

Sustainability Efforts at JCU An Inventory for Ignatian Heritage Week

Sustainability is part of John Carroll's mission. Among the systemic steps we have taken to ensure our commitment to protect and preserve the Earth are:

- Formed a University Sustainability Committee
- Became a Signatory to the Catholic Climate Covenant St. Francis Pledge
- Earned Fair Trade University status

Waste Reduction:

- Single Stream recycling
 - 25 recycling stations across campus
 - Residence halls equipped with recycling containers in every dorm room
- Recycling of batteries, printers, cell phones conducted in departments
- Water Bottle Refill stations - 11 on campus, ongoing plan to replace drinking fountains
- Paper use reduction
 - Xlerator hand dryers
 - Online HR form completion
 - Electronic time reporting and W-2 forms
 - Payroll Direct deposit
 - Electronic (ACH) payments of most vendors
 - Student printing allocation on public and lab printers
 - Printer paper – 20-30% post-consumer waste
 - Class syllabi, assignments, grades on Banner
 - Paperless admissions application system in place
 - University documents available online only (e.g., undergraduate bulletin, schedule of classes, & university directory)
- Composting food waste
 - Dishroom trayless system with pulper

Dining Services:

- Using Local, Organic and Fair Trade suppliers
- Trayless residential dining hall
- Reusable, Bio-degradable containers take-out program
- Excess food donated weekly to shelters.
- 100% use of green cleaning products.
- 100% diversion of used Fryer Oil.
- JCU Dining 1\$ refill program
- Use of EcoLab Green cleaning products

Student Life:

- “Don’t Throw it Away...Give it Away!” Program during Residence Hall move-out
 - Spring 2014: 351 pounds of food donated to the Cleveland Food Bank and 20 boxes (clothes, toiletries, supplies & appliances) donated to Vietnam Veterans of America.

- Spring 2013: 250 pounds of food donated to the Cleveland food Bank and 22 boxes (clothes, toiletries, supplies & appliances) donated to The Salvation Army.
- Spring 2012: 365 pounds of food donated to the Cleveland food Bank and 15 boxes (clothes, toiletries, supplies & appliances) donated to Goodwill Industries.
- Institution Recycling Network Program
 - Furniture totaling over 21 tons were donated from the halls and shipped to development and relief efforts in Guatemala and the Dominican Republic
 - 250 mattresses were donated and repurposed by Institution Recycling Network.

Alternative Transportation:

- Enterprise Car Share program
- Bike Co-op
- Sheltered Bike Racks
- Pedestrian/Bike Friendly entrances to campus
- Priority Carpool and FEV/LEV parking spaces

Academic Coursework:

Courses on campus with an environmental focus (for at least part of the course):

Biology

- BL 109/L Environmental Biology (non-majors)
- BL 159/160 Principles of Biology III (Biodiversity)
- BL 206 Tropical Biology
- BL 331 Global Climate Change
- BL 424/L Aquatic Resources
- BL 444/L Advanced Ecology
- BL 447/L Algae as Bio indicators
- BL 454/L Desert Biology

Chemistry

- CH 103/L Environmental Chemistry
- CH105/L Chemistry and Society

Communications

- CO 389 Social Issues in Journalism
- CO 455 Health and Environmental Writing

Economics

- EC 315 Environmental Economics

English

- EN 291 Environmental Literature

Physics

- PH 115/L Environmental Earth Science
- PH 206 Earth Systems Science

Political Science

- PO 361 Environmental Politics and Policy
- PO 363 Environmental Law

Sociology

- SC 290 Environmental Sociology
- SC 380 Environmental Justice Movements

Business / Marketing

- MK 580/MN 580 Environmental Sustainability in Business
- MK 581/MN 580 Social and Environmental Marketing

Information Technology:

- Programmed shutdown of unused monitors/computers
- Replacing LCD computer monitors with more energy efficient LED monitors.
- Virtualization of servers (running many servers on a single physical computer, thus reducing power consumption/demand in the data center dramatically)
- Personal computer (PC) purchases are Electronic Product Environmental Assessment Tool (EPEAT) and Energy Star certified
- Recycling of PC's is done through a local firm (Ret3) that specializes in safe environmental disposal and salvage
- PC's in classrooms and labs are set to power down during evening hours
- Faculty/staff PC's use energy-saving mode, where they will go into hibernate (approximately 1% – 3% of normal power consumption) after a period of inactivity during working hours
- Desktop virtualization in place in some classrooms & labs, and expanding to more locations each semester – 94% power reduction per unit compared to a traditional PC

Facilities Management and Construction:

- Energy Usage and Utility Tracking
 - Annual Carbon Footprint calculation
 - Summer Energy Conservation Program - 2014
 - Lighting upgrades across campus using electronic ballasts and more efficient LED, CFL, T8 and T5 lamps
 - LED parking lot and sidewalk lighting upgrades
 - Boiler replacement in Campion Hall
 - Library cooling tower– filter media replacement
 - Installed motion sensors to turn off lights in laundry rooms and restrooms, and in Dolan Center classrooms and labs to turn off lights and reduce air supply in unoccupied spaces;
 - Installed water saving low flow shower heads, automatic low flow faucets, and auto- flush toilets;
 - Installed condensate recovery on Dolan Center Air Handling units
 - Insulated boilers and hot water lines;
 - Replaced old inefficient HVAC equipment and controls with more efficient equipment
- Landscaping and Grounds
 - 25 acres on main campus (1.5 acres of display beds)
 - Eco-friendly fertilizers and de-icing products for snow melting
 - Reducing use of herbicides and pesticides
 - Increased use of native plants in gardens
 - Switched from gasoline to propane fuel lawn mowers
- Housekeeping
 - Custom Green cleaning program
 - Use of certified sustainable chemicals, cleaning products, tool and equipment

- Design and Construction
 - Leadership in Energy & Environmental Design (LEED) best practices are being employed in all renovation and construction projects;
 - Specify Rubber flooring, vinyl tile and carpet with recycled content
 - Specify low-VOC adhesives and paints
 - Material and furniture selections are sought from “Green” suppliers and manufacturers. This means low or no VOC’s, recycled or sustainable material, minimum packaging, high durability and long life-cycles to reduce waste downstream
 - Energy efficient and Energy Star products are specified, when available
 - Non-hazardous construction and demolition waste is diverted from landfills
- Recent projects:
 - **Bohannon Site Restoration and Hamlin Quad Improvement Project**
 - Preserved and enhanced natural site elements. Provided 3.16 acres (56.4%) pervious area.
 - Added bio-retention basin to enhance biodiversity and reduce and filter storm water runoff
 - Site lighting utilizes LED light fixtures to reduce energy use, sky glow and minimize lighting impact on nocturnal environments.
 - Demolition debris was reused or recycled as follows: Furniture donated to local restaurant
 - Concrete and masonry was crushed and reused on site
 - Steel and other metals were salvaged for recycling
 - **2011 Shula Track and Turf replacement**
 - Old turf removed from site to be recycled
 - New synthetic turf: No water or fertilizers required
 - Infill made from recycled tires
 - **2013-2014 Murphy Hall Renovation – LEED Silver Certification**