



TECHNOLOGY ASSESSMENT DIVISION

Energy Efficiency & Renewable Energy Activities Overview

Louisiana Overview

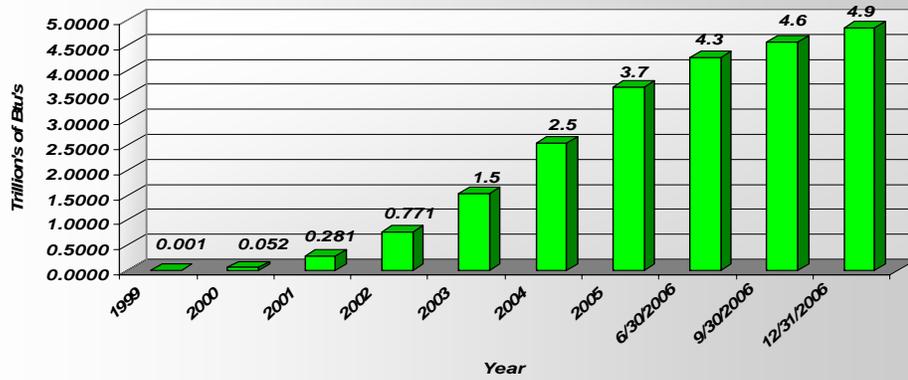
The Louisiana Department of Natural Resources (DNR), Technology Assessment Division (TAD) is the technical and analytical arm of the Office of the Secretary and serves as the State Energy Office. Our mission is to promote and encourage the exploration, production, conservation and efficient use of energy and natural resources in the State of Louisiana. Wise use and conservation of energy and natural resources improve the environment, enhance economic development and insure a better quality of life for this and future generations.

Air quality issues continue to be a major issue for Louisiana. In November of 2006, Louisiana joined 28 other states in an allowance-based, cap-and-trade market in order to comply with Environmental Protection Agency regulations and to reduce ozone causing emissions. Our agency partners with the Louisiana Department of Environmental Quality to formulate policy and procedures for implementing the Clean Air Interstate Rule, which was designed to ensure that air pollution moving across state lines is dramatically reduced. We are also members of the Baton Rouge Clean Air Coalition, which is a public-private partnership formed to address the mutual goals of government and industry in striving to meet our mandated emission reduction requirements.

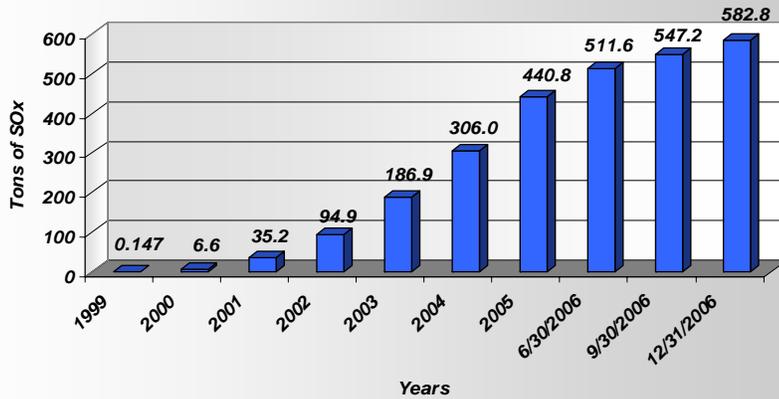
Residential

Our ongoing Home Energy Rebate Option Program (HERO) offers a cash rebate of up to \$2,000 to Louisiana homeowners that renovate their homes to meet a high level of energy efficiency. Staff trains, certifies, and provides quality control over more than 50 home energy raters throughout the state. The program is accredited through the Residential Energy Services Network (RESNET). RESNET ensures the success of the building energy performance certification industry, sets the standards of quality, and increases the opportunity for ownership of high performance buildings. Louisiana Home Energy Raters are private sector entities that operate independently through funds charged to the homeowner for the energy rating. This program has won the EPA's Energy Star high achievement award for the past five consecutive years. In addition, DNR administers the Home Energy Loan Program, currently being modified to address highly efficient technologies to include off-the-shelf -technologies. Since inception, 15,529 rebates and loans have been issued for a total of \$21 million, leveraging approximately \$199 million more in privately funded improvements. The program is included as a voluntary measure in the State Implementation Plan submitted to EPA to reduce pollutant emissions in the state.

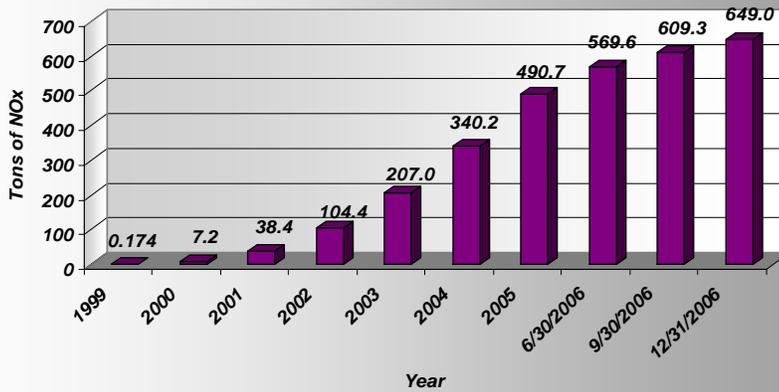
Cumulative Btu Savings Attributed to HERO

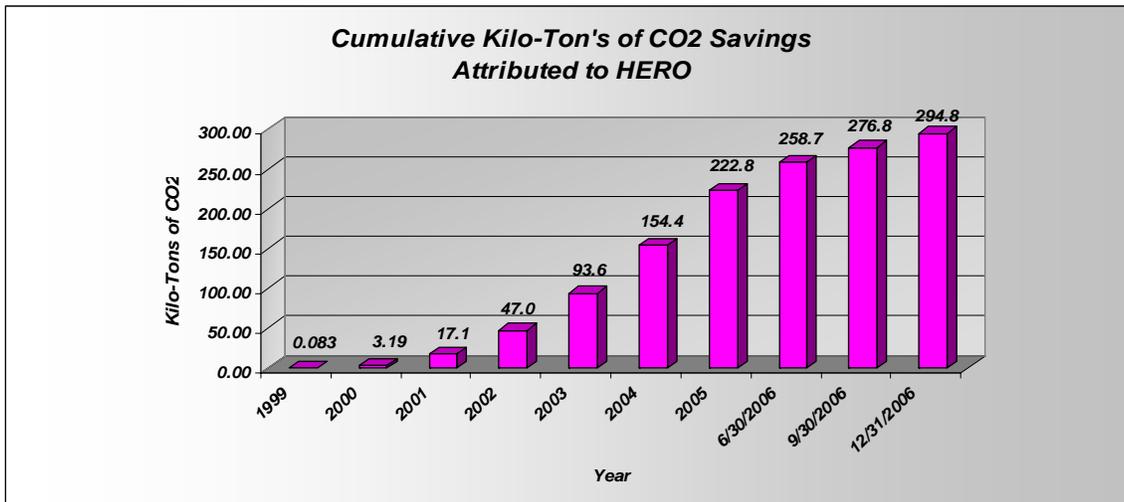


Cumulative Tons of SOx Savings Attributed to HERO



Cumulative Ton's of NOx Savings Attributed to HERO





Institutional

Seventeen projects executed under the Louisiana Department of Natural Resources' Energy Fund for energy performance contracts in public buildings leveraged \$65 million in guaranteed energy savings from a \$3.6 million investment and \$34 million in private funding. The annual emission reductions because of these projects are 61 tons of So_x (oxides of sulfur), 41 tons of No_x (oxides of nitrogen), and 14,000 tons of CO₂.

ACT No. 1184 of 2001, also known as the "Energy Management Act of 2001" directed the Division of Administration to develop and implement a standardized reporting method to obtain information from each state agency on energy usage and costs in order to ensure that buildings and facilities are operated with maximum efficiency. Our office assisted the Division of Administration with the development of a database to capture each agency's information, and we continue to provide assistance to the Division of Administration and each state agency on an as-needed basis.

Renewables

The Renewables Council of Louisiana established by the State Energy Office in collaboration with the Departments of Economic Development, Agriculture and Forestry, and Environmental Quality, has held informative conferences to attract private industry and has since moved to establish itself as a non-governmental entity driven by over forty-five businesses. The Council is directing the Legislature's and the Public Service Commission's attention to impediments to expansion of renewable resource utilization. The Technology Assessment Division is providing ongoing leadership by providing comprehensive offshore wind energy studies and analysis regarding how renewables may be incorporated into future renewable portfolio standard legislation and utilizing green pricing as an alternative. DNR initiated legislation passed by the Legislature in 2005 to enable the state to lease offshore acreage for wind power development.

In addition, the Public Service Commission adopted rules for net metering in 2005, and the New Orleans City Council is considering the same net metering rules for the New Orleans area.

Energy Codes

The Technology Assessment Division has played a lead role in the initiation and passage of energy codes for buildings in Louisiana. In 1997, the Louisiana Legislature passed the Commercial Building Energy Conservation Code (CBECC). Based on ASHRAE 90.1-1989 (American Society of Heating, Refrigerating and Air-Conditioning Engineers Standard 90.1-1989, *Energy Standard for Buildings Except Low-Rise Residential Buildings*), the code applied to all new, and modifications to existing, commercial buildings. Our office reported 8.55 trillion Btu in savings for the 2006-2007 fiscal year, for a total of 39 trillion Btu since passage. This equates to reductions in emissions totaling 23,126 tons of So_x, 14,821 tons of No_x, and 7,169,414 tons of CO₂.

On June 14, 2005, the CBECC was upgraded to ASHRAE 90.1-2001. Effective January 1, 2007, the mandated statewide uniform construction code includes the 2006 International Building Code, the 2006 International Residential Code (including the energy provisions), the 2006 International Existing Building Code, the 2006 International Mechanical Code, the 2006 Fuel Gas Code, the Louisiana State Plumbing Code and the 2005 National Electric Code. The Technology Assessment Division has an intensive training schedule throughout Louisiana on COMcheck and REScheck, the commercial and residential energy codes compliance software.

Transportation

State Energy Program (SEP) and Special Project funding support three coalitions in Louisiana. Some of the accomplishments include the purchase of six compressed natural gas (CNG) trolleys for the downtown Baton Rouge area, new CNG fueling facility at the Baton Rouge airport, purchase of natural gas vehicles for the City of Baton Rouge, hybrid electric buses for Shreveport, and bio-diesel use for Mardi Gras parades in New Orleans. The [Clean Cities](#) programs are listed as voluntary measures in the State Implementation Plan for Baton Rouge, and the Early Action Compacts for Shreveport and New Orleans. In January 2007, the third annual Louisiana Clean Cities Conference was held in New Orleans, encompassing other cities and pushing alternative fuels use as a statewide effort. Renewable Fuel Standard Legislation was passed in the state in 2006 mandating 2% sales volume for both ethanol and bio-diesel, once production equals or exceeds an annual production of at least 50 million gallons.

Hurricane Recovery

DNR is actively involved in numerous educational activities to promote the rebuilding of Louisiana's Gulf Coast, focusing on sustainability and energy efficiency practices. Staff serves the Louisiana Recovery Authority's Environmental Task Force by providing information, materials, and potential projects in an effort to incorporate such practices.

DNR facilitated two recovery roundtables for the Holy Cross Neighborhood in New Orleans to incorporate such practices into the neighborhood's future plan. "A Preliminary Plan for the Sustainable Restoration for the Lower 9th Ward, including the Historic Holy Cross Neighborhood," was presented for the association to be utilized as a starting tool for planners assigned to the neighborhood by the city. Various suggestions within the plan have been actively embraced by DNR, as well as other organizations, in utilizing this neighborhood to move forward with projects reflected in the plan.

DNR, in collaboration with the Preservation Resource Center, is addressing the historical housing stock prevalent in New Orleans. To date, five workshops consisting of energy efficient and renewable technologies, including solar, have been administered. The second phase of the joint operation is currently underway, encompassing on-site installation training in five historical homes designated by the Preservation Resource Center's [Operation Comeback](#). These five homes will be models of historical homes built energy efficiently and will be promoted and marketed through various campaigns, including Shotgun Home Month and the Historical Energy Efficient Parade of Homes Event in the spring. All workshops and installations will be included on DVD for distribution and replication.

DNR is currently providing energy efficiency/renewable energy rebuilding fact sheets to the Road Home Program Offices throughout the state.

Industrial

Louisiana DNR has partnered with Texas A & M to sponsor the Industrial Energy Technology Conference for the last three years. This annual two-day conference is designed to serve the professionals who are involved in the production, use, or transportation of energy, or in designing and evaluating energy-related equipment and waste reduction practices. Because of the similarity of the industry located in Texas and Louisiana, the conference was moved to New Orleans in 2005 and 2006. Due to the response, it will be held in New Orleans again this year.

Louisiana has had 10 plants to participate in the “Save Energy Now” audits, a program which we promote. Among the fifty states, this is the third highest number to participate. Additionally, Louisiana has an Industrial Assessment Center that has performed over 150 assessments on small to medium size plants.

The state has organized several Compressed Air and Steam trainings for industry upon request.

For more information, contact:

Louisiana Department of Natural Resources
Technology Assessment Division – State Energy Office Programs
225-342-1399
<http://dnr.louisiana.gov/tad>