

New York State K-12

Recognizing Excellence in Energy, Management and Sustainability

Increase energy efficiency, improve indoor environmental quality, and create an outstanding learning environment for students and staff.



Create Energy-efficient, Healthy, and More Productive Spaces in Your School

If you believe you are already energy efficient, you might belong to the top 25% of schools nationwide that can qualify for and receive the ENERGY STAR® Building Label, certified by the U.S. Environmental Protection Agency, to display in your school and demonstrate the efficiency of your buildings. Additionally, school districts demonstrating outstanding district-wide improvement in energy efficiency can qualify for the ENERGY STAR® Leader award.

For more information on the Energy Smart Schools Program, please contact us toll-free at 1-866-NYSERDA; locally at 1-518-862-1090; visit NYSEDA's web site at www.nyserda.org/programs/schools or e-mail at info@nyserda.org

New York State Leader Award Recipients

Recognized by the US Environmental Protection Agency's ENERGY STAR® Program



The New York State Energy Research and Development Authority (NYSERDA) developed the *Energy Smart Schools Program* to support New York State K-12 public and private schools in pursuit of energy efficiency. The benchmarks provided by the *Energy Smart Schools Program* is designed to help you in three ways:

- Understand the energy consumption and cost trends at each of your buildings,
- See how your buildings are doing compared to other schools locally and nationally,
- Identify opportunities for improving operations and reducing cost.

The analysis is based on the following criteria: description of each school — size, number of students, types of heating and cooling, cooking facilities, number of PCs, etc. Each building's utility bills are then used to assess electricity and heating fuel consumption for the year(s) provided. A summary table of each school's building, use, and cost information also is provided.

Each school's information is then compared against two different sets of school energy data: U.S. EPA's national data and NYSERDA's New York State data. The results are illustrated in a graph for each year provided. The seven major *Energy Smart Schools Benchmarks* represented include: U.S. EPA Score, total energy use, electricity use, heating fuel use, and total cost, all of which have been normalized for comparison by either square footage or number of students. These benchmarks are further explained in the rest of the report.

Additionally, within the benchmarking report, graphs track each building's monthly electricity use, electricity demand, and heating fuel use figures. Although the monthly usage graphs do not include comparisons with other schools in New York or nationwide, they provide a clear picture of how each school consumes energy over the course of a year. Monthly figures also are useful for anyone who is interested in performing an onsite energy audit.

As part of the Program's focus on sustainability, each school's carbon footprint is also presented.

Recommended next steps and a discussion of the applicable NYSERDA programs available, including programs for onsite energy audits, are provided at the conclusion of the report.

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Rochester City School District – 49 schools

A 10 Point Improvement Awarded on 11/24/2004

Rochester was the first New York State public school district to receive a Leader Award, achieving a **14** point improvement. The district reduced its total energy use by **11%** (kBtu/ft²), consequently reducing its CO₂ emissions by **12,802,000** lbs/year. The **12%** overall electricity use reduction plus the **9%** overall natural gas use reduction led to a savings of **\$750,000** for the 2003-2004 school year. Two Rochester schools received the ENERGY STAR® Building Label for scoring 75 or above in 2006 and four more are expected to receive the award in early 2007.

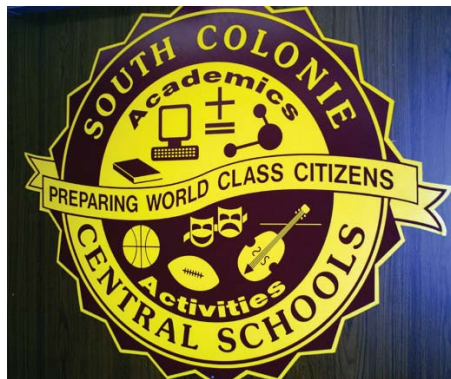
Rochester City School District's Education Facilities Plant Manager **John Songer** explains: "The results of our energy management and benchmarking programs would not be possible without the partnerships and support of District administrators, staff and students as well as NYSERDA, the US EPA, contractors, mentors, and the community to which we serve."

Rochester's comprehensive energy program has expanded and now saves the school district in excess of **\$1,000,000** per year in utility and maintenance costs.

South Colonie Central School District – 8 schools

A 10 Point Improvement Awarded on 1/19/2005

Boasting a **19** point improvement, South Colonie Central School District was the second New York State public school district to receive a Leader Award. Its overall energy reduction totaled **16%** (kBtu/ft²) and **2,625,000** pounds of CO₂. Since September of 2001, South Colonie has reduced its annual electric consumption by **one million** kWh and its annual gas consumption by **100,000** therms, resulting in more than a **20%** cost avoidance. South Colonie also lays claim to New York's first public school awarded the ENERGY STAR® Building Label in June of 2005.



South Colonie Energy Manager **Jim Brown** notes that lighting upgrades performed in combination with day-lighting controls and occupancy sensors enable maximum electricity savings. Jim Brown was also recently named Energy Manager of the Year by the Capital Region chapter of the Association of Energy Engineers.



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Averill Park Central School District – 7 schools

A 20 Point Improvement Awarded on 6/27/2006

Averill Park Central School District was the first New York State public school district to receive the 20 Point Improvement Award for its outstanding 24 point improvement. It accomplished a 19% energy reduction (kBtu/ft²) and a CO₂ reduction of 2,711,000 pounds per year. Over the past three years, it has reduced its electricity use by 24%, its natural gas use by 23%, and its fuel oil use by 18%. Its efficiency methods have led to an outstanding savings of \$200,000 during this period. Averill Park also has four schools – more than half of the schools in the district – that have applied for the ENERGY STAR® Building Label. Energy Manager **Aaron Heffner** explains that he has worked with all district staff “to establish an energy ethic throughout the district,” while “making sure teachers and students are comfortable during the day.” Consequently “every person in the district is doing his/her part to conserve energy, using the energy necessary and saving money for the education of the children.”

Cohoes City School District – 6 schools

A 30 Point Improvement Awarded on 8/22/2006

The Cohoes City School District has achieved the largest US Environmental Protection Agency score improvement of any district in New York State to date, with an average score improvement of 34 points. Achieved between 2004 and 2006, this outstanding accomplishment corresponds to a 28% energy reduction (kBtu/ft²), a 1,458,000 lbs/year emissions reduction, and \$130,000 in savings between the 2004-2005 and 2005-2006 school year. Two Cohoes schools have also applied for the ENERGY STAR® Building Label.



Supervisor of Buildings and Grounds **Ken Kellogg** attributes success to simple energy saving measures such as: scheduling heating and air-conditioning systems to be turned off when unoccupied; opening windows and turning off HVAC units when temperatures allow; turning off computers when not in use; setting comfort zone temperatures to 78° in the summer and 68° in the winter; and installing motion sensors and vending misers.

For more information on NYSERDA's Energy Benchmarking Program, call toll free 1-877-442-9181 or email NYSchoolsBenchmarking@trcsolutions.com

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Ichabod Crane Central School District – 5 schools

A 10 Point Improvement Awarded on 9/25/2006

75 or Greater Rating Achievement Awarded on 9/25/2006

The Ichabod Crane Central School District is the first public school district in New York State to qualify for two different types of Leadership Awards. The district-wide average score increased by **32%**, moving from the **60th** to the **79th** percentile. The new average score places the district in the top quartile of performance for all school districts nationwide. Ichabod Crane Central School District also has the highest average score of any district in New York State. All five of Ichabod Crane's school buildings scored above the **75th percentile**, and all schools are in the process of applying for the ENERGY STAR® Building Label. Over the past two years, the district has reduced its overall energy consumption by **18%** (kBtu/ft²) and eliminated the emission of **1,168,000** pounds of CO₂ into the environment. More specifically, Ichabod Crane has reduced its total electricity use by **17%** and its total fuel oil use by **21%**, leading to a **\$93,000** cost avoidance for the 2005-2006 school year.

In the district staff's own words: "These significant reductions were accomplished by the cooperative efforts, of over 350 employees on a district-wide basis, to implement the district policy of energy conservation. The district was able to appreciably reduce energy consumption in the daily operation of all occupied and unoccupied spaces, including active classrooms and corridors, by the stakeholders using these spaces. In addition to this cooperative human focus on energy reduction as practiced by the entirety of the staff, a parallel strategy was implemented by the Operation and Maintenance department employees to optimize the deployment of all building utilities and services. This optimization included all mechanical systems, comfort systems, and lighting schedules, both inside the buildings and on the grounds, at all times."

Indian River Central School District – 8 schools

A 10 % Improvement Awarded on 3/14/2007

Indian River CSD is a unique New York State school district with four different heating methods for eight schools, including natural gas, fuel oil, geothermal heat source heat pumps, and geothermal water-to-air heat pumps. The district has taken advantage of over \$560,000 in NYSERDA incentives through **New York Energy Smart™** programs, such as New Construction and Technical Assistance.

Over the course of just two years, Indian River CSD has reduced its site energy by 15% and its source energy by 19%, leading to the receipt of the 10% Improvement Leader Award. Its average EPA Score has increased by 16 points, corresponding to an emissions reduction of 2,513 pounds of CO₂ each year. This reduction also corresponds to a cost savings of well over \$100,000. The district looks forward to continuing to educate students and staff, and continuing to pursue innovative energy efficiency projects in the future.



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New York State Leader Award Recipients

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					Label Year			
School	District	Sq. Ft.	Students	EPA	2005	2006	2007	2008
Algonquin MS	Averill Park CSD	146000	797	84		2006		
Miller Hill ES	Averill Park CSD	63760	341	75		2006		
Sand Lake ES	Averill Park CSD	48000	191	83		2006		
West Sand Lake ES	Averill Park CSD	77577	509	84		2006		
Dorgee JHS	Baldwinsville CSD	51443	207	82		2006		2008
McNamara ES	Baldwinsville CSD	60898	547					2008
Palmer ES	Baldwinsville CSD	60898	535					2008
Ray MS	Baldwinsville CSD	156887	1010					2008
Van Buren ES	Baldwinsville CSD	48090	503					2008
Brockport HS	Brockport	319861	1490					2008
Fred W. Hill School	Brockport	102060	593					2008
Cohoes High School	Cohoes City	135000	642					2008
Page Avenue School	Cohoes City	13388	47					2008
Van Schaick school	Cohoes City	35000	140					2008
Cohoes MS	Cohoes CSD	99000	499	76		2006		
Harmony Hill ES	Cohoes CSD	61664	404	81		2006		
Corlears	Corlears	91015	625					2008
Big Flats ES	Horseheads CSD	58770	399	83				2008
Ridge Road ES	Horseheads CSD	48888	380	75				2008
Sing Sing MS	Horseheads CSD	232781	1293	81				2008
Ichabod Crane HS	Ichabod Crane CSD	124284	707	75		2006	2007	
Ichabod Crane MS	Ichabod Crane CSD	109250	554	75		2006	2007	
Ichabod Crane Primary School	Ichabod Crane CSD	56832	500	87		2006	2007	
Martin H. Glynn	Ichabod Crane CSD	44476	322	93		2006	2007	
Martin Van Buren	Ichabod Crane CSD	31453	206	85		2006	2007	
Moses Dewitt ES	Jamesville Dewitt CSD	55450	365			2006		
Lowville Academy	Lowville	288996	1500					2008
Bradt Primary	Mohonasen	95766	507					2008
Draper MS	Mohonasen	138921	790					2008
Mohonasen HS	Mohonasen	202546	1140					2008

New York State Building Labels

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ENERGY STAR® Program

School	District	Sq. Ft.	Students	EPA	Label Year			
					2005	2006	2007	2008
Madill Elementary	Ogdensburg CSD	76090	468	77		2006		
Perry ESMS	Perry	154466	801					2008
Perry HS	Perry	121900	370					2008
Seymour Smith ES	Pine Plains	86000	500					2008
Andrew J Townson School 39	Rochester CSD	92091	627					2008
Audobon School 33	Rochester CSD	267264	1128					2008
Dr. Charles T. Lunsford School #19	Rochester CSD	84732	325	79		2006		
Francis Parker School 23	Rochester CSD	53572	324					2008
Frank Fowler Dow School 52	Rochester CSD	61114	318					2008
Franklin Academy and Montessori School	Rochester CSD	481129	1243	86		2006		2008
Heinrick Hudson School 28	Rochester CSD	197974	1443					2008
James P.B. Duffy School #12	Rochester CSD	100760	711	77		2006		
Marshall Senior HS	Rochester CSD	10000	22					2008
Monroe HS	Rochester CSD	202546	1140	81		2006		
Pinnacle School #35	Rochester CSD	72880	679	81		2006		2008
Virgil S. Grissom School #7	Rochester CSD	67567	571	83		2006		2008
Wilson Magnet School	Rochester CSD	259378	1881					2008
Roessleville ES	South Colonie CSD	48400	296				2007	2008
Saddlewood ES	South Colonie CSD	59403	340				2007	2008
Sand Creek MS	South Colonie CSD	175600	960	76/75	2005	2006	2007	2008
Veeder ES	South Colonie CSD	73025	479	75		2006	2007	2008
Tuxedo Park School	Tuxedo Park	90000	224					2008
Split Rock ES	West Genesee CSD	67378	448					2008
Camillus MS	West Genesee CSD	156560	587					2008
West Genesee HS	West Genesee CSD	311854	1742					2008
West Genesee MS	West Genesee CSD	125700	647					2008





The New York State Energy Research and Development Authority (NYSEERDA), a public benefit corporation, was created in 1975 by the New York State Legislature. NYSEERDA works to improve New York State's energy, environmental, and economic future by sponsoring energy analysis, research and development, and efficiency deployment programs. Funding for these programs comes from the State's investor-owned utilities, the federal government, substantial project partner co-funding, and voluntary contributions from the New York Power Authority (NYPA) and Long Island Power Authority (LIPA). NYSEERDA also coordinates the State's nuclear energy activities, manages the Western New York Nuclear Service Center at West Valley, and finances utility energy-related projects, reducing ratepayer costs.

State of New York
David A. Paterson, Governor

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and Development Authority**
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