

## SUSTAINABILITY AT THE INDIANAPOLIS MUSEUM OF ART

The Indianapolis Museum of Art values not only the conservation of its artistic assets, but also of its environmental assets. The Museum is in a unique position to lead by example in the area of sustainability in the city of Indianapolis and beyond, and to proactively address global environmental issues.

As a part of the Indianapolis Museum of Art's thorough and ongoing effort to achieve greater sustainability, the Museum has formed a greening committee composed of a cross-section of Museum employees whose focus is to integrate principles of sustainability into major Museum decisions and to shape public programs that foster environmental stewardship.

The Museum has also established the following affiliations:

- The IMA joined the Central Indiana Clean Air Partnership in 2007 and has achieved gold-level membership by making more than 10 commitments to improve local air quality.
- In 2008, the IMA joined the Indiana Recycling Coalition in an effort to improve source reduction and reuse and recycling activities.
- In April 2008, the IMA joined the Environmental Protection Agency's Green Power Partnership. The IMA's voluntary membership in this partnership underscores the Museum's commitment to use green power where feasible in its operations as a means to proactively address global climate risk.

Since 2006, when the IMA began a dedicated effort to reduce its energy consumption, the Museum has implemented a wide range of green technologies and strategies across all sectors, including:

### OPERATIONS:

- **ENERGY STAR Certification.** In April 2008, the IMA became the first fine art museum to be recognized by the government, achieving ENERGY STAR certification, for its efforts to become more environmentally responsible. ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy, which recognizes organizations for utilizing energy efficient products and practices.
- **Energy Consumption.** At the beginning of 2006, the IMA began to utilize an engineering-based, detailed approach to reducing its energy consumption. Improved preventive maintenance procedures, a thorough review of operating sequences and experimentation with equipment settings all contributed to dramatic results. All of the improvements were achieved while meeting the very stringent temperature and humidity levels required by Museum standards. At the end of 2009, the IMA had reduced its natural gas usage by 48.5% since 2005, avoiding more than 7,000 tons of emissions into the environment. The IMA had also reduced its annual electricity usage by 17.5% (2,747,000 kWhs) since 2005.
- **Green Power.** All IMA outbuildings take part in Indianapolis Power and Light's green energy option. One hundred percent of the electricity used in these buildings is generated from clean, renewable energy sources, including wind, solar, geothermal or biomass generation (including landfill gas). IMA outbuildings comprise 3 percent of the IMA's total electricity demand.
- **Lighting Efficiency.** In January 2009, the IMA partnered with Sylvania Lighting Services to improve lighting efficiency throughout the Museum by replacing standard bulbs with more energy-efficient bulbs with a longer life span throughout the service and ground levels of the Museum. (Due to their unique lighting requirements, areas of the Museum

where artwork is displayed and stored were not included in this retrofit.) The IMA projects that this change will cut energy usage in these areas by 24%. With the energy savings and material cost savings, the IMA anticipates a net annual savings of nearly \$9,000. The Museum has also installed motion-sensitive lights where appropriate.

In fall 2009, the Museum also replaced the original white halogen lights in Sutphin Fountain and Nonie's Garden, both adjacent to the main Museum entrance, with more energy-efficient LED lights with a life span of about 50,000 hours, or about five years. This new LED technology not only saves energy but also serves as a unique selling point for clients who rent the IMA's event facilities. They may request colored lighting shows for weddings, dinners, and other special events. (See a time-lapse video of the LED light installation here: [www.imamuseum.org/blog/2009/10/21/light-emitting-diodes/](http://www.imamuseum.org/blog/2009/10/21/light-emitting-diodes/)).

- **Recycling.** Waste-recycling initiatives at the IMA have led to the following amounts of material recycled in 2009:
  - 7,392 pounds of newspaper (3.4 times the amount recycled in 2008)
  - 12,950 pounds of office paper (8.24 times the amount recycled in 2008)
  - 2,099 pounds of aluminum
  - 2,046 pounds of plastic
- **Paper use.** The IMA prefers using vendors who use "green" practices, including Saint Clair Press, a printing service, which recently announced its new Forest Stewardship Council (FSC) Certification. Additionally, the Museum has taken steps to reduce its paper use by relying more heavily on its website, [www.imamuseum.org](http://www.imamuseum.org), to disseminate information about Museum programming. In the administrative offices, staff members are encouraged to print documents only when necessary, and to use a double-sided printing option whenever possible. The IMA uses a digital fax number, which allows incoming faxes to be routed to IMA staff via e-mail rather than paper.
- **Exhibition installation.** IMA's exhibition design and installation teams reuse risers that were built for previous IMA exhibitions and take measures to reduce construction waste.

## CONSTRUCTION & REMODELING:

- **Tobias Theater.** During the renovation of Tobias Theater (aka The Toby) in 2008, the IMA was committed to using green products whenever possible. Additionally, recycling bins are located in the theater lobby for public use. The materials used in the renovation include:
  - Retire Composite Flooring, made from 100% recycled materials including cork and tires, was used throughout the theater
  - Kirei Board, laminated board made from recycled wood, was used for the lobby trim, wall paneling and service area
  - Recyclable Shaw carpet tiles were used in the lobby, ADA seating areas and hallways
  - Recycled glass and concrete from Santarossa Terrazzo was used for the countertops in the service area
  - Seats are covered in Victor theater fabric, made of 100% recycled polyester
  - Foam chairs made by Comfy Sacks used as "alternative seating" for some theater events are made with recycled polyurethane filling
  - All bathroom fixtures, including toilets and urinals, are waterless or low-water use
- **Visitors Pavilion at 100 Acres: The Virginia B. Fairbanks Art and Nature Park.** Opening June 20, 2010, the Visitors Pavilion located in 100 Acres will be a LEED-certified facility. The 3,000-square-foot structure will be both aesthetically innovative and functional, providing visitors with restrooms, emergency phones and shelter. It will be constructed partially with certified plantation-grown tropical hardwoods and will utilize

geothermal heating and cooling systems. Fallen logs integral to the eco-system local to the pavilion site were temporarily removed for construction and were returned to the site to preserve the site's ecological balance.

## **HORTICULTURE:**

Encompassing 152 acres, the IMA campus includes 52 acres of gardens and grounds currently open to the public, part of which is the historic 26-acre Oldfields Estate, designed in the 1920s by Percival Gallagher of the landscape architecture firm Olmsted Brothers, and 100 Acres: The Virginia B. Fairbanks Art & Nature Park, which will open in June 2010. The IMA horticulture staff follows a number of sustainable practices on the grounds, including:

- A landscape design using groundcovers and other plantings that reduce the frequency of seasonal change-outs
- Reduction of horticulture waste by composting. Finished compost is used in the planting beds around the campus.
- An integrated pest management system, which lessens the dependence on harmful chemicals
- The addition of a green roof atop its parking garage, which has allowed the IMA to preserve more green space on its campus. The additional green space allows for absorption of rainwater, whereas additional blacktop would increase storm water runoff, carrying more pollutants into the ecosystem. Rainwater runoff from existing surface-level parking lots is diverted through a four-bay filter to the wetlands in the IMA's Virginia B. Fairbanks Art & Nature Park.
- Use of LED landscape lighting, which saves energy and reduces light pollution
- Re-use of scrap stone from Museum expansion for walls and walks
- Organic methods for newly renovated orchard and vegetable garden
- Recent renovations in the greenhouses which have improved heating, cooling, and other operational efficiencies
- A public recycling program for plastic and clay pots at the IMA Greenhouse shop

### **Rain Garden**

A sustainable and natural solution to a common problem in urban areas, the IMA's rain garden captures and filters storm water runoff from an asphalt parking lot outside the Greenhouse that would otherwise flow into nearby waterways, carrying petroleum products and other pollutants with it. Planted in July 2009 and designed with both functionality and aesthetic appeal in mind, the rain garden is formed by a shallow depression in the ground that is planted with three levels of native and non-native plants. Plants tolerant of wet conditions grow at the lowest level, while drought-tolerant plants are located at the highest level. Educational signage in the garden explains how it was built, so that homeowners and business owners can learn the benefits of rain gardens and how to create their own. The garden was made possible by a grant from the Marion County Soil and Water Conservation District, along with the Hoosier Heartland Resource Conservation & Development Council.

### **100 ACRES: THE VIRGINIA B. FAIRBANKS ART & NATURE PARK:**

The IMA views the natural environment as both a source of artistic inspiration and a medium through which art may be presented and interpreted, a stance best illustrated in the IMA's opening of 100 Acres: The Virginia B. Fairbanks Art & Nature Park in spring 2010. Located on 100 acres of untamed woodlands, wetlands, a lake, and meadows adjacent to the Museum, the Art & Nature Park will be one of the largest museum art parks in the country. Moreover, the establishment of the park allows the IMA to preserve 100 acres of green space in the heart of Indianapolis for public enjoyment and as a habitat for a variety of wildlife.

The Art & Nature Park site is bordered by the White River and runs contiguous to the IMA's current 52-acre campus, more than half of which is composed of historic landscapes and gardens. The land, a former gravel pit, has evolved through a natural reclamation into its current state of untamed woodlands, wetlands, and a 35-acre lake. The IMA has engaged architect Marlon Blackwell and landscape architect Edward L. Blake to work with the selected artists to transform the 100 acres into an unparalleled art park. Additionally, the IMA Horticulture staff has been actively removing invasive species from the site and incorporating native plants into the landscape.

The Art & Nature Park lies along the Central Canal Towpath, a 5-mile pedestrian and bike path which runs from 30<sup>th</sup> Street northeast toward the neighborhood of Broad Ripple and connects to additional bike paths leading downtown and elsewhere in Indianapolis. The IMA encourages visitors to travel to the Museum and Art & Nature Park through alternative forms of transportation via this greenway. Bike racks can be found on the IMA campus in the parking garage, outside the Efroymsen Family Entrance Pavilion and at the IMA Greenhouse and will be included on the grounds of the Art & Nature Park when it opens in 2010.

#### **CONSERVATION LABS:**

Many changes have been made in the IMA's conservation labs over the past several years. The conservation labs no longer use X-ray technology; instead, they use digital technology. Conservators have eliminated chemical developers and fixers for black and white film, and color slides and they use high-volume/low-pressure (HVLP) spray guns for application of paints and varnishes that minimize overspray. The Conservation Department uses less toxic solvents and/or using water-based materials when possible. Scrap supplies not suitable for use in the conservation labs or in the print room are shared with the education division.

#### **PROGRAMMING & EVENTS:**

The IMA engages visitors with programs that inspire audiences with actionable ideas about living creatively and sustainably. Programming in this vein includes:

- **Planet Indy speaker series.** An annual speaker series at the Indianapolis Museum of Art that addresses quality of life from a sustainable, creative perspective. The series' planning process involves various community organizations in the presentation of a speaker chosen to inspire audiences with actionable ideas about creativity, environmental sustainability, design, and social justice. Past speakers include: Richard Louv, author of *Last Child in the Woods: Saving Our Children from Nature Deficit Disorder* (November 2007); and food educator, chef, and local food advocate Alice Waters (December 2008). The 2010 Planet Indy lineup will include filmmaker Chris Paine (director of *Who Killed the Electric Car?*; February 11), "gestalt gardener" Felder Rushing (April 22) and Sarah Susanka (author of *The Not So Big House* series; May 20).
- **Additional programming.** Public programming at the IMA includes screenings of films that draw attention to environmental issues, art classes focused on creating works from recycled materials, and more. Additionally, the IMA Horticultural Society supports a number of lectures on the use of native plants in gardening and other topics related to sustainability.

#### **About the Indianapolis Museum of Art**

Encompassing 152 acres of gardens and grounds, the Indianapolis Museum of Art is among the 10 largest encyclopedic art museums in the United States, and features significant collections of African, American, Asian, European and contemporary art, as well as a newly established collection of design arts. The IMA offers visitors an expansive view of arts and culture through its collection of more than 54,000 works of art that span 5,000 years of history from across the

world's continents. The collections include paintings, sculpture, furniture and design objects, prints, drawings and photographs, as well as textiles and costumes.

Recognizing the inherent connections between art, design and nature, the IMA offers visitors experiences at the Museum, in 100 Acres: The Virginia B. Fairbanks Art & Nature Park, which will be one of the largest contemporary art parks in the United States when it opens in June 2010, and at Oldfields–Lilly House & Gardens, an historic Country Place Era estate on the IMA's grounds.

The IMA completed a \$74 million expansion project in May 2005. The construction added 164,000 square feet to the Museum and includes renovation of 90,000 square feet of existing space. In order to present major exhibitions of its own and to accommodate major traveling exhibitions, the expanded Museum was outfitted with new 10,000-plus-square-foot Clowes Special Exhibition Gallery on the Museum's first level. In November 2008, the IMA opened the renovated 600-seat Tobias Theater. Nicknamed, "The Toby," the theater is a venue for talks, performances and films.

Located at 4000 Michigan Road, the IMA and Lilly House are open Tuesday through Saturday, 11 a.m. to 5 p.m.; Thursday and Friday, 11 a.m. to 9 p.m.; and Sunday, noon to 5 p.m. The IMA is closed Mondays and Thanksgiving, Christmas and New Year's days. For more information, call 317-923-1331 or visit [www.imamuseum.org](http://www.imamuseum.org).

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