

Sustainable CLC



Lake County, Energy and
Environment Committee
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CLC a Leader in Sustainability

- 2020 US Dept. of Ed. Green Ribbon Schools
- 2020 CLC Silver STARS rating
- 2018 Illinois Sustainability Award
- 2018 LEED Platinum for Science Building
- 2017 Ill. Chapter USGBC Emerald Award
- 2016 Green Genome Award
- 2017-19 Top 10 in the AASHE Sustainable Campus Index



The College of Lake County is a comprehensive community college committed to equitable high-quality education, cultural enrichment and partnerships to advance the diverse communities it serves.

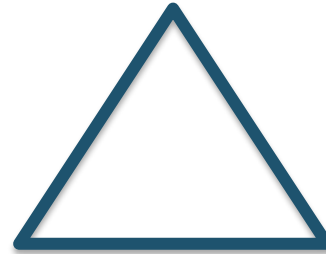
Pillars of CLC's Strategic Plan

1. Access and Success for Students
2. Equity and Inclusion
3. Teaching & Learning Excellence
4. Community & Workforce Partnerships
5. Collaborative Culture
6. Strategic Use of Resources

Areas of Excellence

- Diversity
- Health and Wellness
- Student Success
- Sustainability

Living Laboratory



Show Community:

- Efficient Buildings
- Renewable Energy
- Stormwater Management
- more ...

Teach Students:

- Technology
- English
- Math
- Economics
- more ...

WELCOME TO CLC'S LEED PLATINUM SCIENCE AND ENGINEERING BUILDING



Highest rated new
construction green
building in Illinois!

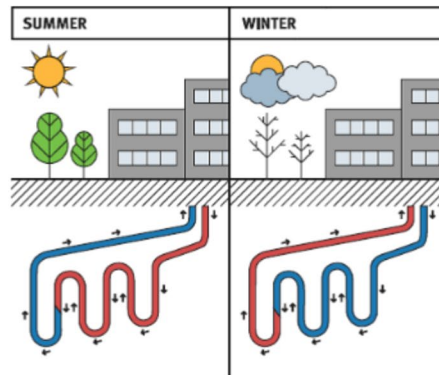
- LEED Platinum 2018
- Solar PV
- Geothermal heating and cooling
- Rainwater collection
- Green roof
- Daylight harvesting
- Variable frequency drive fans

Geothermal Heat Exchange Systems

Geofield

The wells in the geofield are 500 feet deep where the temperature of the earth's crust in this region is always 55 degrees. This makes the system effective and reliable, because that temperature is warmer than the outside air in the winter and cooler in the summer.

In summer, water transfers heat from the buildings into the deep underground wells. In the winter, the opposite process takes place: the relative heat from the ground is condensed and circulated through the system to heat the buildings.



What is a geothermal heat exchange?

Under the field in front of you is a geofield, the heart of a geothermal heat exchange system that heats and cools the core buildings on campus. **This system condenses and transfers heat between the buildings and the earth deep underground.**

Students in the HVAC, Engineering Technology and Geology programs observe this living lab to learn how these systems function. This experience gives them an edge when competing for jobs such as professional engineers and system programmers.



More Solar Energy at CLC

1.9 MW of Solar PV Panels Ground Mount and Rooftop



What is Solar PV?

The field in front of you contains XX solar photovoltaic (PV) panels. The rooftops on the buildings behind you have even more. Together these PV panels are rated at 1.9 MW. This power rating tells you how much wattage a solar installation would produce while operating at standard test conditions.

Sustainability means making use of resources already available. These solar panels provide about 17% of the Grayslake Campus electricity needs, just by collecting light energy from the sun.

Using solar energy not only reduces pollution, but also lowers the amount of greenhouse gases from coal power plants. Solar energy can save consumers lots of money on energy bills.



Solar Photovoltaic

"Solar photovoltaic" means making electricity out of sunlight. Sunlight activates electrons inside the photovoltaic cells to produce electricity. Many of these cells make up the solar panels you see here.

The electricity in the solar panels is called direct current (DC), while buildings use alternating current (or AC) electricity. DC electricity can easily be changed into AC by a gadget called an inverter. That's how electricity from the sun powers our buildings.

Green Roofs:

- Southlake and Science Building
- Cool in summer
- Absorb rainwater
- Shield UV rays
- Teach students
- Community demonstration



Energy Efficiency



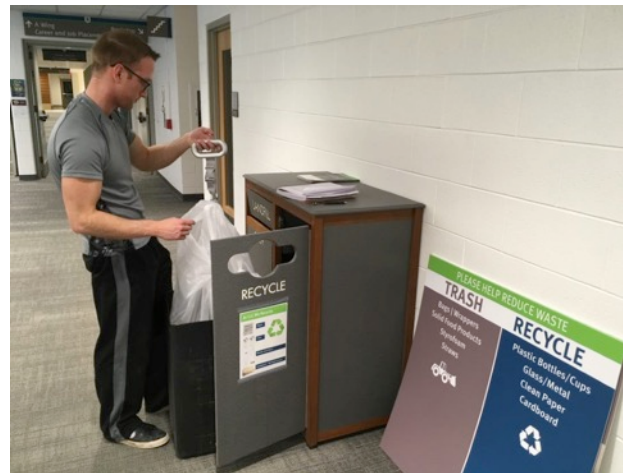
LED Lighting Upgrades



Waste Reduction



Trash		Recycle		Compost	
<p>Bags Wrappers Soft Plastic Styrofoam</p> <p>Straws Utensils Dirty Paper</p>		<p>Glass Metal Hard Plastic</p> <p>Clean Paper Cardboard</p>		<p>Food Scraps: Fruits/Vegetables Bread Meat/Cheese</p> <p>Unwaxed Paper: Plates Containers Napkins</p>	
 At CLC, We Reduce Waste: Learn more at— www.clcillinois.edu/reducwaste		 At CLC, We Reduce Waste: Learn more at— www.clcillinois.edu/reducwaste		 At CLC, We Reduce Waste: Learn more at— www.clcillinois.edu/reducwaste	

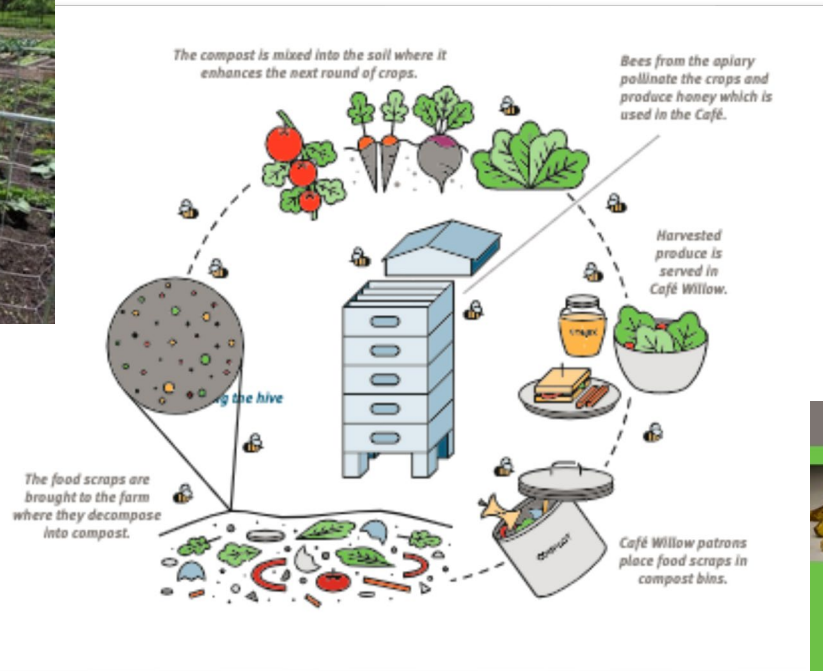


clcillinois.edu/trail

Textile Collection Bin

Your donations can help reduce the **2.5 million pounds of textiles** from filling up area landfills. CLC encourages you to donate clothing to be reused by members of our community and textiles to be recycled into rags, carpeting and insulation.

Campus Farm ↔ Food Service



Be sustainable.

COMPOST

FOOD SCRAPS	UNWAXED PAPER
Fruits	Plates
Vegetables	Containers
Bread	Napkins
Meat/Cheese	

Screenshot

For Clean Air ...





Sustainable Landscaping

- Reduce maintenance over long term
- Reduce emissions
- Improve habitat for biodiversity
- Improve stormwater management

Living Lab Trail



Lakeshore Campus Waukegan

- LEED Platinum Student Services
- Urban Ag Center



Earth Week at CLC!



- Earth Month BINGO
 - 4 weekly sets of activities that can be done at home or in the community
- Tree Planting
 - Small group activities
- Bike Share Project
 - Launch of pilot program in Grayslake

Questions? Thank you!



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