

*Putting good ideas to work for a  
carbon-neutral, flourishing campus*

# Sustainable CWRU



CASE WESTERN RESERVE  
UNIVERSITY

EST. 1826

think beyond the possible™

## Case Western Reserve University Stats

- 8 millions sq. feet
- \$360.1 million in research revenues
- \$4.8 billion endowment
- 750,000 annual community volunteer hours
- 185 urban acres
- 140+ buildings
- 400 acres off-campus Univ. Farm
- 18,000+ people (10,000 students)
- \$20+ million annual utility spend
- 200,000 mmtco2e
- 1,300 research labs
- 1.8 million local food spend by Bon Appetit (approx)
- 130 fleet vehicles (approx)
- 140 bike racks
- 5 bike fixit stations
- 1000+ bikes
- 1,001 trees
- 1,002 squirrels





# Sustainable CWRU Elements



- Climate Action Plan
- The Fowler Center for Business as an Agent of World Benefit
- Great Lakes Energy Institute
- University Farm
- Summer Undergraduate Research in Energy and Sustainability
- Social Justice Alliance
- Sustainability Alliance
- Campus Planning & Facilities Management
- Student Groups
- Staff Green Teams
- Environmental Studies Major
- Lots of sustainability related research
- ...

## What We Work On

- Climate Action Plan
- Green Building + Transportation + Green Grounds
- Recycling & Materials Management
- Sustainability Data Collection
- Engagement and Creating a Culture of Sustainability

# ENGAGEMENT

# GREEN BAG LUNCH SERIES

- Green Your Lawn
- Personal Alternative Fuel Vehicles
- Green Building Design for Your Home
- Green Holidays w/ Upcycled Gifts
- Build Your Own Rain Barrel
- Solar for Your Home
- Biking to Work
- Recycle Like a Master
- Everything Trees
- Lake Erie's Health
- Composting at Home

# Student Sustainability Ambassadors

**Recycling & Waste:** Lori Sun & Sindhu Yalavarthy

**Reuse:** Carlos Lewis-Miller & Sierra Leonard

**Energy – Res Hall:** Maggie McClarren & Divya Manoharan

**Energy – Green Labs:** Ethan Hill & Emily Herrmann

**Green Building:** John Kilbane & Kevin Pataroque

**Transportation:** Thanvi Vatti & Mika Hoecher

**Green Grounds:** Kayla Buckelew & Claire Holliday

**Food (Real Food Challenge):** Naveen Rehman & Jason Guo



# CWRU Green Lab Certification Program

w/ Student Audits – [Google form link](#)

## Green Lab Check List - Certification Program For CWRU Labs

### Energy

#### *Electronics & Lights*

No.	Question	Possible Ans.
E1	Does the lab have proper shutdown procedures for equipments such as computers, monitors, printers, cell phone & battery chargers, etc.?	Y - 2 point / N - 0 point
E2	Does last person in the lab turns off lights & other equipments?	Y - 1 point / N - 0/ NA
E3	Are there reminder signs for shutting the equipments?	Y - 1 point / N - 0/ NA
E4	Do the lab members make an effort to use natural light when possible?	Y - 1 point / N - 0/ NA





# CLIMATE ACTION PLAN



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# Climate Action Plan (CAP) Commitments

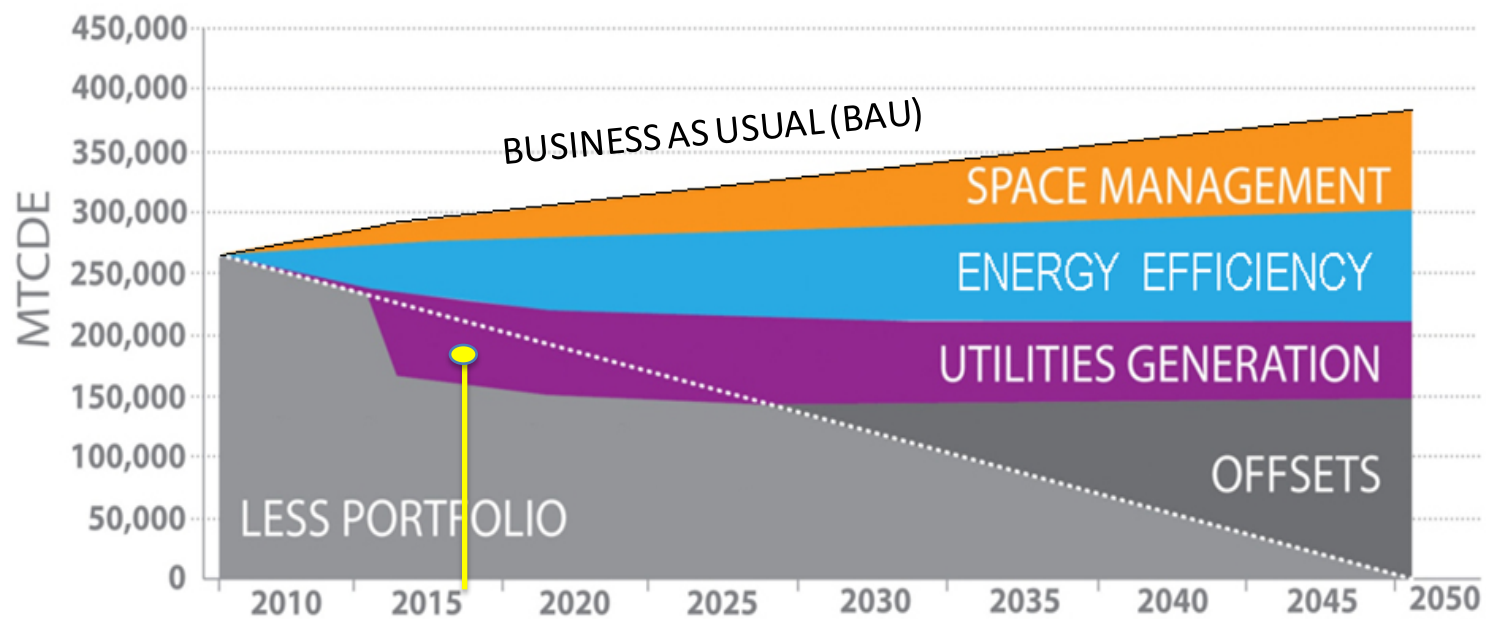
Signed ACUPCC 2008 / CAP published 2011



- Publicly report CWRU's GHG emissions inventory every year
- Report on CAP progress every 2 years
- Update plan every 5 years
- Requires we build min. LEED silver for new construction
- Goal to expand sustainability literacy academically



# Climate Action Plan Emissions Mitigation



# GREEN BUILDING, GROUNDS, & TRANSPORTATION



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## Leadership in Energy and Environmental Design

A leading-edge system  
for certifying the  
greenest performing  
buildings in the world



## University Green Buildings

1. North Residential Village - Silver Houses 1-4/6-7 and Gold House 5 only
2. Tomlinson Hall - Silver
3. Tinkham Veale University Center - Gold
4. Wyant Athletics and Wellness Center - Silver
5. New STJ Residence Hall – Gold
6. LS Think Box – Projecting Silver
7. Mandel School of Applied Social Sciences – LEED Interior projecting Silver
8. LS Alumni Center - Projecting Silver
9. Health Education Campus – Projecting Silver
10. New Dental Clinic - Projecting Silver



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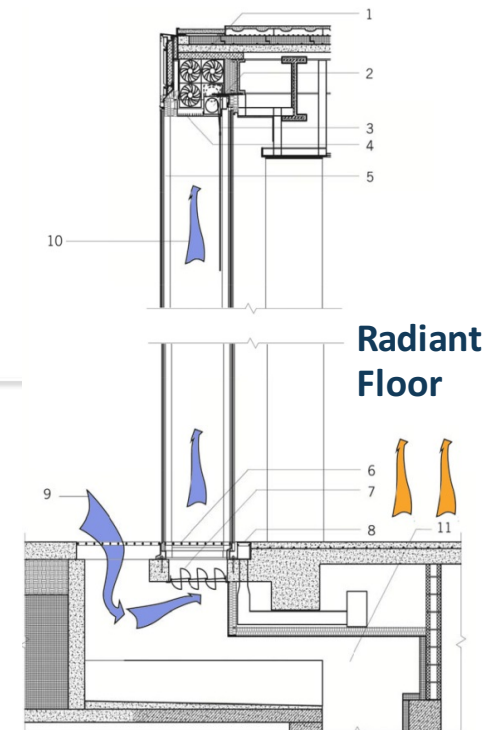
# Tink Green Building Technology Features

**40kW Solar Array**



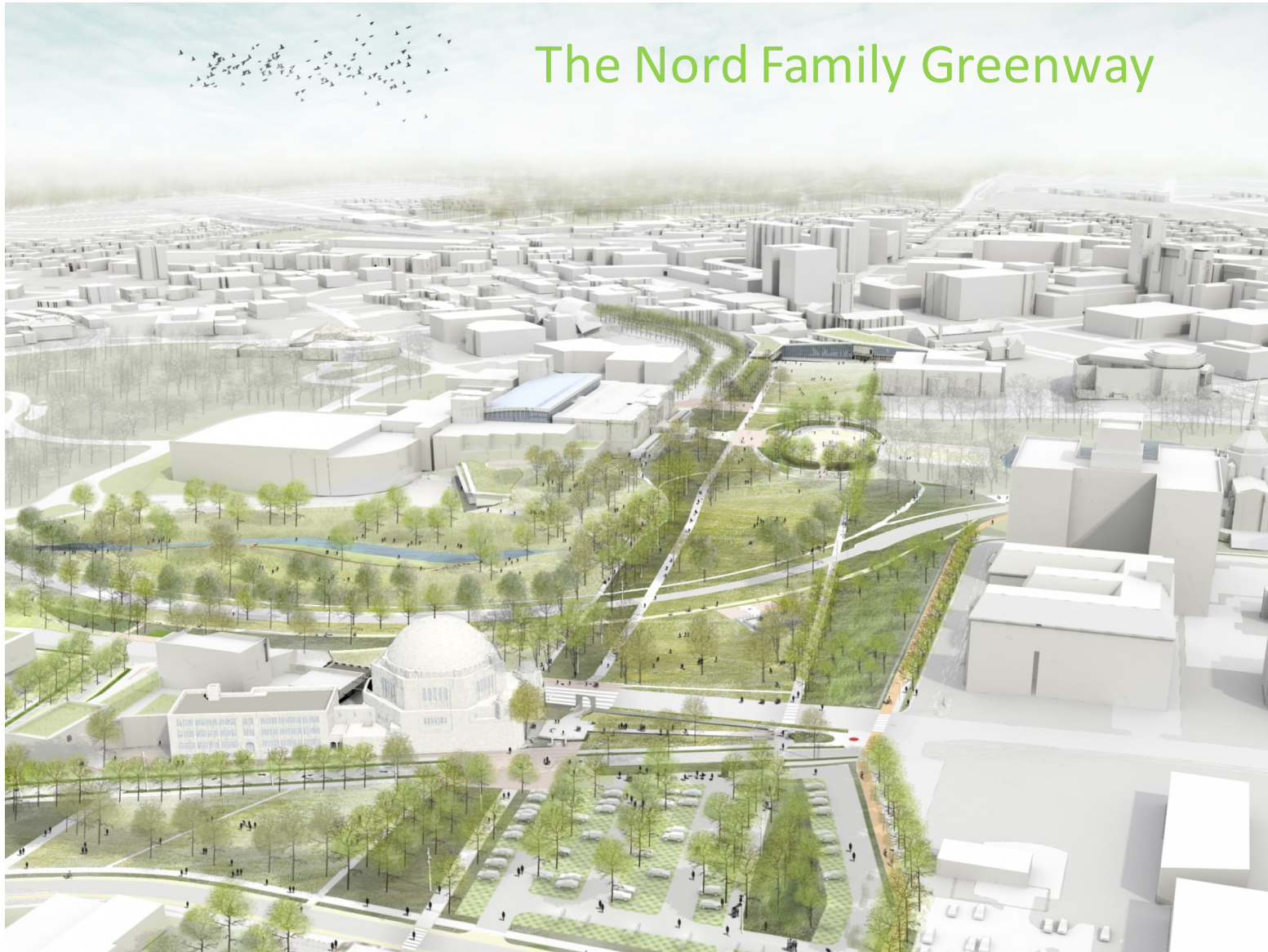
**Live Roof**

**Double-Skin Facade**



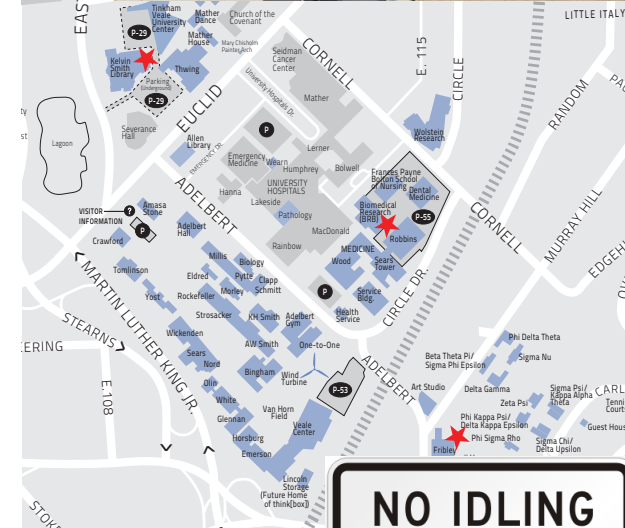
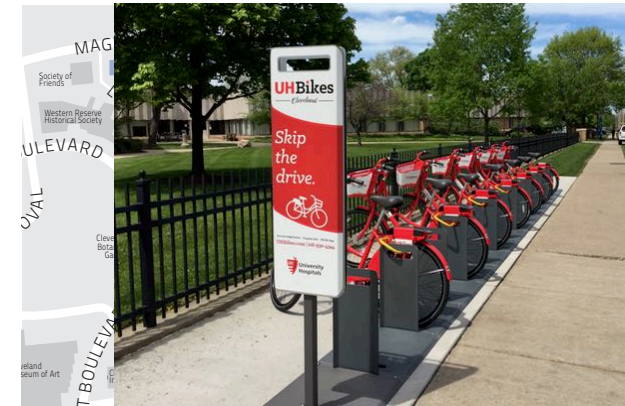


# The Nord Family Greenway



# Sustainable Transportation @ CWRU

- 6 Bike Fixit Stations
- Over 130 bike racks
- 4 Bike Share Stations
- Greenie shuttle system (1 runs on CNG)
- Car sharing – Enterprise & Zip
- Gohio ride matching portal
- New Van Pool program in Cuyahoga County
- RTA Commuter Advantage for employees
- U-Pass for Undergrads



# RECYCLING & COMPOSTING



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# Welcome Home to Case Western Reserve University

The University is striving to use less and recycle the rest - thank you for your assistance in reducing, reusing & recycling!

## In Your Room:



when your bin fills,  
empty it into the  
appropriate bins in  
the common area

## In Common Areas:



corrugated cardboard  
- break it down  
- put it between bins



Reach out to us for  
specialty items:

- Styrofoam
- Scrap Metal
- Furniture
- [www.tinyurl.com/CWRUewaste](http://www.tinyurl.com/CWRUewaste)
- Batteries
- Printer Cartridges
- Office Supplies



# Bon Appetit & University Farm Composting Partnership

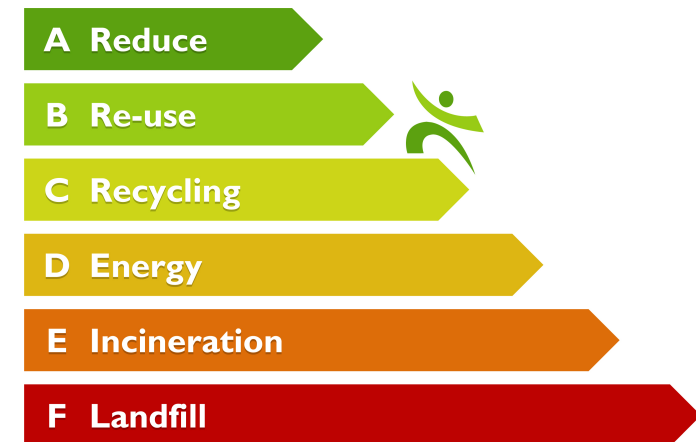


- Pre-consumer kitchen scraps go to University Farm for composting.
- Post-consumer composting pilot in the coming months to meet student demand.
- Increased Special Events composting
  - Changes in regional composting infrastructure allow program expansion.

# What is Recycling?

- The collection and processing of items that would otherwise be thrown away as trash and turning them in to new products.
- Planet Earth is a checking account.
- Waste Hierarchy
  - REScycle

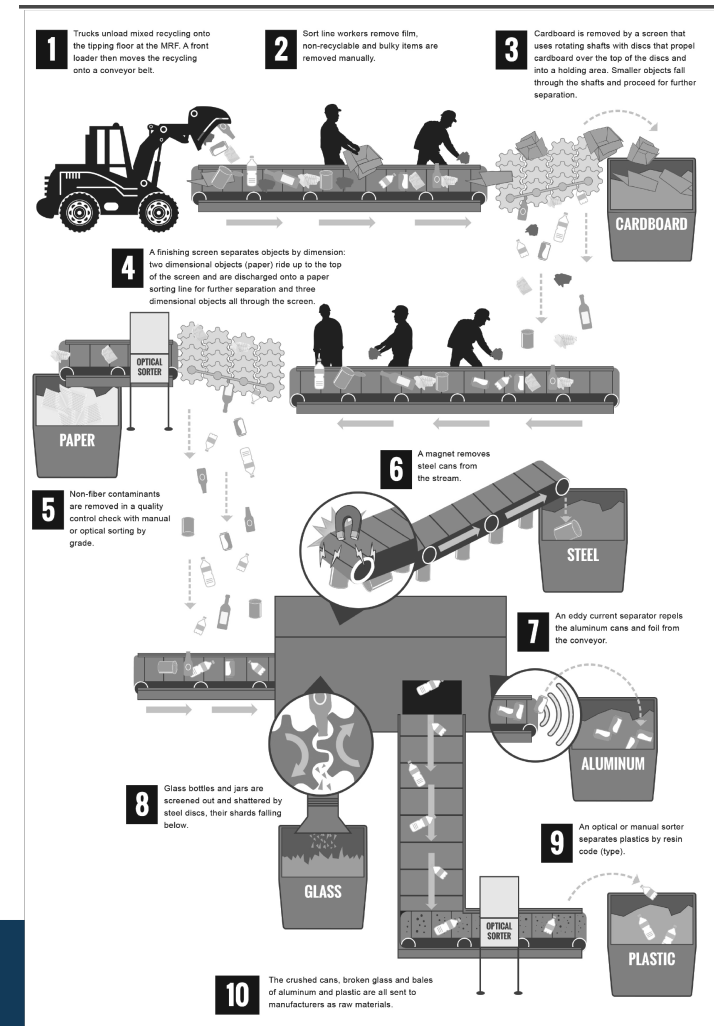
## WASTE HIERARCHY - LANSINK'S LADDER



Powered by Recycling.com

# Current Challenges to Recycling

- Single stream v. source separated
  - Easier for the end user
  - Harder for the plants
  - More contamination
- China Sword
- Value of commodities
- Changes to items able to be recycled



# CWRU Sustainability Team — [sustainability@case.edu](mailto:sustainability@case.edu)



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