

U.S. Environmental Protection Agency (EPA) - Environmental Technology Verification (ETV) Program





#### March 2012 Greenhouse Gas Technology Center

An Environmental Technology Verification (ETV) Organization

#### What is the ETV Greenhouse Gas Technology Center?

The ETV Greenhouse Gas (GHG) Technology Center, located in Research Triangle Park, NC is a public/private partnership between the U.S. Environmental Protection Agency (EPA) and Southern Research Institute. The GHG Center operates under the U.S. EPA's Environmental T echnology Verification (ETV) program, and provides independent performance testing of technologies that produce, mitigate, monitor, or sequester greenhouse gas emissions.



# What Does the Center Do?

Since 1997, the GHG Center has located promising GHG mitigation and monitoring technologies, subjected them to independent third-party performance testing, and provided performance results to the public free of charge. To date, the GHG Center has completed or initiated the verifications of 36 different environmental technologies. For technologies that perform well, ETV verification can help increase technology sales and further environmental protection. Technology performance verifications are accomplished using measurement and analytical methods that have been reviewed and approved by independent expert stakeholder panels.

The GHG Center strives to help technology purchasers make wise purchase decisions, vendors obtain independent confirmation of their technology's performance, and superior environmental technologies penetrate the market place.

## How can I Initiate an ETV Verification?

The EPA GHG Technology Center will no longer be accepting applications as of April 1, 2012; however, SRI will continue to offer third party verifications of technologies as an independent effort after this date. For details regarding a third-party verification, please contact Southern Research Institute.







### **Technologies Verified or in Process**

- » Fuel Cell Combined Heat and Power (CHP) for a university dorm
- » Biogas fired fuel cell for waste water treatment plant
- » Manure biogas IC engines and microturbines
- » H<sub>2</sub>S reduction from potential biogas streams
- » Landfill gas in microturbines and fuel cells
- » Energy recovery from waste steam
- » Natural gas IC engines for commercial CHP
- » Residential micro-CHP

#### Transportation and Other

- » Conoco FEHP SAE 75W90 Rear Axle Lubricant
- » JCH Diesel Fuel Cleaning System
- » GECO<sup>TM</sup> 3001 Engine Air/Fuel Ratio Controller
- » UTC/US Filter Biogas Fuel Cleaning System
- » Parametric Engine Emissions Monitoring System
- » Envirofuels Diesel Fuel Catalyzer
- » NCI, Inc. Diesel Crankcase Filtration System
- » ECR Technologies Earthlinked Geothermal Water Heating System
- » Sight glass system to reduce CFC emissions



EVRU<sup>™</sup> Storage Tank Vapor Recovery System

## How Can I Learn More?

To learn more about the GHG Center and to download verification test plans, statements, reports, announcements, articles, and other publications, go to the ETV web site (www.epa.gov/etv). Additional information on verification testing and/or to submit an application for testing of your technology, can also be found in the ETV web site. The verification reports and statement can also be found at the Southern Research Institute Greenhouse Gas Technology Center website (www.sri-rtp.com).

#### Tim Hansen

Director Greenhouse Gas Technology Center Southern Research Institute Phone: 919/806-3456 Email: hasen@sri.org

#### Lee Beck ETV Program Manager Office of Research and Development U.S. Environmental Protection Agency Phone: 919/541-0617 Email: beck.lee@epa.gov

- Oil and Gas Industry:
- » Compressor Emissions Packing System
- » Compressor Seal Assist System (SAS)
- » Compressor Static-Pac<sup>TM</sup> Seal
- » EVRU<sup>TM</sup> Storage Tank Vapor Recovery System
- » Pin-Tech™ Bubble Tight Tank Relief Vent
- » Quantum Leap Natural Gas Dehydrator
- » Emissions reduction in natural gas transmission engines