

# WINTERGREEN

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A monthly update on Steven Winter Associates, Inc.'s work in the realm of Energy Efficient, Sustainable, and High-Performance Buildings

## First Anniversary of the LGEA Program & Its New Additions



Cresskill, New Jersey

SWA is one of five pre-approved providers of energy audits for the **New Jersey Local Government Energy Audit (LGEA) Program**. The LGEA Program just concluded its first year and has included buildings owned by local governments, school districts, housing authorities, and New Jersey State Colleges and Universities.

Having just completed our one year anniversary of the launch of the Program, SWA has some exciting news to report:

- ◆ More than 220 buildings have been audited and more than 100 other buildings will be audited in the first two months of 2010
- ◆ Over 7,115,000 kWh and 223,800 Therms of energy savings have been presented to our clients
- ◆ More than 55 municipalities selected SWA to help with the identification of energy conservation measures
- ◆ SWA completed the first housing authority energy audit as part of the Program

The LGEA Program has been a fantastic platform to encourage municipal awareness of energy conservation, coupled with New Jersey State incentive programs being offered to increase performance. Effective this month, the program has been expanded to include **501(c)(3) organizations**; and the LGEA Program will now reimburse 100% of the cost of the energy audit to its participants.

For more information, please contact Dominique Lempereur at [dlempereur@swinter.com](mailto:dlempereur@swinter.com)

## School System Saving over 1.7 million kWh of Energy Based on Audit Results



Livingston Board of Education

The **Livingston Board of Education** had eight school buildings and its administrative offices audited, a total of 863,000 square feet of space, as part of the New Jersey Local Government Energy Audit program. The audit was completed within a 30-day timeframe to allow the Board of Education to offer a referendum for the town voters to determine which suggested energy conservation measures, if any, would be supported through municipal and state funding.

Based upon the analysis of the current conditions in the buildings and the incentive funding available through the State of New Jersey, SWA recommended energy conservation measures, including the installation of solar panels, lighting upgrades, motor and fan upgrades and retro-commissioning. The total proposed energy savings were 1,783,339 kWh and 53,134 Therms. Some of the measures approved for funding by the voters include the replacement of heating and ventilation systems, construction on some buildings and the installation of solar panels, which should reduce carbon dioxide emissions by 1,125 tons per year.

For more information, please contact Lauren Brust at [lbrust@swinter.com](mailto:lbrust@swinter.com).



## LEED for Homes Platinum on Long Island, NY



Palma Terrace Hamptons Residence built by **Fiachra Hallisey and Clontarf Properties**



2" closed cell provides good air sealing and 3.5" blown-in fiberglass completes the thermal envelope.

At 3,100 square feet, this single-family, 4-bedroom and 6-bathroom home has a compact plan, while maintaining an open feeling. From the exterior, the shingle style with thick sage-colored trim and second floor balcony fits the local aesthetic, but behind the walls are a thermal envelope and mechanical systems that set it apart.

- ◆ The full basement has a combination of rigid and batt insulation on the interior walls and good air sealing at the large windows (placed for daylighting).
- ◆ Above-grade walls were sprayed with 2" of open cell foam and 3.5" of blown-in fiberglass. An unvented attic sprayed with closed cell at the roof deck allows all of the mechanical equipment and ductwork to remain within the thermal envelope.
- ◆ Good windows (U-factor 0.33, Solar Heat Gain Coefficient 0.30) and good air sealing through construction create a tight envelope and enabled the mechanicals to be sized at a modest 2 tons of cooling.
- ◆ Two wells approximately 100' deep supply the two-stage Ground Source Heat Pump (3.9 COP, 18 EER) with de-super heater for domestic hot water.
- ◆ ENERGY STAR™ rated appliances, CFL's, and a 5Kw system photovoltaic array contribute to HERS Index 30 (HERS Score 94).
- ◆ The tight envelope has 2.38 Air Changes per Hour @ 50 pascals and approximately 3 CFM/100sf of duct leakage.
- ◆ An **Aprilaire** energy recovery ventilator ensures that 52 CFM minimum continuous ventilation is met with fresh air supplied to each bedroom.
- ◆ Contributing to good indoor air quality are: no added urea formaldehyde resins in the cabinetry; low or no VOC paint, stains, or sealants; gas fireplace with sealed doors and electronic pilot.


In the LEED for Homes program, Sustainable Sites is the second largest point category after Energy and Atmosphere, and the project team was determined to shrink its environmental footprint here as well. Rainwater is harvested from 100% of the roof area and stored in cistern tanks to be used for efficient irrigation of the entirely native landscape. Drought tolerant turf, limited to recreation "patches", mulched landscape beds, and permeable patios create a low maintenance exterior.

For more information, please contact Karla Donnelly at [kdonnelly@swinter.com](mailto:kdonnelly@swinter.com).

## Announcements

**CTGBC** - SWA is excited to announce that our President, Steven Winter, has been elected to the Board of Directors of the Connecticut Green Building Council. His election comes nine years after his first involvement with the CTGBC as founder. Steven's experience with the USGBC and the green building community will help fill a long untapped niche in the lower CT area.

For more information visit the SWA Website: [swinter.com](http://swinter.com)

**GSA** - SWA is a contract holder with the General Services Administration. Services that we provide under contract# GS-21F-0117V are energy management planning and strategies, training on energy management, building commissioning, energy auditing, resource efficiency management, and innovations in energy. Log on to [GSA Advantage](http://GSA Advantage) or contact Cecily Kaz at [ckaz@swinter.com](mailto:ckaz@swinter.com). 

**NSBA Program** - Maureen Mahle will be a guest instructor for the *National Sustainable Building Advisor Program* at the **SUNY Ulster** campus on Friday, January 22, 2010 from 10:30 a.m. to 11:30 a.m. She will be discussing LEED for Homes from a rater's perspective. The class location will be at the Business Resource Center on 1 Development Court in Kingston, NY 12401, Room 115.

**Accessibility Seminar** - SWA will present Accessible Design - From Plans to Practice in its New York City office on Thursday, January 28, 2010 from 6 - 8 p.m. Accessibility requirements of the NYC Building Code and the Fair Housing Act will be addressed. Architects qualify for AIA LUs. To register visit our [website](http://website) or contact Fran Payne at [fpayne@swinter.com](mailto:fpayne@swinter.com). 

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