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

Sustainable CWRU

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

Major Office for Sustainability Projects FY19

- Energy Strategy Plan
- Recycling & waste study & Overhaul
- Climate Action Plan Refresh
- Bike training/mapping
- Compost changes

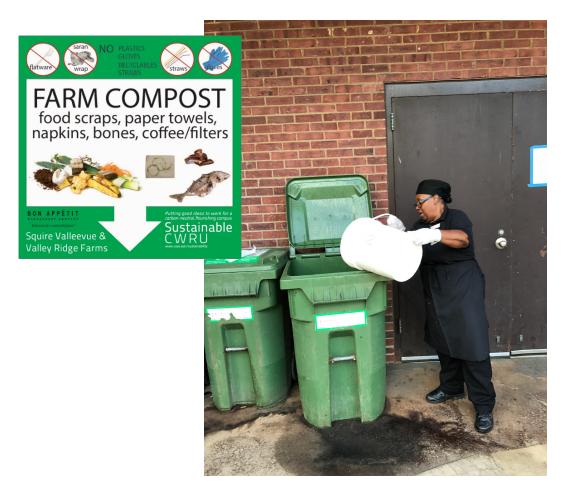




- Green Your Lawn
- Personal Alternative Fuel Vehicles
- Green Building Design for Your Home
- Green Holidays w/ Upcycled Gifts
- Build Your Own Rain Barrel

- Solar for Your Home
- Biking to Work
- Recycle Like a Master
- Everything Trees
- Lake Erie's Health
- Composting at Home

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.

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

Student Sustainability Ambassadors

Recycling & Waste: Lori Sun & Sindhu Yalavarthy

Reuse: Carlos Lewis-Miller & Sierra Leonard

Energy – Res Hall: Maggie McClarren & Divya Manoharan

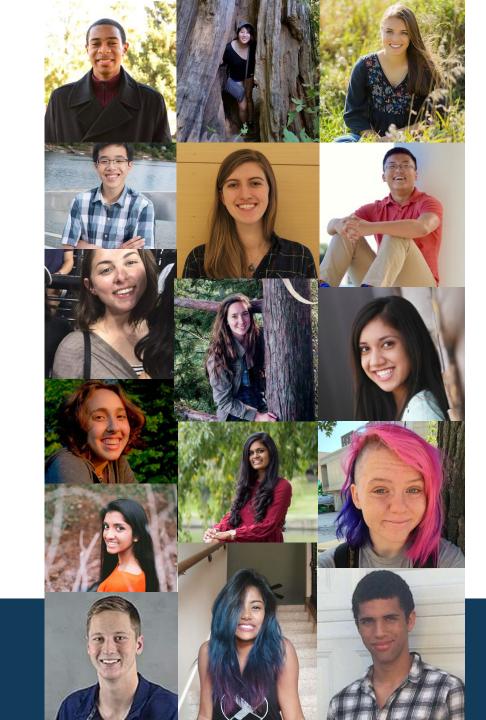
Energy – Green Labs: Ethan Hill & Emily Herrmann

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

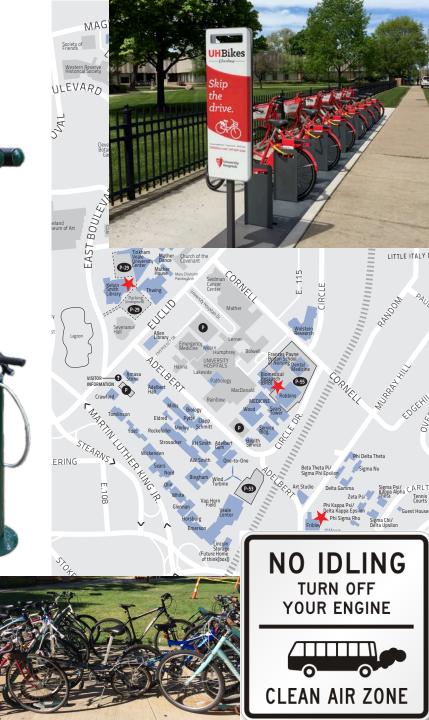


Sustainable Transportation @ CWRU

- 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

from High Tech

- RTA Commuter Advantage for employees
- U-Pass for Undergrads





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!



Reach out to us for specialty items:

- Styrofoam
- Scrap Metal
- Furniture
- www.tinyurl.com/ CWRUewaste
- Batteries
- Printer Cartridges
- Office Supplies

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





REBECCA LOWRY SENIOR INTERIOR DESIGNER CWRU



CONTRACT vs RETAIL

CONTRACT/ COMMERCIAL

RETAIL/ RESIDENTIAL

12 YEAR WARRANTY TYP.

LIMITED WARRANTY, ONE YEAR, IF ANY

GREATER DURABILITY – MANUFACTURES OFFER CONTRACT QUALITY FABRICS AND FINISHES. INCLUDING: MOISTURE AND STAIN RESISTANT FABRICS (CRYPTON, AND RECYCLED CONTENT)

NOT AS DURABLE

MAY COST MORE \$ UPFRONT BUT WILL LAST LONGER

MAY BE MORE COST EFFECTIVE INITALLY BUT, NOT LAST AS LONG

MORE OPTIONS: FABRICS, FINISHES

LIMITED OPTIONS ON FABRICS AND FINISHES

ADDITIONAL FEATURES/ACCESSORIES: HIDDEN FASTENERS TO SECURE SEAT CUSHIONS, REMOVABLE COVERS (TRINITY "FACELIFT"), BARIATRIC SEATING (STEELCASE HEATHCARE)

NO ADDITIONAL FEATURES/ACCESSORIES TO PREVENT ADDITIONAL WEAR AND TEAR

LOCAL DEALERS AND REPRESENTATIVES AVAILABLE FOR SERVICE CALLS AND REPLACEMENT PARTS

HELP OR SERVICING FURNITURE MAY BE LIMITED

PURCHASING A MORE DURABLE PRODUCT WILL PROVIDE THE OPPORTUNITY TO RE UPHOLSER, REFINISH

LESS OPPORTUNITY TO RE-USE. ONLY OPTION REMAINING IS TO

BEFORE HANDING DOWN FOR RE-USE

DECOMMISSION



COMMERCIAL - TESTING AND SAFETY STANDARDS

In order for commercial furniture to receive a ANSI and BIFMA rating, it is put through a rigorous set of tests. These tests are meant to measure safety, performance and sustainability. Each piece of furniture and manufacturing facility must meet a strict set of standards before it can receive a ANSI or BIFMA rating. Testing is entirely volunteer and manufactures work very hard to meet these ratings.

OFFICE FURNITURE IS AWARDED POINTS IN FOUR CATEGORIES THAT INCLUDE: MATERIALS, ENERGY AND ATMOSPHERE, HUMAN AND ECOSYSTEM HEALTH AND SOCIAL RESPONSIBILITY.

What is ANSI?

Founded in 1918 the American National Standards Institute (ANSI) works with organizations to create and manage voluntary national standards for products. The goal of ANSI is to enhance the global competitiveness of US business by facilitating the development of standards.

What is BIFMA?

The mission of the Business and Institutional Furniture Manufacturer's Association (BIFMA) is to lead, advocate, inform and the CASE AVERTER PROPERTY and institutional furniture industry. BIFMA is a non-for profit that develops Voluntary Broad in the possible standards that support safe, healthy and sustainable environments in the workplace.

CONTRACT MANUFACTURERS ON GROUP PURCHASING ORGANIZATIONS CWRU belongs to e&i, us communities, iuc, tcpn, njpa, hps

AGATI

DAVIS

AIS

EGAN

JASPER

INSCAPE

SAFECO

ALLERMUIR

EMECO

IDEON)

JONTI-CRAFT

SAUDER **SEDIA**

ALLSTEEL

ENWORK

KEILHAUER

SEGIS

AMERICAN SEATING

EXEMPLIS (SIT ON IT &

KNOLL

STEEL CASE

ANDREU WORLD

Κı

STYLEX **TEKNION**

ARCADIA

GLOBAL FURNITURE GROUP

MAGNUSON GROUP

VERSTEEL

CLARIDGE

GUNLOCKE

MARTIN BRATTRUD

VITRA

CLARIN

HAWORTH

HERMAN MILLER

MAVERICK DESK

MAYLINE GROUP

WATSON FURNITURE

CLARUS GLASSBOARDS

CFGROUP (FALCON, THONET,

SHELBY WILLIAMS, HOWE)

HBF

HIGHTOWER

MITY-LITE

NEVINS

DARRAN

HON

NUCRAFT

OFS BRANDS (FIRST OFFICE, LOEWNSTEIN, CAROLINA)

think beyond the possible

WHERE TO PURCHASE CONTRACT FURNITURE

CLEVELAND FURNITURE DEALERS

Ohio Desk – steelcase

American Interiors - knoll

APG – herman miller

River City Furniture (RCF) - haworth

Environments 4 Business (e4B) – gunlocke/allsteel

Gdot – teknion

National Office Services – open lines

Contract Source – open lines

Workscape Interiors – open lines

Office Furniture Warehouse – gently used contract furniture

The City Desk Company – gently used contract furniture

CASE WESTERN RESERVE
UNIVERSITY EST. 1826
think beyond the possible

EXTEND THE USEABLE LIFE OF CONTRACT FURNITURE

RE-UPHOLSTER

schultz upholstery, wodarczyk interiors, laubacher upholstery

REFINISH

gomillion, hardwood solutions

RETROFIT EXISTING WORKSTATIONS WITH SIT STAND LEGS

National office will retrofit an existing workstation with "Gen 2" legs

RELAMINATE WORK SURFACES

Wilsonart – "re-cover" laminate surface - An innovative new option for laminate combining a pre-applied adhesive to HPL to quickly update a dated design. Suggested interior applications include store fixtures, cabinetry, furniture, doors, and other vertical surfaces.

REUSED FURNITURE

RE-UPHOLSTER KNOLL – PFISTER LOUNGE CHAIR

BEFORE

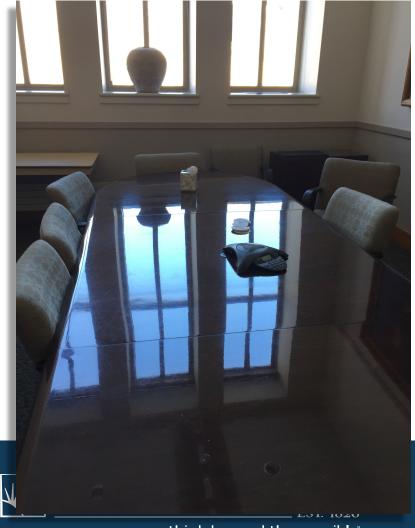


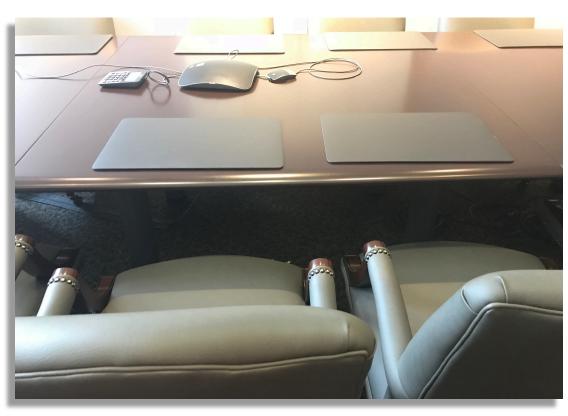


RE-FINISH GEIGER CONFERENCE TABLES

BEFORE







think beyond the possible

RE-FINISH GEIGER CONFERENCE TABLES

BEFORE AFTER





FURNITURE WITH Recycled content

LOLL DESIGNS TINK UNIVERSITY CENTER PATIO









80% RECYCLED ALUMINUM LIGHTWEIGHT, NON CORROSIVE, FIREPROOF, DESIGNED IN 1944

PRODUCTS ARE MADE WITH 100% RECYCLED HIGH-DENSITY
POLYETHYLENE (HDPE) PRIMARILY FROM MILK JUGS. MILK
JUKARENSE WESTIERIN RESERVIENT SO LOLL'S
UNIBRARTROSORSCAN BERSREATED.

think beyond the possible

COCA-COLA AND EMECO COLLABORATED TO SOLVE AN ENVIRONMENTAL PROBLEM: UP-CYCLING CONSUMER WASTE INTO A SUSTAINABLE, TIMELESS, CLASSIC CHAIR. MADE OF 111 RECYCLED PET BOTTLES

ARLET WRIGHT DIRECTOR, THE OFFICE OF THWING CENTER ENGAGEMENT AND OPERATIONS CWRU

MARK CAPURIA VICE PRESIDENT THE CITY DESK

CWRU Sustainability Team — sustainability@case.edu



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Coming Up

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11/13
  Big Green Event,
   5:00 - 8:00pm
1/17/19
  Green Bag Lunch
  Noon - 1:00pm
  How everyday chemicals affect
  our health & behavior
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