Sustainability at Lakeland! An Overview FY15



Sustainability can prevail with a global culture that: preserves the environment, develops strong and peaceful relationships, while maintaining flourishing and just economies and societies.

- Understanding the inextricable relationship between diverse human cultures and natural systems
- Understanding the interconnections between economy, society, environment & culture
- Seeking equitable opportunities for livelihood and equitable distribution of resources
- Conserving resources, preserving and renewing natural systems

College Mission: To provide quality learning opportunities to meet the social and economic needs of the community.

A List of Lakeland Initiatives & Accomplishments

Energy Performance

- Completed the upgrades and integrated automation systems for the HVAC, lighting and water. 2009
- Lakeland, having benchmarked our energy efficiency goals against European colleges, became, and continues to be, <u>Best in Class</u> in the United States for Energy Efficiency. 2009 - 2014
- Annual energy conservation reporting shows continued improvements by the reduction from the 2007 base year of: 38% electric, 48% natural gas, 37% water. 2014
 37% electric, 45% natural gas, 46% water. 2015
- Lakeland was the 2010 <u>Bellwether Award</u> winner in Planning, Governance & Finance category for our Energy Efficiency Program, a winner of the 2012 <u>Crain's Cleveland</u>
 <u>Business Emerald Award</u> honoring Champions of Sustainable Business Strategies and was featured on 2010 <u>Public Television's</u> "Growing Greener Schools to promote collaboration and development of best practices for energy efficiency.

Sustainability Reporting

 The college became a member of the Association for the Advancement of Sustainability in Higher Education (AASHE) which has 809 member colleges. We completed a Sustainability Tracking, Assessment & Rating System (STARS) report, being ranked 'Reporter' with 15.83 pts. 2010

- A <u>Greenhouse Gas Survey</u> (GHG) is performed annually to track improvements on overall emissions of these gases which are released in day to day actives. They are known to have negative impacts on human and environmental health. 2014
- The first annual comprehensive <u>Recycling/Diversion Report</u> was completed showing that 47% of total waste is being diverted from the landfill. 2014
- Waste Audit Student/faculty/staff participants found that 34% of the waste from the compactor and dumpsters surveyed was recyclable. 2014

LEED Buildings

- Holden University Center awarded LEED Silver for New Construction and is the first facility to gain this designation in Lake County. 2012
- C Building Renovation awarded <u>LEED Silver for Commercial Interiors</u>. 2014

Roofs

- A <u>Green Roof</u> was installed on the second floor of A Bldg. It was the first of its kind in Lake County. It contains short vegetation, acts as a water filtering system, slows run-off, helps to regulate building temperature, reduces heat island effect and provides habitat. 2008
- All <u>new roofs and roofing</u> renovation projects completed since 2007 have installed insulation above State of Ohio code requirements. Also, white reflective roof coatings have been installed on the Holden University Center, S building, and T building. 2007-2014

Storm Water

- A detention swale was installed at the Faculty/Staff parking lot. It regulates flow of surface drainage, decreases hillside erosion and run-off into East Branch of Chagrin River. 2010
- Two <u>detention basins</u> were created for the Holden University Center to allow localized water infiltration instead of run-off. 2011

Purchasing

- The <u>Surplus Auction Program</u> was started and has successfully diverted approximately 5% ofmaterials from the general waste stream. 2008
- Energy Star labeled electronics and appliances made a preference in purchasing. 2010
- The college purchases recycled content paper for printing and for housekeeping. 2010

Recycling

- · Composting of organic materials and cardboard was done from the kitchen of the dining area. It is currently discontinued while we are looking for a new vendor. 2010 - 2013
- Recycling efforts expanded, adding 52+ new public area recycling containers. 2013
- Recycling, according to our Recycling and Diversion Report includes: Single Stream - plastic, metal & glass; paper & cardboard; kitchen oil; landscape waste; light bulbs; tires; pallets; and batteries. It has successfully recycled and diverted approximately 47% of the colleges total waste. 2014

Grounds

- Selective <u>low mowing areas</u> are maintained to save money, reduce emissions and save water while increasing biodiversity. 2008
- Started a preferred use of <u>native plant species</u> for new plantings. 2011
- Walking & Bike trails are being developed incrementally. The goal is to increase student/staff/faculty access to our natural habitats to increase exposure to nature for health benefits as well as developing an awareness of the local ecosystems that comprise much of the campus. 2009 - to present.
- Initiation of a campus wide <u>bike path</u> began with installation of a half mile paved path along North Clocktower Drive. Future additions to this path will be done as funding allows. 2012
- Integrated Pest Management (IPM) was included in the landscape contractor agreement. 2012

Dining

- Elimination of <u>trans-fats</u> in foods produced in Breakers Dining. 2010
- We have been increasing healthy food options in the deli, at the grill and salad bar. More entrees are being made from scratch rather than serving processed foods. 2012
- Replaced Styrofoam and non recyclable containers with cardboard containers and replaced non-recyclable plastics with recyclable to support the composting and recycling programs. 2013
- A new coffee supplier, Crimson Cup, a local Ohio roaster, was added to the Breakers Café serving organic, fairly and directly traded coffee and teas. 2013

Other Initiatives

- The Siemen's Distinguished Lecture Series in Engineering, Manufacturing and Entrepreneurship. Offers the community an opportunity to learn about progressive local businesses, research and innovation, in manufacturing and engineering.
- Lake County Transit offers students/faculty/staff free bus passes on local bus routes.
- A <u>Diversity Committee</u> was established at Lakeland to promote inclusion of all groups.
- The Center for International Education was established and acts to increase awareness of global relations in culture and economics.
- A local seasonal <u>farmers market</u> was created, though discontinued in 2010 because of low numbers of buyer participants in the summer months.
- The Holden University Center offers the community a convenient way to receive a 4 yr. or Master's degree from partnering colleges in a variety of discipline areas. This reduces the cost of a degree while helping students who need close-to-home opportunities.
- The Teaching and Learning Center (TLC) and Campus Kids has a Garden Program that teaches the children to start plants for their gardens from seeds, and then harvest and eat the food they grow.

Future opportunities

- 1. Increase trans-disciplinary curriculum development that incorporates local and global sustainability issues that affect individuals, societies and the planet. Seek faculty leadership.
- 2. Increase student involvement opportunities outside of the classroom, offering valuable co-curricular, experiential learning opportunities that act as value-added benefits that compliment the student academic experience.
 - a.) Work closely with Phi Theta Kappa club members to explore ways to increase awareness of Lakeland's sustainability initiatives by: exploring ways of incorporating it into New Student Orientation and into an outreach event for students and community members.
 - b.) Be a resource and support for student, faculty or staff-led development of new initiatives by connecting through interested faculty, Student Affairs, the Green Group and other clubs.
- 3. Identify, research and develop initiatives that will increase Lakeland's efficiencies and responsibility to the students and community. Increase Lakeland's STARS rating to reflect this progress.
- 4. Update and expand the websites for Energy & Sustainability and the Facilities Management Department.

STARS Credits to consider (not a complete list):

AC-1: Academic Courses - can be updated/expanded to reflect current progress (1 pt.)

EN 7: Employee Orientation (1pts.)

ER-3: Sustainability in New Student Orientation (2 pts.)

ER-4: Sustainability Outreach and Publications (1-2 pt.)

OP-9: Integrated Pest Management (.25 pt.)

Tier 2-1: Native Plants (.25 pt.)

OP-11: Cleaning Products Purchasing (1 pt.)

OP-13: Vendor Code of Conduct (1)

OP-18: Waste Diversion (1.19 pts.)

OP 24: Construction Waste Diversion (1 pt.)

15.83 existing points (Reporter level) plus 9.5 future points = 25.33pts. (Bronze level)

Resources: for learning about the concepts of sustainability and Lakeland's initiatives

Sustainability at Lakeland:

Lakeland's sustainability page has information, videos and reports primarily on our Energy Efficiency initiative. These references are important to watch to become grounded in Lakeland's early efforts and major accomplishments to date. These accomplishments have been the drivers for sustainability at Lakeland.

Lakeland's home page/about/commitment to excellence/sustainability

or: http://lakelandcc.edu/web/about/sustainability

- 1. Sustainability Wikipedia http://en.wikipedia.org/wiki/Sustainability
- 2. United Nations Educational, Scientific and Cultural Organization Educating for a Sustainable Future: A Transdisciplinary Vision for Concerted Action EPD-97/CONF.401/CLD.1., November 1997. http://www.unesco.org/education/flsf/mods/theme_a/popups/mod01t05s01.html#emer
- 3. Second Nature.org A must visit site for anyone interested in sustainability! http://www.secondnature.org/mission/history
- 4. Read the first few pages of this book: The Ethics of Sustainability http://en.calameo.com/read/000908933c809484fe60d
- 5. Good Paper reviewing the historic development and difficulty of defining and implementing sustainability. http://w3.unisa.edu.au/hawkeinstitute/publications/downloads/wp27.pdf
- 6. STARS 2.0 Technical Manual, see pages 12-13 for Defining Sustainability http://www.aashe.org/files/documents/STARS/2.0/stars_2.0_technical_manual.pdf
- EPA website for Green Chemistry http://www2.epa.gov/green-chemistry