outreach and assurance of the testing results.

Asia

Korea, the Philippines, and Japan all have active ETV programs. China is exploring options for a program of its own and plans to launch within a year. In June 2011, Environment Canada and the Chinese Ministry of Environmental Protection jointly organized a workshop in Beijing. In January 2012, a delegation from Japan visited Canada to explore future options for program delivery and international collaboration. In September 2012, Korea will host an International ETV Forum.

Next steps for Canada

The future delivery of the Canadian ETV Program will continue to focus on technology companies, technology users and other key decision-makers relying on credible performance information. The program will be marketed to both supply-side and demand-side customers seeking to demonstrate value and provide assurance of performance through verification. Strengthening Canada's network of competent testing and verification organizations will support this. This will also encourage international reciprocity and mutual recognition so that the ultimate goal of "verify once, accept everywhere" can be realized. **wc**



This article was originally published in the **March/April 2012** issue of **WATERCANADA**
watercanada.net



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