

Yale University Art Gallery Sustainability Action Plan

May, 2014

Sustainability at Yale

Yale University is dedicated to an integrated, comprehensive approach to policy and operations that balances ecosystem health with human health and economic viability in order to demonstrate that sustainability is both feasible and affordable. To accomplish this goal the University integrates sustainable practices into the fabric of institutional decision-making at all levels.

Each unit on campus has a unique cultural context. Successful implementation of sustainability goals will rely on efforts to refine tools and tactics to suit this diversity of disciplines and perspectives.

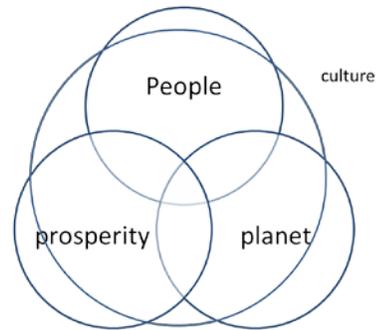


Figure 1: sustainability values

This Document

As a component of leadership and capacity building, the Yale Sustainability Strategic Plan commits to establish and implement sustainability action plans for each of the professional schools and each of the University's museums. These plans are intended to support the Yale-wide goals while reflecting the intellectual and operational contexts of each Museum.

This document offers overarching language about sustainability at Yale and provides an excerpt of goals from the *Yale Sustainability Strategy Plan 2013-2016* that are particularly relevant to the Yale University Art Gallery. It then suggests a brief set of initiatives related to the operations and mission of the Yale University Art Gallery.

The Office of Sustainability will communicate with key staff members at the Art Gallery on a bi-annual basis to follow progress on the Action Items below and update this "living document" accordingly. The Office will also convene a meeting of representatives from all on-campus museum and collection spaces at least once per year to encourage knowledge transfer and collegiality.

Yale 2013-2016 Sustainability Strategic Plan

The *Yale 2013-2016 Sustainability Strategic Plan* contains 26 ambitious-yet achievable goals divided into five categories: energy and greenhouse gas emissions, natural and built

environment, materials management, food and well-being, and sustainability leadership and capacity building. Several of these have sub-categories, as demonstrated in Figure 2.

Figure 2 : Yale Sustainability Strategic Plan Categories



The Plan is available in-full online at sustainability.yale.edu. Goals that may be of particular interest to the Yale University Art Gallery include:

ENERGY & GREENHOUSE GAS EMISSIONS

- Goal Reduce energy consumption and greenhouse gas emissions 6% below 2012 levels by June 2016. This will result in a 22% total reduction in greenhouse gas emissions from 2005 levels.
- Goal Reduce university greenhouse gas emissions from university fleet vehicles by 80 tons of carbon dioxide equivalent per year below 2012 levels by June 2016.

NATURAL & BUILT ENVIRONMENT

- Goal Develop and implement sustainable land development and maintenance practices on the Yale campus by June 2016.

MATERIALS MANAGEMENT

- Goal Achieve a 15% reduction in paper purchases and a 10% reduction in office supply purchases from 2012 levels by June 2016.
- Goal Establish sustainable procurement standards by June 2014.
- Goal Achieve a 50% waste diversion rate by June 2016 via reuse, recycling, and/or composting strategies.
- Goal Implement strategies to reduce municipal solid waste with the intention to commit to an institutional total volume waste reduction target by January 2015.

FOOD & WELL-BEING

- Goal Reduce cleaning chemical usage on campus 30% from 2012 levels by June 2016.

SUSTAINABILITY LEADERSHIP & CAPACITY BUILDING

- Goal Establish a portfolio of sustainability action plans for schools and departments by December 2013.

Execute sustainability action plans for the Yale University Art Gallery, the Yale Peabody Museum of Natural History, and the Yale Center for British Art.

Yale University Art Gallery: Mission Statement

The mission of the Yale University Art Gallery is to encourage appreciation and understanding of art and its role in society through direct engagement with original works of art. The Gallery stimulates active learning about art and the creative process through research, teaching, and dialogue among communities of Yale students, faculty, artists, scholars, alumni, and the wider public. The Gallery organizes exhibitions and educational programs to offer enjoyment and encourage inquiry, while building and maintaining its collections in trust for future generations.

Museums and Sustainability

There are several ways to explore the intersections of sustainability with both museums and art. Some overarching concepts include:

Exhibits

Art can create awareness and emotional connection to sustainability imperatives.

Example: Cross Roads Project

Conservation

Innovations in how artwork is preserved and restored can not only extend the lifespan of cultural icons, but can also inform conservation and preservation in similar settings.

Programming/Empowerment

Art can be a power tool to offer advantages to those in need, such as youth in poverty.

Operations

Museums have the capacity to lead by example—demonstrating to visitors the viability of various tactics aimed at reducing environmental and financial impacts while enhancing social benefits.

Sustainability Action at the Yale University Art Gallery

At the time of this writing, remarkable and robust efforts are underway to integrate sustainability into the operations of the Art Gallery. In order to recognize and build on these accomplishments, included here are a set of successes-to-date, which are followed by a set of suggested opportunities. Each of the Action Items listed here is labeled with the meta-categories listed in the *Yale Sustainability Strategic Plan*.

Successes to-date

ENERGY & GREENHOUSE GAS EMISSIONS

- Energy saving sequence for HVAC systems has been modified to meet the new Yale on-demand standard for air exchanges.
- Early adopters of the new American Association of Museum Directors (AAMD) Climate Parameter Guidelines for Museum Collections. The widened range (40-60% humidity and 59-77 degrees temperature) is acceptable with minimum fluctuations. Adopted for newly renovated Old Yale Art Gallery and Street Hall buildings, as well as the very large off-site warehouse.
- New lighting, louver and shade controls have been integrated for efficient use of daylight while still protecting the artwork.
- Deployed LED lights for 34% of lighting in galleries in new facilities. We adopted non Energy Star rated wall wash Xicato series lights from LSI; the Energy Star products in this category still do not meet the color requirements of our environment. The LED spot lights, Energy Star or not, still do not meet our curatorial requirements. When this technology advances, we will begin to make incremental swap outs for other 66% of gallery lighting from MR16 incandescent bulbs to LEDs.

NATURAL & BUILT ENVIRONMENT

- New wood floors have been finished with VOC-free plant-based oil finishes.
- New low-flow toilets and urinals.
- Sophisticated art moving system has been developed with a focus on efficiency/modularity. This has vastly reduced use of packing materials and maximized need for storage and transport capacity.

MATERIALS MANAGEMENT

- Reduced art moving system crate packing material waste.
- Installed Big Belly solar-powered compactors for disposal and recycling on main entry area streetscape.

FOOD & WELL-BEING

- New green cleaning products and procedures have been deployed. We now use ionized water rather than cleansers.

SUSTAINABILITY LEADERSHIP & CAPACITY BUILDING

- Occupancy Training program deployed in multiple locations for all staff with assigned mentors.

Opportunities

[Goals below are defined as in-progress, short-term, mid-term, long-term]

ENERGY & GREENHOUSE GAS EMISSIONS

- Implement an LED lighting project in a 30,000 square foot renovation on West Campus with United Illuminating incentive support. (Short-Term)
- Replace all lighting in the 400 seat Gallery auditorium with Energy Star LEDs. Re-commission the Kahn building HVAC system to be in sync with newly completed commissioning of renovated buildings. (Mid-Term)
- Update current incandescent object lighting fixtures in a single gallery to LEDs. (Mid-Term)
- Replace wall wash in Louis Kahn building with LED Xicato wall wash modules. (Long -term)

NATURAL & BUILT ENVIRONMENT

- Initiate sustainable landscaping for sculpture garden to incorporate use of compost tea fertilizer in grassy areas. (In Progress)
- Utilize snow-melt treatment that preserves natural environment. (In Progress)
- Select an energy efficient box truck when it is time to replace the current YUAG box truck. (Mid-Term)
- Explore the possibility of sharing a box truck with the British Arts Center. (Long-Term)

MATERIALS MANAGEMENT: PURCHASING

- Wherever allowable, use electronic signatures. (Short-Term)
- Reduce paper purchasing 25% from 2010 levels by June 2016. (Mid-Term)

- Identify and deploy various ways for museum departments to reduce paper consumption and increase productivity by working with documents digitally instead of in paper format - e.g. how the MFA Boston has created custom software to aid in the creation of media records in TMS which various people can work from without printing. Explore the possibility of storing curatorial files digitally. (Mid-Term)
- Reduce the purchase of office supplies 10% from 2010 levels by June 2016. (Mid-Term)

MATERIALS MANAGEMENT: DISPOSAL

- Divert used art crates and other exhibition materials from the waste stream. This can be done through reusing crates, donating the crates for re-use or repurpose, or recycling the crates. (In Progress)
- Reduce overall volume of waste and increase the diversion of waste from trash to re-use, recycling, or composting. (In Progress)
- Divert paper towels from the traditional waste stream through composting or installing hand driers. (In Progress)
- Prototype and test a modular, knockdown crate for moving artwork. (Short-Term)
- Prototype and test an Ethafoam grinder, from which the Ethafoam can be melted and repurposed. (Short-Term)
- Formalize a partnership between CEID and YUAG. This partnership can be used to help develop innovative new ways to drive sustainability at YUAG and, possibly, some discarded material from YUAG can be redirected to CEID. (Short-Term)
- Work with Office of New Haven Affairs, other museums, and other departments to develop a list of potential places to receive donations of discarded items. (Short-Term)
- Develop management system for paint that is no longer needed. Utilize Habitat for Humanity Re-Stores which accepts open paint containers. See <http://www.habitat.org/restores>. (Mid-Term)

FOOD & WELL-BEING

- Participate in Being-Well/Eco-Challenges. (In Progress)
- Promote sustainable food options amongst staff and at special events. (Short-Term)

SUSTAINABILITY LEADERSHIP & CAPACITY BUILDING

- Hire students to support the Gallery's sustainability commitments and act as liaisons with other museums and schools with related disciplines. (In Progress)
- Apply for Green Workplace Certification for administrative spaces. (In Progress)
- Add sustainability to tours. (Short-Term)
- Add sustainability to training for new staff members. (Short-Term)
- Consider integrating sustainability programming into summer and school year programming for area youth. (Short-Term)
- Commit to Green Event Certification for all special events and programs. (Short-Term)
- Pursue Green Lab Certification for any lab space within Yale University Art Gallery. (Mid-Term)
- With the Center for British Art and the Yale Peabody Museum, co-host a symposium on green museums. (Mid-Term)

Next Steps / Timeline

- Green Team meetings will be held quarterly.
Output: Newsletter to all staff will follow most meetings.
- Update Green Workplace Certification by June, 2014
Output: Task list for improved score & certification to be proud of!
- Green Team will address short-term goals not dealing with Facilities items by December, 2015.
- Facilities benchmarking & retro commissioning completed by June 2015.
Output: A report will be published and made available online.
- Facilities Team will address short-term goals identified above by October, 2015.
- Mid-term goals will be addressed both by the Green Team and Facilities before December , 2016

Upcoming Items:

April 22: Circulate draft YUAG plan for staff input (on Earth Day) Feedback due by May 15.

June 11: All Staff Meeting: Announce YUAG Sustainability Action Plan

Bi-annual check-in on progress. (March/November)