

US EPA ARCHIVE DOCUMENT



EPA Assistant Administrator Luis A. Luna signs the federal MOU

Energy Policy Act (EPAct 2005): AED/EPA Faces New, Tougher Energy Challenge



The new EPAct 2005 goals require energy reductions of 3 percent each year from a fiscal year (FY) 2003 baseline, beginning in FY 2006 and continuing through FY 2015.

EPA Signs MOU for High Performance and Sustainable Buildings

At the White House Summit on Federal Sustainable Buildings on January 24, 2006, EPA Assistant Administrator Luis A. Luna, along with representatives from 16 federal agencies, signed a Memorandum of Understanding (MOU) entitled "Federal Leadership in High Performance and Sustainable Buildings." By signing the MOU, these federal agencies commit to design, construct, and operate their facilities in an energy-efficient and sustainable manner.

	1st Qtr FY 2003 Btu/GSF	1st Qtr FY 2006 Btu/GSF	1st Qtr FY 2007 Btu/GSF	Difference FY 2006 to FY 2007	Difference FY 2006 to FY 2007
Chelmsford	87,134	87,205	85,308	-17,096	-17.7%
Narragansett	48,684	82,853	72,831	-10,022	-12.0%
Fulton	57,000	38,888	31,483	-6,405	-16.5%
Edison R2	N/A	28,414	30,028	1,614	5.7%
RFAC/Trotter	N/A	41,754	34,802	-6,952	-16.6%
Butler/CRD	N/A	N/A	32,944	N/A	N/A
Fuel Meade	58,948	55,829	58,297	2,468	4.4%
Artisan-ORD	82,880	80,384	81,488	1,104	1.4%
Artisan-ESD	78,388	78,388	81,418	3,030	3.9%
Golf Course	51,288	57,462	45,267	-12,195	-21.2%
Montgomery	27,719	44,885	41,050	-3,835	-8.5%
RTF(Total)	118,832	122,822	108,191	-14,631	-11.9%
Ann Arbor	80,868	88,270	88,562	2,292	2.6%
Indiana	111,358	87,478	85,008	-2,470	-2.8%
Crescent	78,577	71,517	72,517	1,000	1.3%
Cincinnati (Total)	118,832	107,254	102,535	-4,719	-4.4%

Notes: *Difference FY 2003 to FY 2007 represents the quantity: [(1st Qtr FY 2007 Btu/GSF) - (1st Qtr FY 2003 Btu/GSF)] / [(1st Qtr FY 2007 Btu/GSF) + (1st Qtr FY 2003 Btu/GSF)] / 2
 *Difference FY 2006 to FY 2007 represents the quantity: [(1st Qtr FY 2007 Btu/GSF) - (1st Qtr FY 2006 Btu/GSF)] / [(1st Qtr FY 2007 Btu/GSF) + (1st Qtr FY 2006 Btu/GSF)] / 2

Our energy conservation accomplishments to date include:

- Fully utilizing the economizer set-back controls on the air handlers
- Full conversion of the chilled water system to premium efficiency motors couple with variable drives
- Lighting automation
- Employee participation in turning off lights, reducing errant air flow in wet lab, reporting water leaks, turning off equipment when not in use, turning down thermostats.

YOU CAN HELP BY:

- Turning off lights, copy machines, and printers at the end of the day.
- Seasonally adjust thermostats at night and before weekends
- Adjust clothing to compensate for small changes in indoor air temperatures
- The laboratory LP air compressors are a major energy consumer, close off air lines when not in use, report leaks that are detected

How A Sustainable Facility Brings Money Back To The Organization

Coupled With Reducing Our Environmental Footprint

- Decrease facility operating costs
- Convey a message to building occupants and the surrounding community.
"we care about your perception and your future"
- Our light reduction efforts to date save significant resources and greenhouse gas emissions:

Total Annual KW-hr Savings*	Annual Reduction in Pounds of CO ₂ *	Total \$ Savings*
17,300	22,000	\$1,952.29

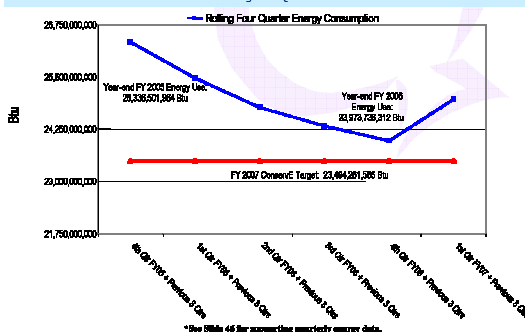
*Savings based on \$.14 per Kw-hr including Renewable Energy Credit Costs

Pounds of pollution are based on the national average emissions factor for electricity generation in the United States, 1.64 pounds CO₂ per kWh.

EXAMPLES:

- Exterior motion controlled lights estimated to be on 2 hours per night, 8 hours per night
* 365 days per year = **2920 reduced use hours**
- Exterior lights extinguished 10 hours per night savings
* 365 days per year = **3650 reduced usage hours**

Narragansett Rolling Four Quarter Energy Use vs. FY 2007 ConservE Target Through 1st Qtr FY 2007

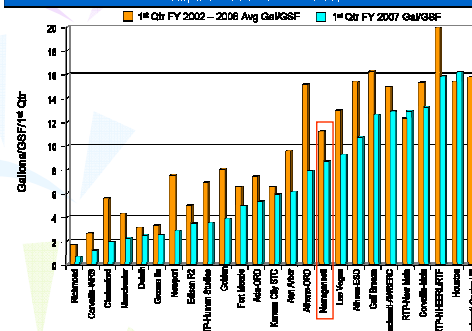


Leading Edge Award

Russell Ahlgren and Mark Tagliabue
Narragansett, Rhode Island
Atlantic Ecology Division Laboratory

Russell Ahlgren and Mark Tagliabue of the Narragansett, Rhode Island, Atlantic Ecology Division Laboratory received Leading Edge Awards for installing a compressed air delivery system to aerate wet laboratory and microcosm growth chambers filled with water from Narragansett Bay. Initiated in January 2006, the project is expected to save nearly 600,000 gallons of water per year by eliminating the use of once-through cooling water—adding to the 350,000 gallons of water per year already saved from the facility's high-efficiency toilet retrofit in 2004.

1st Qtr FY 2007 Water Use in Gallons/GSF



New Executive Order – The newly issued Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," includes a new mandatory 2 percent annual reduction in water intensity below the baseline water intensity established in FY 2007.