

Clean Air Excellence Award Recipients: Year 2002

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Clean Air Technology

Reduction of Tailpipe Emissions – Biodiesel and Electric Vehicles — U.S. Postal Service; Various Locations Nationwide

Under its Biodiesel Utilization Program, the U.S. Postal Service (USPS) purchases biodiesel, a renewable fuel made from agricultural products, in bulk to fuel its vehicles. Under its Electric Propulsion Vehicle Program, the USPS purchased 500 new zero-emission, battery-powered vehicles for use in hauling and delivery. Through these two programs, the USPS has achieved significant reductions in carbon dioxide, carbon monoxide, hydrocarbons, and other emissions, and serves as a great model for other fleets and the public.

"Yard Hog" Battery Electric Locomotives — Railway Equipment Corporation; Nationwide

To eliminate diesel emissions from idling locomotives, the Railway Equipment Corporation took the initiative to purchase electricity from local power companies and store it in batteries for later use. The use of these lead-acid batteries in the "Yard Hog" locomotive is a cost-effective alternative to diesel locomotives and reduces idling emissions. Additionally, the "Yard Hog" can be easily modified to incorporate technology advancements, rather than having to be replaced.

Ultra Low Sulfur Gasoline — Irving Oil; Portsmouth, New Hampshire

Recognizing that sulfur in gasoline decreases the efficiency and effectiveness of emission-control systems and low emission vehicles, Irving Oil performed a \$1 billion upgrade to the Irving Oil Refinery so that it may increase production of its higher-value transportation fuels such as low-sulfur gasoline. In 2000, the refinery became the first in North America to commission full-scale desulfurization technology. Because of these changes, Irving Oil's low sulfur gasoline met 2004 EPA sulfur standards three years ahead of schedule.

VEC™ (Virtual Engineered Composites) Technology for Fiberglass Reinforced Plastic Boat Manufacturing — Genmar Holdings, Inc.; Little Falls, Minnesota

The Virtual Engineered Composites Technology (VECT™) system is an automated, computer-monitored process used in fiberglass molding. The VECT™ system, a closed-molding system, emits less styrene into the atmosphere and makes an even stronger fiberglass reinforced plastic (FRP) than the open molding process. This system also can be widely applied to non-marine industries manufacturing FRP, another significant source of the United States' styrene emissions.

Super High Solids Ultra-low Emissions Automotive Coating — DaimlerChrysler and DuPont; Newark, Delaware

DuPont and DaimlerChrysler have created and implemented a new paint technology – the "Super High Solids" ultra-low emissions clearcoat technology. By using this DuPont product, the DaimlerChrysler Newark facility has realized a 20 percent reduction in topcoat volatile organic compound emissions and an 84 percent decrease in hazardous air pollutant emissions associated with the automotive coating process.

Community Action

IHM Motherhouse Sustainable Renovation — Sisters, Servants of the Immaculate Heart of Mary; Monroe, Michigan

The Sisters, Servants of the Immaculate Heart of Mary, have begun a green building renovation of a large institutional structure on their campus in Monroe, Michigan. This renovation uses comprehensive and sustainable design practices including passive energy systems, renewable energy sources, reduction of water use, habitat restoration, constructed wetlands, and use of green/recyclable materials. The green renovation of the motherhouse balances the current occupants' needs with environmental concerns.

Highlands' Garden Village — Perry Rose, an affiliate of Jonathan Rose Companies, LLC; Denver, Colorado

Located 10 minutes from downtown Denver, the Highlands' Garden Village is a walkable, transit-linked village that is a model for environmentally responsible infill development. Using green buildings and green transportation systems, the village has revitalized an underused site into a network of homes, gardens, plazas, and open spaces. The Village's car-share program provides vehicles fueled by compressed natural gas that can be rented by the half hour.

Education/Outreach

PM_{2.5} Forecasting Program — Forsyth County Environmental Affairs Department; Winston-Salem, North Carolina

To provide the public with real-time information concerning particulate matter (PM_{2.5}) levels and their effect on public health, the Forsyth County Environmental Affairs Department began a PM_{2.5} forecasting program. Year-round, forecasts are provided on a daily basis through the Department's web site, an email list service, a toll-free number, and by newspaper and television broadcasts. The program provides a valuable product to increase public awareness of air quality issues and the seriousness of health problems created by fine particles.

Lawn Care for Cleaner Air — Louisville Metro Air Pollution Control District/Louisville, Kentucky

Lawn Care for Cleaner Air, a program of the Louisville Metro Air Pollution Control District, educates the public about reducing emissions from gasoline-powered lawn maintenance equipment. The program promotes the use of cleaner alternatives including electric or reel mowers and low-maintenance landscaping techniques.

Active National Directory of Source Emissions Testing — Colleen Hodge, Owner and Executive Producer; Worldwide

The web site www.ActiveSET.org EXIT Disclaimer provides a global forum to exchange air quality information electronically. The web site helps increase awareness about the importance of clean air and effective methods for reducing harmful emissions at their source. The web site's electronic newsletter provides the latest information on business opportunities, featured firms, announcements, and other useful information. More than 1.7 million stakeholders worldwide have accessed the web site since August 2000.

Partners for Clean Air – Green Pays on Green Days Education Program — Illinois Environmental Protection Agency; Chicago, Illinois

The Partners for Clean Air coalition members have pledged to notify their employees about Ozone Action Days and take actions to reduce air pollution on these days. The coalition's outreach includes a web site, radio advertisements, a billboard campaign, and the Green Pays on Green Days initiative, in which citizens sign a "Clean Air Pledge" to take one or more green actions to improve air quality. A survey showed that, as a result of the overall program, 73 percent of those who heard about an Ozone Action Day took action in response.

Easy Breathers — Wisconsin Department of Natural Resources; Southeastern Wisconsin

Recognizing that driving behavior and purchasing habits develop during the adolescent years, the Easy Breathers program educates teens about simple and inexpensive transportation choices they can make to reduce air pollution. The program includes an educational video and an interactive web site (www.easybreathers.org EXIT Disclaimer), both created by students in partnership with the Department of Natural Resources and a multimedia firm. The result is a program that speaks to teenagers in their own language, while conveying the science of mobile source pollution.

EV Challenge — Carolina Electric Vehicle Coalition, Inc. — In partnership with over 30 business and government organizations; Southeastern U.S.

The Electric Vehicle (EV) Challenge educational program uses the activity of electric vehicle construction to teach young people about the air quality effects of their transportation choices. The EV Challenge includes a year-long educational program that has both middle school and high school components. In addition, the EV Challenge provides schools with professional development for teachers, curriculum materials, project funding, technical support, and product discounts through a vendor sponsorship program. The program also operates a mobile classroom, which features educational displays and sample electric vehicles. List of all partners:

Platinum

Advanced Energy Corporation

CP&L/Progress Energy Corporation
Dominion Virginia/North Carolina Power
Duke Power Company
Energy Office, North Carolina Department of Administration
North Carolina Department of Environment and Natural Resources, Air Quality Division
U.S. EPA, Office of Transportation and Air Quality

Gold

Alternate Neighborhood Transportation, Inc.
Design Dimension
Flying Foto Factory, Inc.
Triangle Electric Auto Association

Silver

Tarheel Sports Car Club
Trojan Battery Company
Wake Soil and Water Conservation District

Bronze

Conway Photo
DC Power Systems
Electric Vehicle Association of the Americas
Electric Vehicles of America
Enterprise Rent-a-Car
Wake Technical Community College
Zapi, Inc.

Friends

Classic Car Services
DC Electric Auto Association
Electric Auto Association of Coastal Carolinas
Florida Division of Air Resources Management
Frankie & Zoe's Screenprinting
Hands-On Technology Systems
KTA Services
NASCAR
National Alternative Fuels Training Consortium
North Carolina Department of Agriculture
North Carolina Solar Center
Triangle Clean Cities
TrophyUSA.com, Inc.
York Technical College

Air Pollution Educational and Research Scholarship Program — Mid-Atlantic States Section of the Air and Waste Management

The Air Pollution Educational and Research Scholarship Program awards four \$25,000 scholarships each year to doctoral and post-doctoral students. The program enables recipients to pursue research careers in air pollution reduction and brings innovation to the field.

Vapor Recovery Compliance Assistance Manual on Interactive Compact Disc — California Air Resources Board; California

Vapor recovery systems are designed to recover the equivalent of 36 million gallons of gasoline per year. The success of these systems depends on the hundreds of local inspectors and industry personnel who must be trained and updated on test procedures and certified equipment for vapor recovery systems. The California Air Resources Board has created the two-ounce *Vapor Recovery Interactive CD* to replace the two-volume, 11-pound paper manual previously used to convey this material. The environmentally-friendly and cost-effective CD is easy to navigate and provides links to the Internet for up-to-date information.

Agricultural and Outdoor Burning Notification and Information System — Washington State Department of Ecology; Washington

The Washington State Department of Ecology Agricultural and Outdoor "Burn Team" has developed a web site to provide access to information related to agricultural and outdoor burning. The site provides information on where and when burning will occur to help people with respiratory diseases to manage exposures. The web site promotes clean air by providing easy access to information on burn restrictions, permitting requirements, best management practices for emissions reductions, and burning alternatives.

Regulatory/Policy Innovations

Chicago Industrial Rebuild Program — Chicago Department of Environment; Chicago, Illinois

The City of Chicago developed its Industrial Energy Efficiency Program to help the most energy and waste intensive industries in Chicago become more efficient. Each year, the City works with a selected industry to improve energy use, pollution prevention, and economic development. The City of Chicago offers companies within the selected industry an energy and pollution assessment funded by the City. The program also includes a revolving loan program that is tied to renewable energy goals.

The New Hampshire Dioxin Reduction Strategy — New Hampshire Department of Environmental Services; Concord, New Hampshire

To quantify and address statewide environmental impacts of dioxin, the New Hampshire Department of Environmental Services (DES) created the New Hampshire Dioxin Reduction Strategy. DES collaborated with stakeholders to develop a comprehensive, statewide inventory of dioxin releases and to make recommendations designed to substantially reduce dioxin in New Hampshire. Early reduction efforts in the areas of medical waste incineration and backyard trash burning already have reduced statewide dioxin emissions by 30 percent.

Transportation Efficiency Innovations

Orlando Bikeways — City of Orlando; Orlando, Florida

The City of Orlando developed the Orlando Bikeways program to make bicycling safer and encourage the use of this alternative transportation mode. Orlando has achieved this goal by increasing its bikeways from three miles to over 150 miles in the last 12 years. The City has publicized and promoted bicycling in numerous other ways, such as by expanding the bike units and teams of the Orlando Police and Fire Departments, increasing bicycle parking availability, and establishing an annual "Bike to Work" day, led by the Mayor.

VPSI Commuter Vanpools — VPSI, Inc.; Worldwide

For over 25 years, VPSI has provided commuters with a viable, cost-effective, commuting alternative. VPSI vanpools provide over 30,000 commuters daily with a way to contribute to improving air quality while minimizing traffic congestion. With over 3,500 vehicles in service nationwide and in Europe, VPSI has created a sustainable program with continuous and replicable air quality benefits.

Thomas W. Zosel Outstanding Individual Achievement

John C. Elston — Trenton, New Jersey

John C. Elston has provided 33 years of dedicated service and leadership to the State of New Jersey in the air pollution reduction area. As Administrator of the Office of Air Quality Management in the New Jersey Department of Environmental Protection, his efforts resulted in significant reductions in outside air levels of volatile organic compounds and nitrogen oxides, the main components of ground level ozone - one of New Jersey's most serious air pollution problems. Mr. Elston presided over the implementation of the country's first inspection and maintenance program to ensure that vehicles continue to emit within their allowable limits. He also has played a key role in planning and implementing future measures to reduce air pollutant levels.