

**The Loyola University Chicago
Center for Urban Environmental Research and Policy
Strategic Plan 2010 – 2015**

Goal 1. Deliver a premier environmental sustainability educational experience, characterized by teaching multidisciplinary, problem-solving, research-based, and experiential courses, and offering co-curricular activities to supplement the courses.

Tactics:

- Offer the following courses: STEP:Food Systems and Advanced STEP each semester, Biodiesel Lab course each fall, Small Scale Biodiesel Production course each summer, Freshman Seminar to the Green Learning Community each spring, and Environmental Sustainability each fall.
- Offer up to 10 undergraduate Sustainability Fellowships to students working on sustainability projects including beekeeping, biodiesel production, biosoap production, crop and flower production, biogas production, aquaponics, and the farmer's market.
- Develop an Integrated Urban Agriculture Initiative which will support STEP:Food Systems, but will remain as an independent university enterprise with its own courses, beyond STEP:
 - Erect a greenhouse on Winthrop and Loyola Streets for crop and fish production to be used as a laboratory for STEP:Food Systems, and where students are integral in the planning, development, and implementation of the program.
 - Develop a bee keeping program, as part of STEP:Food Systems, on the roof of QLSB with flowers, and flowering vegetables. Harvest honey and flowers for sale/use in the university by 2012.
 - Develop a farmer's market with the extended University Community.
- Develop a topic, syllabus and expertise for teaching the next version of STEP.
- Develop an interdisciplinary Master's Program in Environmental Sustainability

Goal 2. Reduce the University's environmental footprint by 40% by decreasing our dependency on fossil fuels, and by reducing the purchase of goods brought onto campus, reusing goods once they are on campus, and reducing waste that leaves campus.

Tactics:

- Develop solar and wind energy capture systems on the WTC, LSC and other Loyola University properties to produce at least 10-20% of our electricity, to be increased over the next decade.
- Develop a Conservation Ethic on campus, which engages every Loyolan to more thoughtfully and intentionally reduce their personal human footprint:
 - Expand the functions of the Reduction and Recycling Committee to develop university-wide purchasing policies to encourage double-sided printing, reducing disposables, reducing plastic bottled beverages, unplugging computers at night, etc.
 - Develop additional committees as needed, to educate Loyolans and implement environmental sustainability policies and practices.
 - Conduct friendly competitions between dorms and academic units for reducing water and electricity usage, and waste production.
 - Develop a system for reusing furniture and other Loyola property (expanding on Iggy's List), to decrease purchasing of new items.
 - Conduct a year-long 3-campus wide thematic program on the social, economic, and environmental implications of bottled water with the goal of banning the sale of bottled water on our 3 campuses.
 - Improve recycling program to increase constancy, reduce confusion, and encourage more efficient and complete participation by the Loyola community.
- Produce 1,000 gallons of biodiesel per semester from waste vegetable oil, to be used in the Free Enterprise shuttle buses by 2010, and produce biosoap for sales in the LUC convenient markets.
- Design and implement biogas systems to digest all waste food in Mertz and Simpson. Capture CH₄ produced and use it to heat water for dishwashers, and for heating the buildings by 2011.
- Evaluate transportation systems at Loyola to reduce emissions, reduce single car occupancy and reduce total miles travelled (work related) by Loyolans.

Goal 3. Develop an interdisciplinary faculty and student research team that explores emerging contaminants in Chicago's water and air (Chicago Clean Air, Clean Water Program), and collaborates with agencies and NGOs in Chicago with similar interests.

Tactics:

- Hire a CUERP Ecotoxicology faculty researcher with a 75% appointment in CUERP, whose position involves developing an interdisciplinary research team and leading research in the Center.

- Appoint at least 3 jointly-appointed faculty to CUERP from within the University to participate in this collaborative research and write grant proposals.
- Obtain at least one NSF Major Research Instrumentation grant and two major federally funded research grants to fund this work.
- Conduct a series of experiments on emerging contaminants with scientists from the Metropolitan Water Reclamation District of Greater Chicago and the Illinois EPA.
- Develop a shared and cumulative database of water monitoring data from MWRDGC, IEPA, IDNR and Jardine Water Filtration Plant, that is queryable and accessible to the public.
- Develop a citizen science component where K-12 students and teachers from the CPS are involved with sampling air and water, and whose water quality data are posted on our GIS based web site for their use.
- Provide graduate and undergraduate students with interdisciplinary research opportunities through CACW by mentoring, and by managing of the CUERP Undergraduate Research Fellows Program, and the Carbon Scholars Program.

Goal 4. Develop a collaborative outreach program that serves educational, research, and environmental sustainability objectives within our Loyola community as well as in our neighboring communities of Rogers Park, Edgewater, and the City of Chicago.

Tactics:

- Partner with Edgewater and Rogers Park communities to help them develop and implement community environmental sustainability plans. Develop fellowships where Loyola students work with these communities to help implement their plans.
- Bring the biodiesel technology and apparatus to 8-10 local area high schools, and integrate a biofuels module into their curriculum.
- Develop and support a radio show (*Chicago Footprints*) with Loyola students to air weekly on WLWU to discuss environmental issues on a local, regional, national, and global level.
- Partner with the LUC Center for Science and Math Education to develop the citizen-science outreach program of the CACW Program (described in Goal 3) and partner with at least 15 CPS schools.
- Develop a community based agriculture program with Rogers Park and Edgewater using the Loyola Greenhouse and aquaculture program (described in Goal 1).

- Partner with the local chapter of “Food, Not Bombs”, an organization that brings excess food to the homeless in Rogers Park, for distribution of crops and fish produced by Loyola students in the greenhouse/aquaculture program.
- Partner with Chicago Wilderness; serve on their Executive Board, the Sustainability Task Force, and assist in implementing the Chicago Green Infrastructure Vision.
- Conduct campus outreach events each semester to reach more Loyolans and community members, including an ongoing documentary film series with professional panel discussions.