

The Maryland Green Registry promotes and recognizes sustainable practices at organizations of all types and sizes. Members agree to share at least five environmental practices and one measurable result while striving to continually improve their environmental performance.

# **Lucy School**



9117 Frostown Road Middletown, MD 21769 301-293-1163 <u>www.lucyschool.com</u> Preschool and Primary School *Member since September 2009* 

## Management and Leadership

## **Environmental Team**

The school's environmental committee consists of school personnel, parents and community members. It monitors and advises on issues related to improving and expanding sustainable practices at the school and organizes community outreach and education activities, such as seminars, workshops, visits and tours (see website).

### **Environmental Policy Statement**

The school's primary focus is on the children enrolled in its programs: their emotional, social and intellectual development, their safety and their health. Creating a safe and sustainable community and teaching them to be active stewards of their environment is a central component of the school's work. Renovation, new construction and repairs of school facilities shall be guided by these principles.

Our future goals include the expansion of our solar panel assembly, the installation of a second geothermal system, perhaps using the pond, and incremental changes in landscaping to further reduce the need for irrigation.

# **Environmentally Preferable Procurement**

We are heavily committed to sustainability – food served at the school is primarily from local, organic farms (some of it grown at school and school-related gardens); cleaning products (approved by the Maryland Department of Education) are free of toxins and harmful chemicals; and energy efficiency and recyclable content are primary considerations in the purchase of equipment.

More than 86% of construction waste for our new building was recycled or otherwise diverted from the landfill. All beams, decking and trim in the new building, and trim, siding and most interior walls in an older building is reused material. Other construction material has been selected for its high recycled content.

#### **Environmental Restoration or Community Environmental Projects**

The school property (about 17 acres) includes (1) about 3.5 acres of woods that have been placed in forest preservation and includes trails where plants and animal habitats are identified and protected; (2) wetlands, protected with appropriate plantings (about 200 trees have been planted); (3) farmland, some farmed organically the rest planted in wildflowers; and (4) a spring-fed pond. These are integrated in our environmental curriculum and are the primary focus of outdoor student activities and projects to observe nature, identify and preserve habitats, recognize beneficial insects and track animal paths and feeding patterns.

The construction of a new classroom building school provided an educational opportunity for our school and community on green building practices. We recruited a team of experts to design a building aspiring to high LEED certification. We then organized trainings for the architects, engineers and contractors that worked on the project, and sponsored community information and education events on the subject. Students were involved in every step of this process.

#### <u>Waste</u>

#### $\checkmark$

#### Solid Waste/Material Use Reduction and Reuse

The school produces very little solid waste – about 10-12 cu.ft. per school week. Students bring lunches in reusable containers, office products are shipped in recyclable containers, and all organic waste is composted. Much of everything else is recycled.

### Recycling

Paper, most plastics, glass and metal are the primary material being recycled at the school. Organic matter is composted and all waste that can be recycled is segregated and recycled. On the average, more than 80% of waste is recycled, reused or composted, including our construction waste. Children learn early on to participate in this process and families are asked to minimize the use of non-recyclable material.

#### Hazardous Waste/Toxic Use Reduction

Hazardous and toxic material is not allowed at the school. Indeed, the school has successfully advocated the replacement of harmful cleaning products, such as bleach, by more environmentally friendly alternatives.

#### Energy

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## Energy Efficiency

All classroom buildings have a mostly southern orientation taking advantage of passive solar gains, and double and triple-pane windows provide further savings. All lighting in our new building is LED, while solar tubes bring in daylight. The walls are heavily insulated with recycled newspaper and denim.

#### Renewable Energy

All of the school's electricity is from wind power. At the same time, sixty (60) solar panels produce enough electricity to reduce the school's electricity needs by 42%. The HVAC system is also geothermal, contributing significantly to energy savings.

#### **Transportation**

#### Employee Commute

The school is in a rural area with no public transportation nearby. Staff and parents are encouraged to carpool and utilize fuel efficient vehicles. Parking spaces are being reserved for carpools and high efficiency vehicles. A bicycle path and bike racks have been installed.

#### Water

# **Water Conservation**

Rainwater from the building roof is collected in a cistern and then used to flush toilets. Toilets are dual-flush and urinals are waterless. Graywater is used for irrigation in the forested area and landscaping requires minimal or no irrigation. Sinks are motion activated.

#### Stormwater Management and Site Design

Eight rain gardens and a roof garden collect most run-off. What escapes is directed to a wildflower-planted bio-retention area that uses natural filters to remove sediment and then directs the water to the pond.

# **Green Building**

# LEED Platinum

The school recently completed the construction of a new classroom building which received a LEED for Schools Platinum certification by the U.S. Green Building Council. The design and construction of the building was guided by a team of school personnel, community members and construction professionals. A similar team of individuals continues to meet to plan future projects.

The school has also invested in an environmental Phase I study, air quality and mold testing of building interiors, and commissioning of its major equipment performance. Pollutants, including  $CO_2$  levels, are constantly monitored and HVAC equipment is wired to correct unhealthy levels automatically.

# **Environmental Certification Programs, Awards, and Other Activities**

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2012: State nominated and nationally recognized as a Green Ribbon School
2011 and 2012: Governor's Tree Planting School Challenge: In consecutive years
planted more trees than any other school in Maryland.
2011: US Green Building Council: LEED Platinum for Schools certification
American Concrete Institute MD Chapter Environmental Award

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# MARYLAND GREEN REGISTRY LEADERSHIP AWARD WINNER 2012

Profile Updated April 2012



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