



PlanItGreen Year One Implementation Report Addendum

Institutional Achievements

November 1, 2011 – October 31, 2012

Rush Oak Park Hospital

In FY 2012, Rush Oak Park Hospital (ROPH) made significant steps in becoming a leader of environmental stewardship in the community through implementing new systems and procedures that reduced resource use and promoted staff involvement and education. For the third year in a row, the Hospital was awarded the U.S. Environmental Protection Agency's Energy Star Award in recognition of superior energy performance. As an Energy Star building, ROPH uses 35 percent less energy and generates 35 percent fewer greenhouse emissions than similar buildings across the nation. It is one of three hospitals in the state and the only building in Oak Park with the award.

The Hospital also diverted 39 tons of landfill material to recycling in ten months by using a new waste vendor- saving of 168 trees, 40,000 kilowatts of electricity, and 69,000 gallons of water. Another major step occurred when the Hospital switched over to a new computer program called Epic that reduced hospital-wide paper usage significantly. In comparing pre- and post-Epic paper usage over a period of six months, it was determined that the hospital ordered 391 fewer cases of paper (18,768 lbs), which also amounted to a savings of \$13,557.

The Hospital's Green Team also focused on increasing staff involvement; recruiting new environmental stewards from a variety of departments, taking the lead on reviving several recycling programs, and communicating "green" accomplishments and tips to staff, patients and visitors. Special Events for "Green" holidays were sponsored. During Earth Day Celebration week (April 15-22), Green Team members manned a table in front of the Cafeteria during lunch time. They provided information on how to become a more environmentally conscious person, engaged staff and visitors with a "Talkin' Trash" game, and provided the opportunity to enter a free raffle for sports ticket and/or a composter if the participant was willing to make a green pledge. In partnership with the local Lions Club, the Green Team also conducted a used eyeglasses drive and collected thirty pairs of eyeglasses from staff. The glasses will be refurbished and given to people in need in developing countries. Members also collected thirty two pairs of old gym shoes, which were dropped off at the Nike store downtown to contribute to their program of recycling the rubber from old shoes and using it to resurface playgrounds and outdoor basketball courts. Green Team members will also provide the same type of staff outreach and education during the upcoming "America Recycles Day" on November 15th, 2012. Beginning in FY 2012, Rush Oak Park Hospital became one of the leaders of a project created by PlanItGreen- the Institutional Food Scrap Diversion Project. Plans are in the works to apply for a grant to acquire the equipment needed for this project. This offers a great opportunity for some of the large institutions in Oak Park and River Forest to work together to initiate food scrap composting at their facilities, and divert their food scrap waste, thereby saving money by spending less on trash weight and pickup.

West Suburban Medical Center

1. Maintained a greater than 28% diversion rate.
2. Reduced Regulated Medical Waste in 2011 by 24% from the previous year.
3. Introduced a pharmaceutical waste management program in December 2011.
4. Upgraded 2113 T12 bulbs and magnetic ballasts to T8 bulbs and electronic ballasts which will reduce our electrical usage by 350,000 kWh.
5. Reduced water consumption by 3.5% through HVAC equipment upgrades.

Dominican University

1. Started a sustainable minded book club, first book being *Silent Spring* by Rachel Carson. It is a collaboration with the Rebecca Crown Library (our on campus library).
2. Phased out old recycling bins, for new ones from MaxR, <http://www.max-r.net/>. They are made from recycled milk jugs, are more colorful and eye catching. The bins also have a back board where we put inserts with fun facts and a detailed list of what can go in each of the three compartments of the bin (paper, cans, trash).
3. Chartwells (Dominican's food service vendor) and select staff lounges have been collecting coffee grounds and egg shells for compost. We have a tumbling composter at the Priory where the collected compost is processed.
4. The Eco Club (student organization) has started collecting items for TerraCycle, <http://www.terracycle.net/en-US/>. The 'brigades' Eco Club is collecting are; candy wrappers, chip bags, pens and Solo cups.
5. 4RFuture (Dominican's Sustainability Team), which is composed of faculty, staff and student from various departments around campus, is in the final stages of creating a plan for Dominican's sustainable path into the future.
6. Four tubes have been placed around campus to collect batteries; the Eco Club is taking them to a proper recycling facility.
7. The Eco Club is also collecting old electronics, large and small, and having those recycled as well. The default setting for printing on campus is now double sided printing.
8. We have started using re-fill-able markers for the white boards.
<http://www.pilotpen.us/ProductGroup/108-Vboard-Master-BeGreeN.aspx>

River Forest Elementary District 90

Lincoln Elementary School

1. Held a book exchange for families.
2. Conducted Look at Your Lunch Week. Students took home all packaging and leftover food from their lunches, along with information on packing zero-waste lunches.
3. Conducted a battery-collection contest.
4. Continuing activities include Walk-to-School Week, Zero-Waste Lunch Challenge, Wrap-n-Mat and Snack Taxi Sales the week prior to Earth Week.

Roosevelt Middle School

1. Eight recycling bins added to classrooms and office after bin audit was performed.
2. Researched options for purchasing bulk green party supplies and reusable tablecloths for annual cultural festival in April.
3. Task force has begun meeting to develop an exterior campus plan to create better flow to the space, with green options likely incorporated into plan. (Roosevelt is undergoing a major facilities renovation this summer.)

Willard Elementary School

1. Established organic gardening class which will be offered as a summer school class.
2. Art class involving the garden also offered as a summer school class.
3. Conducted a survey of room parents to determine whether reusable party goods are being used.

Village of Oak Park

1. Passed Complete Streets Policy requiring all new development projects involving street scape development to incorporate bike lanes, ample and attractive walking space, and other amenities to facilitate greater bicycle and pedestrian activity.
2. Passed Community Choice Aggregation referendum and contracted to purchase 100% wind RECs for the aggregation membership. Oak Park has become the first municipality in Illinois and possibly the nation to choose an all-green power program for its residents and small businesses. Oak Park's Village Board approved a two-year contract with Chicago-based Integrys Energy Services to supply electricity and energy credits from 100-percent wind sources, while still saving local customers about 25 percent over the current state-approved electricity rate. The cumulative savings for Oak Park consumers over the next two years is expected to be about \$4.5 million. To date, Oak Parkers have saved \$888,000.
3. Approved Village of Oak Park Village Hall geothermal project.
4. The Village of Oak Park erected a 99-Kilowatt solar photovoltaic panel system on the top deck of the Avenue Garage on North Boulevard. Thanks to a 75% grant obtained from the Illinois Department of Commerce and Economic Opportunity, Oak Park was able to bid out the project last spring. The Board approved the hiring of Solar Service in October 2011, and the company immediately went to work obtaining permits and ordering materials. The racking structure was installed in February and went on-line in April. It is expected to offset 20%-30% of the garage's electrical use while serving as a local example of municipal investment in renewable energy.
5. Smart Grid: As ComEd implements its 10-year, \$2.6 billion Infrastructure Investment Plan, Oak Park, as part of ComEd's Innovation Corridor, will act as a test bed for all grid upgrades and innovations. Village staff will work with ComEd, Argonne National Labs and smart grid companies to identify priority areas for system improvements, coordinate operations to facilitate equipment installation and design programs to educate residents and businesses of the increased reliability which will result from these system upgrades. Oak Park's goal is to improve its reliability rate by 5% a year or 50% over the 10 year implementation period.
6. Two electric vehicle (EV) charging stations were installed in Village Parking garages. Dual-vehicle, Level 2 chargers were installed in the northwest corner on the fourth floor of the Avenue Garage and at the Marion Street entrance on the first floor of the Holley Court Garage. Each charging station will allow two EVs to charge at the same time. The charging station in the Avenue Garage is connected to the solar panel array on the roof, providing clean, renewable energy to power the EVs. Both stations should be operational following an inspection by the Building & Property Standards Department. The installations were approved by the Board in November, and staff is seeking a 50-percent rebate from the Illinois Department of Commerce and Economic Opportunity.

Park District of Oak Park

1. The OP Park District has researched and suggested native plant material to be installed at Lindberg and Scoville Parks; assessed tree health at those locations and increased the overall tree count and diversity in the park system.
2. The Frank Lloyd Wright race committee has reached out to PlanItGreen to discuss strategies for minimizing waste with a more sustainable approach to its October event.
3. Taylor Park is completed, with the installation of a naturalized fen to help control previous water drainage issues at the park.

4. The OP Park District installed additional, educational signage at the native plantings area at Field Park.
5. The OP Park District has incorporated LEED standards/components in the construction plans for the new Ridgeland Commons.

This year the Park District had a special team of volunteers at the Frank Lloyd Wright Races who were on "GREEN" patrol. They helped compost bananas and cups and recycle the variety of plastic water bottles distributed throughout the day. After the Races, volunteers from the Hatch Green Team brought the banana peels back to the composter at Hatch Elementary and about 10 bags of compostable cups were delivered on Monday morning to Village of Oak Park public works, to be put into the compost stream in the southeast Oak Park pilot program. Plastic bottles from water, powerade and vitaminwater were recycled by PDOP buildings and grounds staff. Cardboard was also recycled, as were plastic jugs from course water. The first round of native plants have been planted at Lindberg Park as part of the restoration of the native trial gardens. The Park District submitted a grant application to the IDNR for the construction of an Environmental Learning Center with a discovery garden in Austin Gardens. They hope to be contacted by June 2013 regarding this grant process. Attached is the building concept. If they receive the grant, the facility will have a green roof and a roof water runoff, which will go into the discovery garden. Chris Wolmuth, a member of the GAC, developed a program for the use of green cleaning products by the Park District staff and by the cleaning service with which the Park District contracts to clean the various centers and facilities. Mike Grandy is now using the program in all of our buildings.

Green4Good

Green4Good committees at each school, and several District administrators, work together to make River Forest Public Schools greener. Our mission is to promote a safe and healthy learning environment, encourage environmental stewardship at school and in the community, and foster a lifelong connection to the natural world for all District 90 students and their families. District 90 performed an extensive renovation of the Roosevelt Middle School campus this past summer. The building renovations included the following Green Initiative Design Elements:

1. Energy efficient lighting fixtures
2. Energy efficient lighting layout and switching
3. Infrared automatic flush valves
4. Energy efficient windows
5. Environmentally responsible drywall, insulation and other construction materials
6. Recycling of existing doors

Recycling Extravaganza a Success

The numbers for our event in May are staggering: two semi-trailers full of electronics, 3,000 pounds of textiles and shoes, and 6,000 pounds of other household items were dropped off for recycling. We had 608 cars unloaded by 62 wonderful volunteers. In addition, more than 100 pounds of unused medication was collected by the Cook County Department of Environmental Services, meaning it won't be dumped in a landfill where it can leech into our water supply and harm animals, or be put down home drains where it can contaminate drinking water.

Jewel helped us recycle 20 15-gallon bags stuffed with plastic grocery bags. We also took in five bags of pet supplies for the Animal Care League, as well as 24 boxes of donated school supplies that went to SCARCE in Glen Ellyn, which provides them to nonprofit organizations and teachers.

Students Loved Their Organic Summer Garden

Summer school was back at Willard Elementary this year, and so was the garden class. Aimee Conrad led 3rd and 4th Grade students in the garden that the Willard PTO Green4Good Committee made possible. The garden is in its fourth year at Willard and its second year for summer school. Conrad's class planted flowers, weeded and learned the science behind the garden that parent volunteers planted in May. Conrad said the fact that they could observe, touch and even taste some of what grew made lessons more interesting than if the students were learning about them from their desks inside. Students were able to see plants such as green peppers bear fruit before the end of the session. "It's like the most compelling learning environment you can think of," said Conrad, who has taught at Willard for 10 years. "They're really into the fact that they're doing something and that they're sharing information."

New Garden at Roosevelt Middle School

Now there is another garden in the District. Cory Kadlec's 7th Grade Science class started a new garden at Roosevelt in November by planting garlic bulbs that will come up in the spring. Just like at the Willard garden, the compost from Roosevelt's lunchroom food scraps will fertilize this new garden. New permanent space for classroom gardens is part of the Roosevelt Exterior plan to be implemented next summer. This plan also includes major pedestrian and bike facility safety and circulation upgrades.

Compassion Counts

District 90 was the first school district in Cook County to have 100% of its building composting food waste. Food was also the focus of the 8th Grade's "Compassion Counts Student Service Project" this fall. They focused their efforts to volunteer at "Feed My Starving Children," and held a food drive for the OPRF Food Pantry. The Green4Good Committee also gave presentations to the entire grade about the impact of food waste in the United States and what they can do at school and home.

River Forest Parks Foundation

The River Forest Parks Foundation initiated its brand new GREEN BLOCK PARTY Program on Saturday, April 28 at The River Forest Park District Depot. The project, funded by the Oak Park River Forest Community Foundation's *Communityworks* program, provided resources and education to support RF residents in their efforts to host block parties that incorporate a broad range of sustainable features. Compost demonstrations were offered by Jackie Paine, Master Gardener and Composter and the Earth Machine Compost bin was on display so that residents could see the compost bin that will be delivered over the summer at each Green Block Party. Participants learned about ecologically friendly products, on-site sorting and composting, and other strategies for greening their block parties, and learned about how to access free composters for their blocks. 18 green block parties were conducted throughout the summer and fall.

Triton College

While Triton College is a new institutional member of PlanItGreen, the college has engaged in activities geared towards sustainability for a number of years. A longstanding Facilities policy has been to "take the green path," when doing projects on campus. Examples of this include: choosing green materials for building remodeling and retrofits; installing white, reflective roofs when the old roofs have needed replacing; and putting in water bottle refilling stations when existing water fountains have needed replacement. In addition, Triton has had an active Greening the Campus Committee since 2009.

This year marked an increased commitment to sustainability. In 2011 Triton formally joined the Illinois Green Economy Network, a consortium of community colleges whose mission is to help stimulate the emerging green economy in Illinois by working individually and together on projects related to greening

our campuses, communities, careers and curriculum. Since this agreement was signed, the institution has made great strides in creating a culture of sustainability. Here are some highlights:

- November 2011: Triton establishes the Triton Sustainability Center. As it furthers the IGEN mission, the Center serves as a hub of knowledge and coordination for sustainability initiatives on campus and in the community. More information can be found at www.triton.edu/sustainability.
- February 2012: Triton partners with Chicago Wilderness to put on the first Leave No Child Inside conference for educators. (The second annual conference will be held in January 2013.)
- Winter 2012: Switchgear installation is implemented so electricity use in separate buildings can be monitored. As of this writing, energy dashboards are being installed in order to monitor electricity use, with the goal of setting objectives.
- Spring 2012: Taking advantage of bulk purchasing opportunities offered by IGEN, new lighting is installed in several areas on campus. The fluorescent tubes and prismatic fixtures increase light output and illumination by 30%, while producing energy savings of 50%. Other retrofitted areas include selected classrooms, the gymnasium, and the cafeteria. The gymnasium's old sodium lighting was replaced and wattage went from 400 Watts per fixture down to 128 Watts, while output increased 30%. In the cafeteria, the overall number of fixtures was reduced and wattage was reduced from 400 Watts to 128 Watts per fixture—yet brightness remains the same. The lighting project as a whole will save 440,000 KW hours per year, producing a dollar savings of \$44,000 annually.
- April 2012: The Triton Greening the Campus Committee and Sustainability Center sponsor programs for Sustainability Month, including "Sustainable Thursdays" evening programs for community members, film screenings, and an electronics recycling and meds take-back event at which over 5,000 pounds of e-waste and five thirty-gallon containers of meds are collected.
- May 2012: Triton earns an Illinois Campus Sustainability award, Bronze Level. (The college is now working to achieve Silver -Level status.)
- Summer 2012: Recycling is expanded and 400 new bins placed in classrooms.
- Fall 2012: Work begins on sustainability components to be incorporated into the Master Plan for fiscal year 2014, and then to be included as the college transitions to a strategic plan in fiscal year 2015.
- September 2012: Environmental biology students participate in the first workday in Adena Woods, Forest Preserve District of Cook County land adjacent to the East Campus that Triton has adopted.
- September 2012: There has been a greening the curriculum effort since 20010. This year knowledge of sustainability is included in the new college-wide learning outcomes approved by Academic Senate.
- October 2012: New bike racks are installed in highly visible locations to accommodate increasing numbers of cyclists.
- October 2012: Triton is awarded a CommunityWorks grant to work with the Oak Park Development Corporation and the Illinois Green Business Association to implement a pilot Green Business Certification program in Oak Park and River Forest.

Oak Park Residence Corporation

A. South & Humphrey, a/k/a SouthCourt, 37-49 South Blvd @ 103-11 S. Humphrey – a 52 unit, vintage apartment building with 2 office sites:

1. Replaced the water heater with a Lochinvar-Armor water heater and Teledyne storage tank @ \$10,700; this is a modulating system that approaches 98% efficiency.
2. Replaced the control on 2 boilers with modern R&D models equipped with out-door and unit sensors @ \$6,400. These controls adjust their respective boiler to respond to the outdoor temperature while ensuring adequate and consistent heat in all the apartments.
3. Mechanical louvers and dampers were installed in 2 boiler rooms @ \$4,500. These louvers each protect approximately 16 Sq.Ft. of exterior wall opening. They automatically open to provide combustion air when the boilers fire and, then, close to keep the cold out when the boilers turn-off. In addition to being required to make the boilers run efficiently, they prevent the boilers from drawing fresh air from the apartments above – a safety concern.
4. Both boilers were “tuned” to Nicor standards (@ \$1300) to ensure maximum combustion efficiency.

The above and other energy efficiency work cost \$24,500. The Center for Neighborhood Technology and the NICOR Energy Savers Project recommended this, and other enhancements, in their energy audits and OPRC will be apply for rebate and grants to partially off-set these costs.

B. One Ontario Place, a/k/a NorthCourt, 3-11 Ontario @ 470-92 N. Austin Blvd – a 49 unit, vintage apartment building:

1. In December 2011, the roof of this building was air-sealed and insulated with funds provided by CNT. This has resulted in a significant reduction in fuel consumption in 2012.
2. Replaced the water heater with a Lochinvar-Armor water heater and tank (@ \$20,294). This is a 5-stage modulating, state-of-the-art, system that achieves 98% efficiency.
3. A pair of mechanical louvers and dampers were installed in the boiler room @ \$2,800.
4. This boiler room has a 2 boiler system with each firing separately depending on the building’s heating needs. Each louver protects about 7 Sq.Ft. of exterior wall opening and is connected to its own boiler; so, only the sufficient amount of cold, outside, fresh, combustion air is allowed into the building and boiler room.
5. Both boilers were “tuned” to Nicor standards (@ \$1300) to ensure maximum combustion efficiency. This is an efficiency and safety item.
6. The boiler system control, with its complement of outdoor/unit sensors and set-back options was restored to full operating condition

Oak Park River Forest High School

2010-2011 Improvements (work performed during summer 2010)

Electrical Upgrades: Renovated and replaced existing light fixtures in over 58,000 SF

- Reduced power consumption by an estimated 40.7 kW
- Reduced utility usage by an estimated 127,000 kWh per year
- Reduced CO2 emissions by an estimated 95.25 tons per year

Mechanical Upgrades:

- AHU, equipment replacement – Added cooling, ventilation and equipment to 32 rooms & boiler improvements
- Added utility usage by an estimated 41,000 kWh per year
- Reduced natural gas usage by 6,600 therms per year.
- Reduced CO2 emissions by an estimated 7.68 tons per year (30.93 tons added & 38.61 tons reduced)

Net Energy Result for Year

- Reduced utility usage by an estimated 86,000 kWh per year
- Reduced natural gas usage by 6,600 therms per year
- Reduced CO2 emissions by an estimated 102.93 tons per year

2011-2012 Improvements (work performed during summer of 2011)

Electrical Upgrades: Renovated and replaced existing light fixtures in over 62,000 SF

- Reduced power consumption by an estimated 43.5 kW
- Reduced utility usage by an estimated 135,000 kWh per year
- Reduced CO2 emissions by an estimated 101.25 tons per year

Mechanical Upgrades: AHU & equipment replacement

- Reduced utility usage by an estimated 85,100 kWh per year
- Reduced CO2 emissions by an estimated 63.85 tons per year

Net Energy Result for Year

- Reduced utility usage by an estimated 220,100 kWh per year
- Reduced CO2 emissions by an estimated 165.07 tons per year

2012-2013 Improvements (work performed during summer of 2012 Projected)

Electrical Upgrades: Renovate and replace existing light fixtures in over 30,000 SF

- Will reduce power consumption by an estimated 21.0 kW
- Will reduce utility usage by an estimated 65,500 kWh per year
- Will reduce CO2 emissions by an estimated 49.12 tons per year

Mechanical Upgrades: AHU & equipment replacement

- Will reduce utility usage by an estimated 98,400 kWh per year
- Will reduce CO2 emissions by an estimated 73.81 tons per year

Net Energy Result for Year

- Will reduce utility usage by an estimated 163,900 kWh per year
- Will reduce CO2 emissions by an estimated 122.92 tons per year

Oak Park Township

The new Township *Senior Services and Meeting Room* facility is located at 130 S. Oak Park Avenue. It was officially opened on August 11, 2012, after a \$2.1 million public investment to create an office and meeting facility from a terracotta-faced structure in a district with many “contributing “ historic buildings. The project received the 2012 Historic Preservation Award from the Village of Oak Park.

Goal: The goal was to maintain as much of the historic interior and exterior as possible, add only windows on the visible alley side of the building and upgrade the backside to improve appearance and functionality.

Green: All this would be done promoting “green” features as much as budget and site characteristics would allow. The greatest contribution to the green aspect was the adaptive reuse of the building, saving its “embodied energy,” contributing useable surplus building materials to the ReBuilding Exchange and incorporating the following:

- Substantial new insulation and a white roof
- Locally sourced brick for a needed addition
- High efficiency heating, cooling and hot water
- Natural ventilation and lighting with new windows
- Lighting control through zoning and use sensors
- Limiting water use with low flow fixtures

- Using recycled materials in carpeting and parking wheel stops
- Promoting walking and biking with 16 bike hitches, and
- Preserving a large tree instead of expanded parking

Other options considered: Geothermal was not within budget and the heating/cooling units were relatively new, and a permeable parking lot over non-permeable clay did not make sense.

Historic Preservation: The terracotta facade of the building was maintained in the condition of purchase – second floor level was cleared and repaired as needed. The interior first floor was already gutted when purchased, but the second floor was in its historically 1980s restored 1922 condition with some alteration in inside office detail to accommodate specialized offices. The enclosed photos show the facade and some interior spaces before and after, including the second floor typical hallway with translucent windows and working transoms and an office space with a staff member.

The back of the purchased building was in very poor condition with leaks and much damaged brickwork and a wooden stairway, added to meet code requirements. Our addition on the back not only remedied these problems, but also allowed an interior stairway, new ADA restrooms, “file farm” and storage space to be created, making retention of the historic second floor possible. Without the addition, interior walls would have needed to be removed to create the required Senior Services staff offices and meeting space.

Hephzibah

Hephzibah replaced its 30 year old 1.2 million Btu boiler with 2 smaller boilers. The new boilers are both 399,000 Btu’s. Because of many years of building improvements, Hephzibah has lowered its heat load requirement to 650,000 Btu’s. The primary boiler is 95 % efficient and will do most of the heating throughout the heating season. The second boiler is a standard 80 % efficiency and will run only when outside temperatures are below 15 degrees, or if the primary boiler goes down for repairs. The reason for the hybrid system is that we were able to save upfront costs by purchasing a “standard” efficiency boiler, but we are still able to benefit with the energy savings through the use of the high efficiency condensing boiler when conditions would allow. The average January temperatures are a high of 30 and low of 15. The mechanics behind the Hybrid is that as the incoming air gets colder and the boiler is heating water hotter than 130 degrees, efficiency of the primary boiler goes down to close to standard efficiency. We also split the building into 3 zones from 1 zone. In the Lower level living area, the bedrooms and kitchen are on their own zone with 5 remote thermostats monitoring the rooms. The TV room is on its own zone and has its own thermostat. We installed a wall radiator in the staff bathroom and heat is supplied whenever the boiler is on. The main floor, 2nd floor and attic are on a separate zone and the wireless thermostat is located in the hallway on the 2nd floor by the children’s bedroom. Besides lowering our heating cost we also lower our carbon footprint. In our Atrium area, many of the windows were cracked and the seals were gone. We replaced 30 windows in the Atrium with low- e glass. In 2012, Hephzibah also: replaced the 12 40 watt bulbs in the chandelier with 3 watt LED’s; replaced 5 exterior doors to reduce drafts and increase security; replaced our 5 ton A/C 10 SEER with a 5 ton 13 Seer; replaced 65 watt bulbs from 115 ceiling flood lights with 16 watt dimmable CFL’s; and retrofitted a shower head and kitchen sink faucet to reduce the flow rate of water.