

Annual Sustainability Plan Performance Report

December 2016

Annual Performance Report on Sustainability Plan

The 2015-17 College of Lake County Sustainability Plan clarifies that excellence in sustainability supports the college's Strategic Mission and Vision to deliver high quality, accessible learning opportunities and to be an innovative educational institution offering exceptional learning experiences. Goal 3 of the college's Strategic Plan identifies excellence in sustainability as a strength to be pursued within the college and through its connections with the Lake County community.

The Sustainability Plan identifies a broad range of sustainability applications across fourteen goals, categorized under Planning and Administration and the three overlapping areas of Greening our Campus, Greening our Curriculum, and Greening our Community. Goals and Action Items are outlined in detail in Section II of the Sustainability Plan. This report marks the progress made in meeting the goals and action items over fiscal year 2016.

Evaluation & Tracking

Action Items are measured by their completion status of being either met (M), in progress (P), or unmet (U). Performance metrics relate to the goals and action items, and are measurable either as quantifiable numbers or as a percentage of the whole. In addition to these metrics, narrative data provides additional descriptions of achievements. Together these reporting mechanisms are tracked annually in order to evaluate progress and program effectiveness, reported through performance reports for the College's Strategic Plan and the Sustainability Plan.

The Sustainability Manager, Environmental Action Committee, or other stakeholders across the college community have responsibility for working together toward each goal, helping to determine completion, calculating quantitative progress, and providing anecdotal qualitative progress updates.

A. Sustainability Planning & Administration

Goal 1 – Coordination: Improve and enhance sustainability efforts of the college with comprehensive planning and coordination.

The Sustainability Guiding Coalition is working with stakeholders from across the institution to seek high impact initiatives to reinforce sustainability across the campus, including administration, faculty, staff and students. This Coalition guides and coordinates sustainability efforts of the Environmental Action Committee, Academic Quality Improvement Projects, and the Community Partners for Sustainability.

Goal 2 – Human Capital: Encourage behavioral change through education, awareness and engagement of college employees in the implementation of sustainable practices on campus.

Action Item Status: Met (M) – In Progress (P) – Unmet (U)	2015	2016	2017
Action Item 2.1 Educational Resources at Orientation and for Professional Development	P	P	
Action Item 2.2 Employee participation in activities such as recycling and turning off of unused electronics	P	P	
Action Item 2.3 Communication and Feedback	P	P	
Performance Metrics:			
Number of employees attending courses about sustainability and achieving competency levels (Action Item 2.1)	0	Not calc.	

New Employee Orientation:

Slides have been added to the new employee orientation presentation, outlining sustainability goals and activities at CLC. “Sust’y eBlasts,” biweekly electronic newsletters sent to employees, share stories from different faculty and staff about what they do at CLC, at home, or in the community to live and work sustainably. The eBlasts also share sustainability updates about resources on campus.

B. Greening Our Campus

Goal 3 – Buildings and Energy: Minimize building energy consumption through increased conservation and efficiency. TARGET: The Grayslake Campus will decrease energy consumption by 20% from FY 2014 to FY 2017.

Action Item Status: Met (M) – In Progress (P) – Unmet (U)	2015	2016	2017
Action Item 3.1 Assessments of Energy Use	P	P	
Action Item 3.2 Improve Energy Conservation	P	P	
Action Item 3.3 Upgrade Lighting Systems	P	P	
Action Item 3.4 Increase Energy Efficiency of Buildings	P	P	
Action Item 3.5 Renewable Energy Sources	P	P	
Performance Metrics:			
Reduction in greenhouse gas emissions since 2014 (Action Items 3.1, 3.2, 3.3, 3.4, 3.5, 3.6)	408.8 MTCO _{2e}	4,123.5 MTCO _{2e}	
Reduction of natural gas for heating and water heating from 2014 (Action Items 3.1, 3.2, 3.4, 3.5)	54,223 Therms	212,142 Therms	
Reduction in electricity usage (Action Items 3.1, 3.2, 3.3, 3.4, 3.5)	476,583 kWh	2,117,214 kWh	
Percentage of light fixtures converted to LED (Action Item 3.3)	Not calc.	Not calc.	

In FY 2016, CLC has shown a 17.9% decrease in electricity and gas usage, saving 28,438.4 MMBTUs of energy and \$235,258 of utility costs when compared to FY2014. That difference is equal to taking 220 houses off of the grid. The Facilities Department has been active in increasing the efficiency of the building heating and cooling systems, and with new retrofits and with the building automation system 25Live. Lighting in impacted hallways, classrooms, offices, and parking lots are being retrofitted with efficient LED fixtures. It is expected that LED fixtures will show a quick return on the investment within 2-3 years.

Sustainable Master Plan Construction

During FY 2016, CLC has been under construction on the Grayslake and Southlake Campuses. The A and B Wings and the newly reconstructed Core are being retrofitted with high efficiency, geothermal HVAC systems. Efficiencies in operational costs for heating and cooling and also in carbon emissions are expected to exceed 50% from the baseline.

Greenhouse Gas Inventory

A greenhouse gas (GHG) inventory includes all greenhouse gas emissions caused by an organization, event, product, or person. The most commonly measured greenhouse gases are carbon dioxide, methane, nitrous oxide and water vapor. GHG emissions are measured in three scopes, based on emission source, and then converted to metric tons of carbon dioxide equivalent. Figure 3.0 shows the calculated figures for each the three scopes using the Campus Carbon Calculator. Figure 3.1 shows the distribution of greenhouse gases between those different scopes, which are further identified in Figure 3.2. Figure 3.3 illustrates past trends.

Figure 3.0: FY 2014-16 Calculation

	Scope 1	Scope 2	Scope 3
Definition	Emissions generated on-site by burning of fossil fuels and use of chemicals	Emissions generated off-site and purchased for use by the college	Emissions generated by individuals commuting to and from campus
CLC Sources Measured	<ul style="list-style-type: none"> • Natural gas • Gas & diesel fleet • Refrigerants • Fertilizers 	<ul style="list-style-type: none"> • Electricity • Paper purchased 	<ul style="list-style-type: none"> • Full and part time faculty, staff, & student commuting
Method	<ul style="list-style-type: none"> ➤ Facilities metering ➤ Natural gas budget 	<ul style="list-style-type: none"> ➤ Facilities metering ➤ Purchasing bills and receipts 	<ul style="list-style-type: none"> ➤ Mass Transit Survey, Fall '09 ➤ IEPR survey '15
FY 2014	4,762.04 MTCO ₂ e	14,478.03 MTCO ₂ e	11,314.66 MTCO ₂ e
FY 2015	4,487.40 MTCO ₂ e	14,151.20 MTCO ₂ e	10,902.46 MTCO ₂ e
FY 2016	3,936.92 MTCO ₂ e	13,026.07 MTCO ₂ e	10,349.52 MTCO ₂ e

Figure 3.1: GHG Emissions by Scope

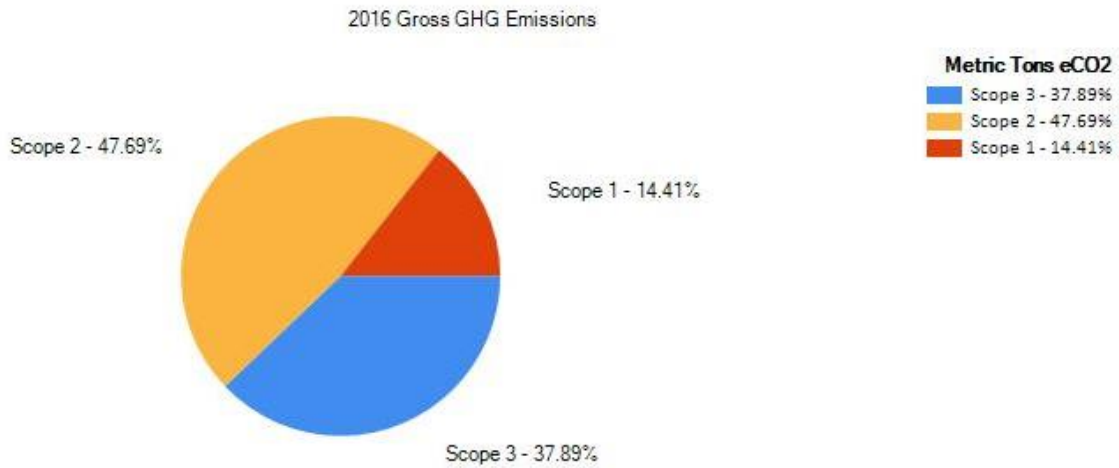


Figure 3.2: 2016 Emissions by Source

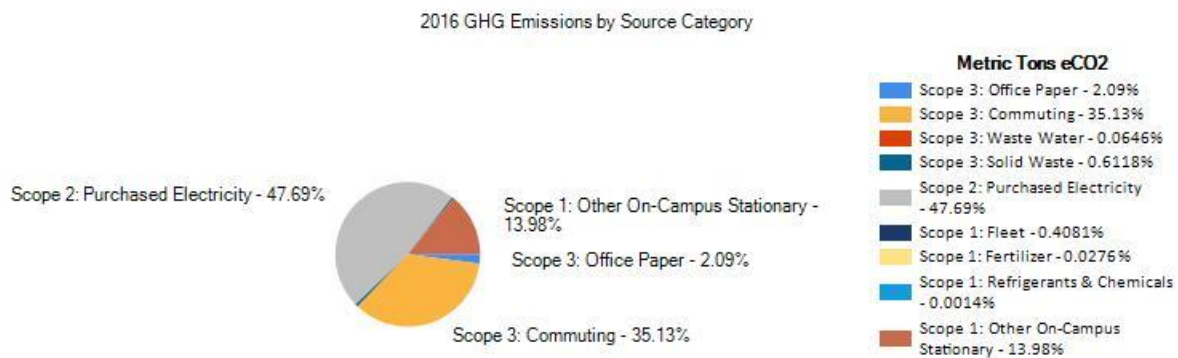
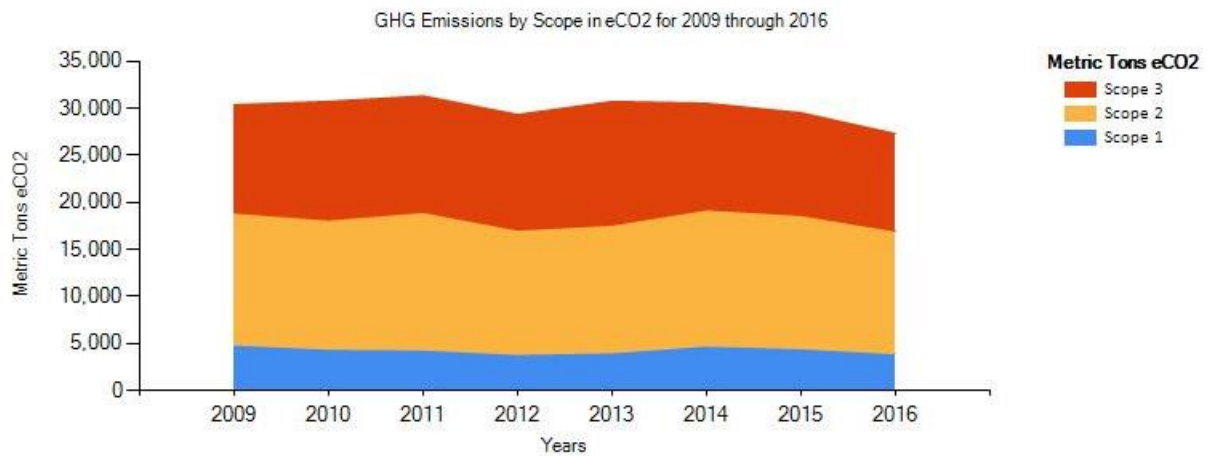


Figure 3.3: CO₂ Emissions 2009-2016



Goal 4 – Dining Services: Offer increased local and sustainable food options and improved resource recovery through food service operations. **TARGET:** The amount of locally grown produce utilized in the cafeteria and Prairie Restaurant will increase by 15% from FY 2014 to FY 2017.

Action Item Status:	2015	2016	2017
Met (M) – In Progress (P) – Unmet (U)			
Action Item 4.1 Local Food Sourcing	P	P	
Action Item 4.2 Organic, Vegetarian & Healthy Options	P	P	
Action Item 4.3 Composting, Reuse & Recycling	P	P	
Action Item 4.4 Culinary Arts, Comm. Gardens and Farmers' Mkt.	P	P	
Performance Metrics:			
Percentage of food purchased from locally-grown or on-campus sources (Action Items 4.1, 4.2, 4.4)	0	Not calc.	
Percentage of materials diverted from waste stream as compost (Item 4.3)	1.0%	1.0%	

Food Service: In FY 2016, CLC elected to outsource its food service and awarded its contract to Fresh Ideas, a company known for sustainable practices. Fresh Ideas will be able to help CLC meet its goals to increase local, organic, vegetarian, and healthy food options. Fresh Ideas began operations of CLC's food service in July and the new Café Willow in August, 2016.

Compost: Compost stalls were installed by the grounds maintenance building for composting landscape waste, some food scraps and coffee grounds. The culinary program has been composting pre-consumer non-meat food scraps. Fresh Ideas has committed to promoting recycling, to composting pre-consumer food scraps, and to working with café patrons to compost leftover scraps in the coming year. Food scrap compost pick-up service is being arranged with CLC's waste hauler for expanded service.

Student Farm: Our Sustainable Foods Coordinator has organized the student farm and community garden to be quite fruitful, providing seasonal produce for Lancers and now Fresh Ideas.

Community Gardens: CLC leased 48 garden plots. Last year, the gardens were so productive that, through a gleaning program, over 700 lbs. of excess produce were harvested and donated to a local food pantry.

Goal 5 – Grounds: Improve sustainable landscape practices, including coordination and management of turf grass, natural areas, installation of prairie pods/gardens, integrated pest management, and best management practices for stormwater treatment. **TARGET:** The percentage of grounds maintained as restored natural areas and with native landscaping will increase by 10% from FY 2014 to FY 2017.

Action Item Status:	2015	2016	2017
Met (M) – In Progress (P) – Unmet (U)			
Action Item 4.1 Campus Landscape Management Plan	P	P	
Action Item 4.2 Reduce Stormwater Runoff	P	P	
Action Item 4.3 Baseline assessments for biodiversity, soil and water	U	U	
Performance Metrics:			
Square footage of best management practices (BMPs) installed for enhanced stormwater management (Action Item 4.2)	0	0	
Percentage of campus grounds converted to natural areas and native landscaping (Action Items 4.1, 4.2, 4.3)	29.1%	29.1%	

Best Management Practices – Bioswales

In August 2014, CLC successfully applied for \$140,750 in 319 Grant funds through the Illinois Environmental Protection Agency and the Lake County Stormwater Management Commission, to fund bioswales in parking lots 6, 7, 2 and 3. Construction of bioswales in Lots 6 and 7 has been completed in summer, with seeding of lot 7 complete in fall 2016 and planting of live plants scheduled for spring 2017.

Natural Areas Maintenance:

CLC faculty, staff, and students participated in a number of activities this year related to habitat restoration and natural areas maintenance, including campus cleanup and buckthorn removal north of the Horticulture Building during Earth Week 2016. Restoration efforts around Willow Lake are moving forward with scheduled application of herbicide to invasive species.

Goal 6 – Purchasing: Incorporation of environmental and social considerations into purchasing and procurement processes.

Action Item Status:	2015	2016	2017
Met (M) – In Progress (P) – Unmet (U)			
Action Item 6.1 Purchasing and Disposal Policies	M	M	
Action Item 6.2 Life Cycle Analysis Policy	U	U	
Action Item 6.3 Eliminate Purchases with VOCs	P	M	
Performance Metrics:			
Percentage of products purchased with environmentally or socially responsible specifications (Action Item 6.1)	Not Calc.	Not Calc.	
Percentage of supplies redirected from the waste stream to be reused or repurposed (Action Items 6.1, 6.2)	Not calc.	Not calc.	
Percentage of products containing VOCs (Action Item 6.3)	0	0	

Purchasing:

Sustainability is a consideration in the Procurement Policy allowing for the consideration of products or services that minimize potentially negative impacts on the environment and human health for competing products or services that serve the same purpose.

Goal 7 – Transportation: Improve alternative transportation options for all faculty, staff and students commuting to and from campus.

Action Item Status:	2015	2016	2017
Met (M) – In Progress (P) – Unmet (U)			
Action Item 7.1 Study and track transportation choices	P	P	
Action Item 7.2 Increase Awareness and Improve Accessibility for Alternative Transportation	P	P	
Action Item 7.3 Fuel Efficient Fleet	P	P	
Action Item 7.4 Measure and Mitigate Emissions from Business Travel	U	U	
Action Item 7.5 Install electric charging stations	U	P	

Performance Metrics:			
Percentage of students engaged in alternative transportation strategies (Action Items 7.1, 7.2, 7.5)	11%	11%	
Percentage of employees engaged in alternative transportation strategies (Action Items 7.1, 7.2, 7.5)	9%	9%	
Percentage of campus fleet vehicles utilizing alternative or fuel efficient technologies (Action Items 7.3, 7.4)	Not calc.	Not calc.	

Transportation Study:

The Department of Institutional Effectiveness, Planning, and Research included transportation choices in its survey of students in spring 2015 and Faculty and Staff in fall 2015.

The Lake County Division of Transportation completed the bicycle path along Washington Street, connecting campus to Atkinson Road and the Rollins Savanna Forest Preserve and regional trails.

Goal 8 – Waste: Maximize waste diversion and resource recovery across campus by individuals and through institution-wide policies and programs. TARGET: Solid waste diversion will increase by 15% in the three-year period from the baseline established in the 2015 spring waste audit.

Action Item Status:	2015	2016	2017
Met (M) – In Progress (P) – Unmet (U)			
Action Item 8.1 Guidelines for C&D Diversion	U	U	
Action Item 8.2 Track Waste Reduction	M	P	
Action Item 8.3 Recycling with Every Garbage Can	P	P	
Action Item 8.4 Develop Info Center for Waste Diversion Information	U	U	
Performance Metrics:			
Quantities of C&D debris diverted from waste stream (Action Item 8.1)	42%	42%*	
Annual tons of solid waste disposal (Action Items 8.2, 8.3, 8.4)	53.9 tons	53.9* tons	

Solid Waste Reduction Plan:

Facilities completed its mandated 5-year Solid Waste Reduction Plan in March 2015. CLC is diverting 42% of its solid waste by recycling and composting pre-consumer food scraps. The recycling plan was revitalized in fall 2015 to provide more blue recycling bins in all classrooms. This diversion rate is set to be expanded significantly with the addition of compost services in the café. *Figures based on FY2015 waste audit.

Goal 9 – Water: Support and improve water conservation measures within building operations, on campus grounds, and in the Lake County community.

Action Item Status:	2015	2016	2017
Met (M) – In Progress (P) – Unmet (U)			
Action Item 9.1 Benchmark Water Usage	U	U	
Action Item 9.2 Water Saving Toilets and Fixtures	M	M	
Action Item 9.3 Minimize irrigation and install drought tolerant, native plant species	P	P	
Action Item 9.4 Increase Education and Awareness	P	P	
Action Item 9.5 Study Uses for Non-Potable Water	U	P	

Performance Metrics:			
Annual reduction in water use (Action Items 9.1, 9.2, 9.3, 9.4)	Not calc.	Not calc.	

Water Conservation:

Native, drought-resistant plants installed in 3 areas of Lancer Lane median in summer 2015.

B. Greening Our Curriculum

Goal 10 – Curriculum: Integrate connection between Student Learning Objectives in Sustainability and other components of sustainability education with all credit curriculum offered by the institution.

Action Item Status:	2015	2016	2017
Met (M) – In Progress (P) – Unmet (U)			
Action Item 10.1 Faculty Development Opportunities	P	P	
Action Item 10.2 Integration of Sustainability into Existing Curriculum	P	P	
Action Item 10.3 Student Sustainability Literacy	P	P	
Action Item 10.4 Community-Based Experiences	P	P	
Action Item 10.5 Experiential Learning with Campus Operations	P	P	
Performance Metrics:			
Number of Sustainability-Focused or Related credit courses (Action Items 10.1, 10.2, 10.3, 10.4, 10.5)	12	12	
Number of credit programs and departments which include as Sustainability-Focused or Related courses (Action Items 10.1, 10.2, 10.3, 10.4, 10.5)	46	46	
Number of graduates exposed to Sustainability-Focused or Related courses, or other sustainability curriculum initiatives (Action Items 10.1, 10.2, 10.3, 10.4, 10.5)	Not calc.	Not calc.	

Faculty Development and Experiences:

Sustainability: the Campus as a Living Laboratory is one of CLC’s 3 AQIP projects pursued during the 2016 Academic Year. Debra Rowe came to CLC to present to faculty about opportunities for sustainability in teaching. The sustainability AQIP identified that many faculty take social and economic aspects of sustainability into their instruction. This AQIP is being followed-up this year to include Sustainability across the Curriculum in FY 2017.

Goal 11 – Student Engagement: Provide unique opportunities for CLC students to influence, participate, and learn from sustainability efforts on campus and in the community.

Action Item Status:	2015	2016	2017
Met (M) – In Progress (P) – Unmet (U)			
Action Item 11.1 Include Sustainability Commitments and Performance in New Student Orientation	P	P	
Action Item 11.2 Integrate Sustainability Practices and Activities with Student Life	P	M	
Action Item 11.3 Extra-Curricular Activities	P	P	

Action Item 11.4 Peer-to-Peer Sustainability Outreach	U	U	
Performance Metrics:			
Number of sustainability outreach campaigns for students (Action Items 11.1, 11.2, 11.3)	3	5	
Number of students engaged in peer-to-peer outreach (Action Item 11.4)	0	0	

Student Sustainability:

Sustainability has become more established as a required activity for student clubs. New and expanded student focused programs were expanded in the 2016 academic year, including: Climate Week, the One Earth Film Festival, 2 other film showings, Earth Week, and the Lake County Green conference. 4 students attended the national AASHE conference in fall 2015.

Goal 12 – Workforce & Professional Development: Incorporate sustainability and green job training into workforce and professional educational opportunities.

Action Item Status:	2015	2016	2017
Met (M) – In Progress (P) – Unmet (U)			
Action Item 12.1 Sustainability Training Opportunities with Workforce Development	P	P	
Action Item 12.2 Expand Partnerships for Experiences	P	P	
Action Item 12.3 Connections to Engage Students in Green Economy	P	P	
Performance Metrics:			
Number of courses and trainings offered related to sustainability and green jobs (Action Items 12.1, 12.2, 12.3)	12	12	
Number of students and community members impacted by workforce educational opportunities (Action Items 12.1, 12.2, 12.3)	Not calc.	Not calc.	

C. Greening Our Community

Goal 13 – Green Economy: Support economic resilience and growth by providing current information and resources on sustainability to the public and across industry sectors.

Action Item Status:	2015	2016	2017
Met (M) – In Progress (P) – Unmet (U)			
Action Item 13.1 Website as Hub of Information on Green Economy	P	P	
Action Item 13.2 Share Best Practices on Campus	P	P	
Action Item 13.3 Communicate Updates on Performance and Solicit Feedback	P	P	
Performance Metrics:			
Number of community members reached via publications, websites, events and other activities (Action Items 13.1, 13.2, 13.3)	Not calc.	Not calc.	
Number of community sustainability events hosted on campus and within the region (Action Items 13.1, 13.2, 13.3)	Not calc.	Not calc.	

Sharing Information:

The Sustainable CLC webpage provides resources in a format that echoes this Sustainability Plan, with information and resources about Greening Our Campus, Greening our Curriculum, and Greening our Community. The community calendar provides information about sustainability-related events across the district. CLC regularly posts information on Facebook and through Constant Contact sustainability news emails.

Goal 14 - Collaboration: Develop partnerships with various entities to facilitate and accelerate sustainability goals and accomplishments across the community.

Action Item Status:	2015	2016	2017
Met (M) – In Progress (P) – Unmet (U)			
Action Item 14.1 Connect Users across Industry Sectors to Information	P	P	
Action Item 14.2 Host Community Partners for Sustainability and Lake County Green conference	M	M	
Action Item 14.3 Survey Needs of stakeholders	P	P	
Performance Metrics:			
Number of community members participating in the Community Partners for Sustainability in Lake County (Action Items 14.1, 14.2, 14.3)	30	25	
Number of community members participating in the annual Lake County Green conference (Action Items 14.1, 14.2, 14.3)	100	85	

Community Meetings:

CLC hosted several events last year that brought in community members to collaborate over sustainability solutions. CLC hosted Climate Week in September, bringing in speakers from Siemens, Baxter, Faith in Place, Lake Forest College, and the State Climatologist. Two films were co-sponsored by student groups and community members. CLC co-hosted 3 films with local partners as part of the One Earth Film Festival, drawing the highest attendance levels of the festival. The Community Partners for Sustainability have decided to meet less often and rather use the forum as a forum for planning special events. CLC hosted its 6th Lake County Green conference in April, 2016. The focus of this year's Lake County Green was "People in Action" bringing together leaders from local businesses, local governments, non-profits, the community, and students.