2009 Leading by Example Awards

Presented by the Commonwealth of Massachusetts

Executive Office of Energy and Environmental Affairs, Executive Office of Administration and Finance, Department of Energy Resources, Operational Services Division, Division of Capital Asset Management

MASSACHUSETTS LEADING BY EXAMPLE PROGRAM

PUBLIC LEADERSHIP, STEWARDSHIP, COMMITMENT

The **Leading by Example Awards** *recognize outstanding efforts among Commonwealth agencies, public higher education institutions, and municipalities that have established and implemented policies and programs resulting in significant and demonstrable environmental benefits.*

The 2009 LBE Award Winners

STATE AGENCIES

The **Massachusetts Department of Environmental Protection** has taken several actions to improve energy efficiency and reduce waste agency-wide including installing efficient lighting and occupancy sensors; implementing computer power management that powers down computers during inactive periods and at night; recycling 111.5 tons of paper and cardboard and three tons of cans and bottles in FY 2008; reducing the agency's vehicle fleet, which is currently comprised of 20% hybrid or alternative fuel vehicles; and major renovation of MassDEP's Wall Experiment Station in Lawrence, which is on track to achieve LEED-Gold certification.

The **Massachusetts Trial Court** is demonstrating energy efficiency leadership across the state at existing buildings as well as in new construction. Through efficiency retrofits, energy performance contracts, and LEED-Silver minimum standard for new courthouses, the Trial Court is decreasing energy demand and saving money. In FY08, the Court reduced electricity consumption 16%, natural gas 9%, and water 14%, saving $2.6 million. In addition, six locations have been identified for demand-response with prospective revenue of $40,000 annually. Single-stream recycling has been instituted across all sixty state-owned facilities and the Trial Court's Green Team works to promote environmental and energy awareness among all employees.

PUBLIC HIGHER EDUCATION

Massachusetts Maritime Academy achieved a LEED-Gold certified dormitory and is on track to receive a LEED-Silver rating for a new library/information commons now under construction. With a strong commitment to on-site clean energy generation, MMA is home to a 660-kW wind turbine that produces 15% of the campus' electricity, an 85-kW solar photovoltaic system producing over 95,000 kWh of electricity, and a combined heat and power system for the Academy's dorm complex. In addition, a range of water conservation measures such as low-flow fixtures, waterless urinals, and use of non-potable water for landscape irrigation has been instituted.

Salem State College's central campus was built on a remediated 37-acre brownfield. When SSC acquired the site in 1997, the College re-used and adapted two buildings and restored a 9-acre degraded tidal marsh. The campus has achieved Mass LEED-Plus for its Interim Library, installed a 68-kW solar array at its Central Residence Hall, and has utilized native plantings to decrease the need for irrigation, pesticides, and herbicides as well as provide food and shelter for native wildlife. In addition, the College implemented energy efficiency measures that have saved $64,000 in electricity and natural gas costs and purchased 3.5 million kWh worth of Renewable Energy Certificates to offset campus carbon emissions.

MUNICIPALITIES

The **City of Somerville** entered into an energy performance contract in 2007 and is now on target to reduce municipal energy consumption by 20% from 2006 levels. The City has completed a GHG emissions inventory, establishing a baseline for the Somerville Climate Action Plan. Somerville's fleet includes four hybrid cars and several Smart Cars as well as a 5% biofuel blend for diesel vehicles. The City installed two solar PV arrays (13-kW and 34-kW) on schools, with three additional installations in the pipeline totaling 35-kW. In addition, 30 BigBelly Solar trash collectors for waste and recycling have been installed in public areas. Somerville developed 5 new parks in the last 3 years and recently completed a citywide inventory of public trees in support of the Mayor's goal to increase the City's tree canopy by 20%.

The **Town of Plymouth** developed a "2020 Plan" that calls for powering all municipal buildings with on-site renewable sources by 2020. Toward that end, the Town has awarded contracts for two 2 MW wind turbines to be installed in 2010 and has approved a plan for a 1.5 MW solar field on a 5-acre capped landfill. Plymouth has benchmarked energy use for all municipal buildings and has completed multiple building retrofits including the library, saving an estimated $73,000 annually on energy costs. Plymouth School Department has also improved efficiency and reduced energy use, resulting in $2 million in savings over the last two years.

The **Town of Dedham** has committed to comprehensive sustainability initiatives including hiring a full-time Environmental Coordinator in 2008, conducting energy audits on municipal buildings, implementation of numerous energy efficiency measures, completing a GHG emissions baseline, and instituting single-stream recycling. Dedham Middle School is recognized as a model "green" school by the Massachusetts Renewable Energy Trust and the Dexter School and Dedham High School have achieved EPA EnergyStar certification.