Sustainability at JCU
Sustainability is part of John Carroll’s mission. Among the ways we work to protect and preserve the Earth are:
- University Sustainability Committee
- Signatory to the Catholic Climate Covenant St. Francis Pledge
- Fair Trade University

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
- 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:**

- **Climate Change Curriculum at JCU**
  - Climate Change and Social Justice – a first year seminar taught in four separate years at John Carroll University as part of the FYS series with social justice themes
  - Global Climate Change – a 300-level course for biology majors and environmental science majors, taught once every year since 2010
  - Environmental Earth Science – a 200 level course for nonmajors science core with a 6 week segment on climate, including 3 weeks on global climate change
  - In planning: Climate Change in North America – an integrated course offering with “American Environmental Literature” to be offered in spring 2016

- **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
    - CH 105/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