

Centers

ETV Advanced Monitoring
Systems Center - **Battelle**

ETV Air Pollution Control
Technology Center - **Research
Triangle Institute**

ETV Greenhouse Gas Technology
Center - **Southern Research
Institute**

ETV Drinking Water Systems
Center - **NSF International**

ETV Water Quality Protection
Center - **NSF International**

ETV P2, Recycling, and Waste
Treatment Center - **Concurrent
Technologies Corporation**

Definitions

Does Evaluate and Verify

ver·i·fy: to establish or prove
the truth of the performance of a
technology under specific,
predetermined criteria or
protocols and adequate data
quality assurance procedures

synonym: confirm, corrobora-
te, substantiate, validate

eval·u·ate: to carefully
examine and judge the efficacy
of a technology; to submit
technologies for testing under
conditions of observation and
analysis

synonym: measure, estimate,
classify, test

Does Not Certify

cer·ti·fy: to guarantee a
technology as meeting a
standard or performance criteria
into the future

synonym: ensure, warrant,
guarantee

What Is ETV?

Throughout its history, the U.S. Environmental Protection Agency (EPA) has evaluated technologies to determine their effectiveness in monitoring, preventing, controlling, and cleaning up pollution. Since the early 1990s, however, numerous government and private groups have determined that the lack of an organized and ongoing program to produce independent, credible performance data is a major impediment to the development and use of innovative environmental technology. Such data are needed by technology buyers and permittees, both in the United States and abroad, to make informed technology decisions. To overcome this impediment, EPA established a program to accelerate the implementation of environmental technology through objective verification and reporting of technology performance. In October 1995, the Environmental Technology Verification (ETV) Program was established by EPA.

What Is the Goal of ETV?

The goal of ETV is to provide credible performance data for commercial-ready environmental technologies to speed their implementation for the benefit of vendors, purchasers, permittees, and the public.

How Does ETV Operate?

Six Centers Through Public/Private Partnerships—The ETV Program is carried out through partnerships with private testing and evaluation organizations. These ETV Partners work with EPA technology experts to create efficient and fully quality-assured testing procedures that verify the performance of innovative technologies. In 2001, the ETV Program began a transition to six ETV Centers from the pilot period (1995-2000), in which 12 ETV pilots operated. The broad range of technology categories covered by the pilots will continue to be covered in the fully implemented six center structure.

Accomplishments and Impact

Since its inception in 1995, ETV has verified more than 170 environmental technologies and developed more than 60 protocols for technology testing. A survey of participating vendors completed in 2001 showed overwhelming support for the ETV Program and its results. Responses indicated that 73% of the vendors believe customers will be impressed by ETV verification, and nearly all vendors were using ETV information in product marketing. More than 20 vendors have returned to ETV to have additional products verified, and 92% of those surveyed would recommend ETV to other vendors.

Numerous EPA program offices and state programs are being supported in their decision-making by ETV technology testing results. These include technologies related to mercury, particulate, NO_x and SO_x emissions control and monitoring, stormwater control and treatment, infrastructure rehabilitation, control of runoff and energy recovery from confined animal feeding operations, distributed energy generation for greenhouse gas reduction, pathogens and arsenic treatment in drinking water systems, and lead in dust monitoring. An example of how ETV supports state drinking water programs is provided by a 2000 survey of the Association of State Drinking Water Administrators, which showed that 35 states are

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<http://www.epa.gov/etv>*

using or plan to use ETV protocols for in-state testing. In addition, 27 states plan to use ETV reports as their primary source for decision-making.

How Do the ETV Centers Operate?

Stakeholder Guidance—The efforts of ETV Centers are being guided by the expertise of Stakeholders Groups. These groups consist of representatives of verification customers for the particular technology sector—buyers and users of technology, developers and vendors, state and federal regulatory personnel, consulting engineers, environmental organizations, financiers, and underwriters. More than 800 individuals are active in ETV Stakeholder Groups. Their primary functions are to assist the Centers in developing protocols for testing, prioritizing the types of technologies to be verified, reviewing important documents, and designing and implementing outreach activities to the verification customer groups that they represent.

Performance Verification Objectives and Reporting—ETV is a voluntary program that seeks to make objective performance information available to all of the actors in the environmental marketplace for their consideration and to assist them in making informed technology decisions. ETV does not rank technologies, compare technology performance, label or list technologies as acceptable or unacceptable, seek to determine “best available technology,” or approve or disapprove technologies. Actual verification activities are announced in the *FedBizOpps* (formerly the *Commerce Business Daily*), other relevant publications, and on the ETV Web Site and ETV listserv. Test plans are prepared in conjunction with the developers and the tests are conducted by independent third parties. Appropriate quality assurance procedures are incorporated into all aspects of the process and all reports are subjected to peer review. Verification Statements of 3 to 5 pages, based on the performance data in the reports, are signed by EPA and the ETV Partner, and then posted on the ETV Web Site.

What Is the International Interest in ETV?

Strong international interest in technology verification has bolstered ETV's impact abroad. ETV with its cosponsors—EPA's Office of International Activities, U.S. Agency for International Development, and the U.S. Asian Environmental Partnership—has conducted workshops and training on technology verification in India, Thailand, and Taiwan, and in the United States for Malaysia and the Philippines. More than 10% of the visits to the ETV Web Site are from foreign nations, and ETV protocols are being used worldwide to verify technologies.

What Are the Benefits of the ETV Program?

- Provides objective, credible performance data to buyers.
- Facilitates technology acceptance and permitting at the state/local level.
- Reduces risk for financial investors.
- Levels the playing field among competitors through standardized tests and objective reporting.
- Facilitates export of environmental products.

Want To Know More About the ETV Program?

Up-to-date information on the ETV Program can be viewed on the ETV Web Site at <http://www.epa.gov/etv>. The ETV Web Site contains a description of each ETV Center as well as its protocols and test plans; a list of stakeholders; a fact sheet; other publications, announcements, and meeting summaries; ETV Verification Statements/Reports; and links to the ETV Partners and other related Web sites. In December 1998, ETV initiated the ETVoice listserv to inform subscribers about the availability of new information on environmental technology testing procedures, upcoming testing opportunities, the performance of individual ETV-verified technologies, verification meeting events, and general news related to the ETV Program. Subscribe to ETVoice on the Internet at <http://www.epa.gov/etv>.



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