



sustain.

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Assistant to the
Provost for
Sustainability
Initiatives



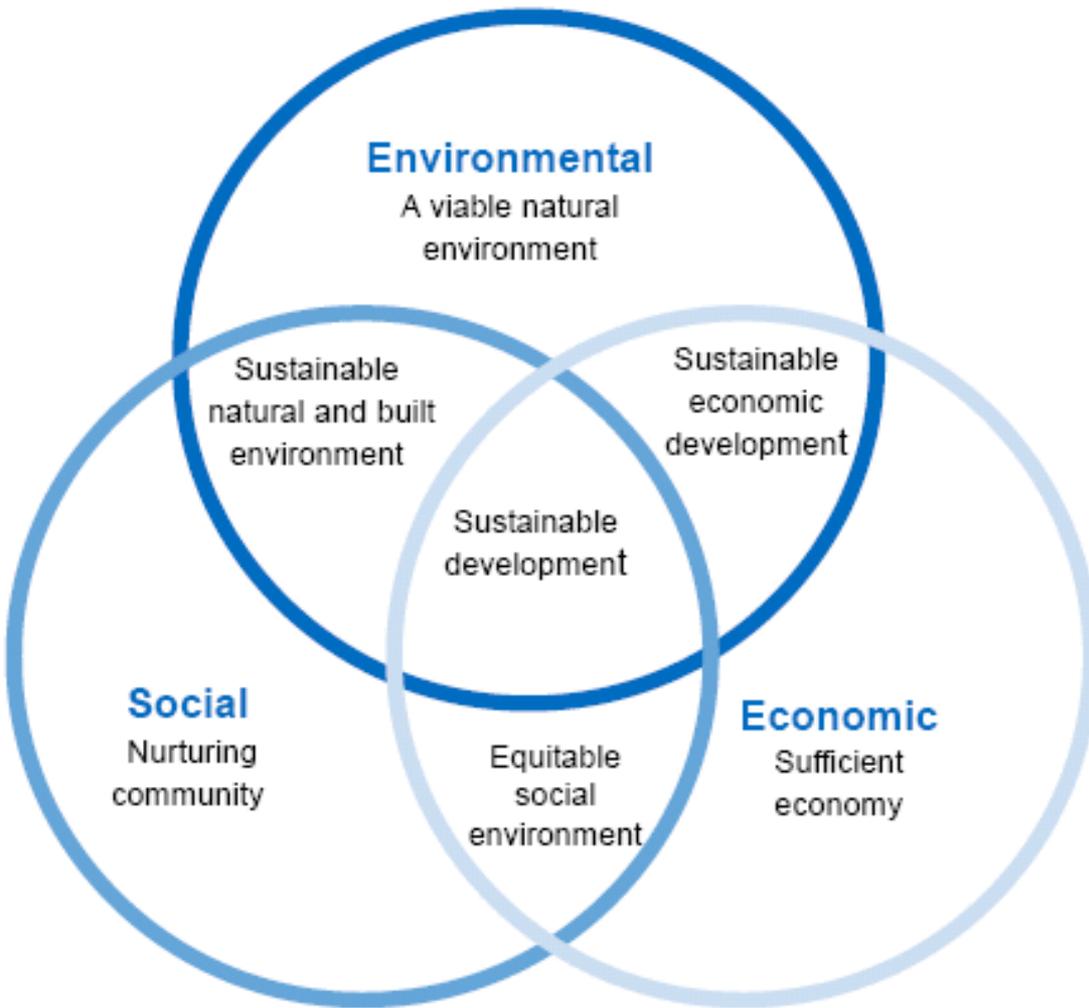
U OF Sustainability



Commitment to a Sustainable Future.

louisville.edu/sustainability

Sustainability = Balance



- Eliminating Waste & Pollution
- Eliminating Abuse & Injustice (to people, animals, planet)
- Relying on Renewable Resources
- Swapping Disposable for Durable
- Cultivating diversity (both human and ecological)
- Building Resilient Communities
- Recognizing Limits



Sustainability has been a Strategic Goal for UofL

UofL Strategic Plan (2008-2020):

“Expand our efficiency and sustainability initiatives to achieve the highest STARS rating from the Association for the Advancement of Sustainability in Higher Education.”



SIGNATORY OF
AMERICAN COLLEGE & UNIVERSITY
PRESIDENTS' CLIMATE COMMITMENT



UofL's 2019 STARS Report

Rating:	<u>Score</u>	<u>Max.</u>	<u>Percentage</u>
Gold	66.24	100	66.24%
<u>Category</u>			
Engagement	32.26	41.0	78.68%
Planning & Administration	22.48	32.0	70.25%
Academics	33.03	58.0	56.95%
Operations	37.34	70.0	53.34%
https://reports.aashe.org			



Historical Comparison:	Year	STARS Rating	Overall Score	Academics	Operations	Planning & Admin.	Engagement
	2019	Gold	66.24%	56.95%	53.34%	70.25%	78.68%
	2016	Gold	65.19%	56.45%	43.41%	72.59%	88.90%
	2013	Silver	58.29%	51.95%	31.60%	79.31%	n/a
	2011	Silver	50.11%	54.59%	28.54%	67.21%	n/a

UofL is the most sustainable school in KY

Kentucky Schools

University of Louisville	2019	Gold	66.24
Berea College	2017	Gold	65.95
Jefferson Comm. & Tech. College	2014	Silver	58.80
Western Kentucky University	2017	Silver	54.15
Madisonville Community College	2015	Silver	47.07
University of Kentucky	2015	Silver	45.25
Transylvania University	2015	Bronze	40.58
Eastern Kentucky University	2018	Bronze	38.32
Hopkinsville Community College	2013	Bronze	32.13

CPE Benchmarks for UofL

University of California - Irvine	2018	Platinum	86.82
Univ. of North Carolina-Chapel Hill	2017	Gold	71.75
University of California - San Diego	2018	Gold	69.02
University of Cincinnati-Main Campus	2017	Gold	67.83
University of Louisville	2019	Gold	66.24
University of South Florida	2018	Gold	65.35
Virginia Commonwealth University	2018	Silver	60.83
University of Iowa	2018	Silver	59.34
University of Utah	2017	Silver	58.55
University of Illinois at Chicago	2018	Silver	54.91
Temple University	2018	Silver	50.04
University of Pittsburgh-Main Campus	2018	Silver	49.76
University of Alabama at Birmingham	2016	Silver	46.59
University of South Carolina-Columbia	2016	Expired	
SUNY at Buffalo			
SUNY at Stony Brook			
University of New Mexico			
Wayne State University			

ACC Schools

Virginia Tech	2017	Gold	71.94
North Carolina	2017	Gold	71.75
Virginia	2018	Gold	66.30
University of Louisville	2019	Gold	66.24
North Carolina State	2016	Gold	65.87
Wake Forest	2018	Gold	65.53
Notre Dame	2017	Silver	63.29
Florida State	2015	Silver	61.36
Clemson	2018	Silver	53.85
Syracuse	2018	Silver	53.65
Miami	2017	Silver	52.77
PITT	2018	Silver	49.76
Boston College	2018	Reporter	
Duke	2015	Reporter	
Georgia Tech	2012		

Other Gold schools in the Southeast US

Appalachian State	2015	Gold	77.24
Florida Gulf Coast University	2017	Gold	72.05
Furman University	2018	Gold	71.65
George Mason University	2017	Gold	70.78
Emory University	2017	Gold	70.12
UNC Greensboro	2015	Gold	69.60
University of Georgia	2017	Gold	66.29
University of Louisville	2019	Gold	66.24
James Madison University	2018	Gold	65.92
Agnes Scott College	2018	Gold	65.20
University of Arkansas	2017	Gold	65.20

Aligning our STARS toward Platinum

Academics

Greatest Weaknesses

Curriculum

Strategies for Improvement

AC-1: Academic Courses	1. Increase up to 20+% of all courses offered which are sustainability-focused and/or sustainability-related courses (currently 5.86%). 2. Increase up to 90+% of academic departments that offer at least one sustainability-focused or sustainability-related course (currently 49.4%).
AC-2: Learning Outcomes	Increase up to 100% of students who graduate from programs that have adopted at least one sustainability learning outcome (currently 14.7%).
AC-6: Sustainability Literacy Assessment	Administer a sustainability literacy assessment to the entire student body or, at minimum, to all undergraduates, directly or by representative sample. Double points for administering as a pre- and post-assessment to the same cohort of students or to representative samples in both the pre-test and post-test.

Research

AC-9: Research and Scholarship	1. Increase up to 15+% of research-producing faculty and staff that are engaged in sustainability research (currently 10.9%). 2. Increase up to 75+% of research-producing departments that are engaged in sustainability research (currently 35.8%).
AC-11: Open Access to Research	UofL (or divisions) needs to publish an open access policy that ensures that versions of future scholarly articles by faculty and staff are deposited in a designated open access repository. The policy may allow for publisher embargoes and/or provide a waiver option that allows faculty to opt-out of the open access program for individual articles. Strictly voluntary (opt-in) programs do not earn points unless UofL also provides financial incentives to support faculty with article processing and other open access publication charges. The repository may be managed by UofL or we may participate in a consortium/outsourced open access repository.

Aligning our STARS toward Platinum

Engagement

Greatest Weaknesses

Campus Engagement

Strategies for Improvement

EN-6: Assessing Sustainability Culture	Administer a longitudinal assessment of sustainability culture (i.e. values, behaviors and beliefs) to the entire campus community, directly or by representative sample
EN-9: Staff Professional Development	Get 75+% of regular (full-time and part-time) staff to participate annually in sustainability professional development & training that is either provided or supported by the institution

Public Engagement

EN-11: Inter-Campus Collaboration	<ol style="list-style-type: none"> 1. Submit a case study during the previous year to a sustainability resource center or awards program that is inclusive of multiple campuses; 2. Have staff, students, or faculty serving on a board or committee of a sustainability network or conference during the previous three years; 3. Have an ongoing mentoring relationship with another institution through which it assists the institution with its sustainability reporting and/or the development of its sustainability program; 4. Have staff, faculty, or students serving as peer reviewers of another institution's sustainability data (e.g. GHG emissions or course inventory) and/or STARS submission during the previous three years
EN-12: Continuing Education	Courses that address sustainability comprise 10+% of all continuing education courses offered. Offer at least one sustainability-themed certificate program through continuing education department.
EN-13: Community Service	Engage the entire student body in community service. Engage students in an average of 20+ hours of community service per year.
EN-15: Trademark Licensing	Rejoin as a member of the Worker Rights Consortium (WRC) and/or the Fair Labor Association (FLA).

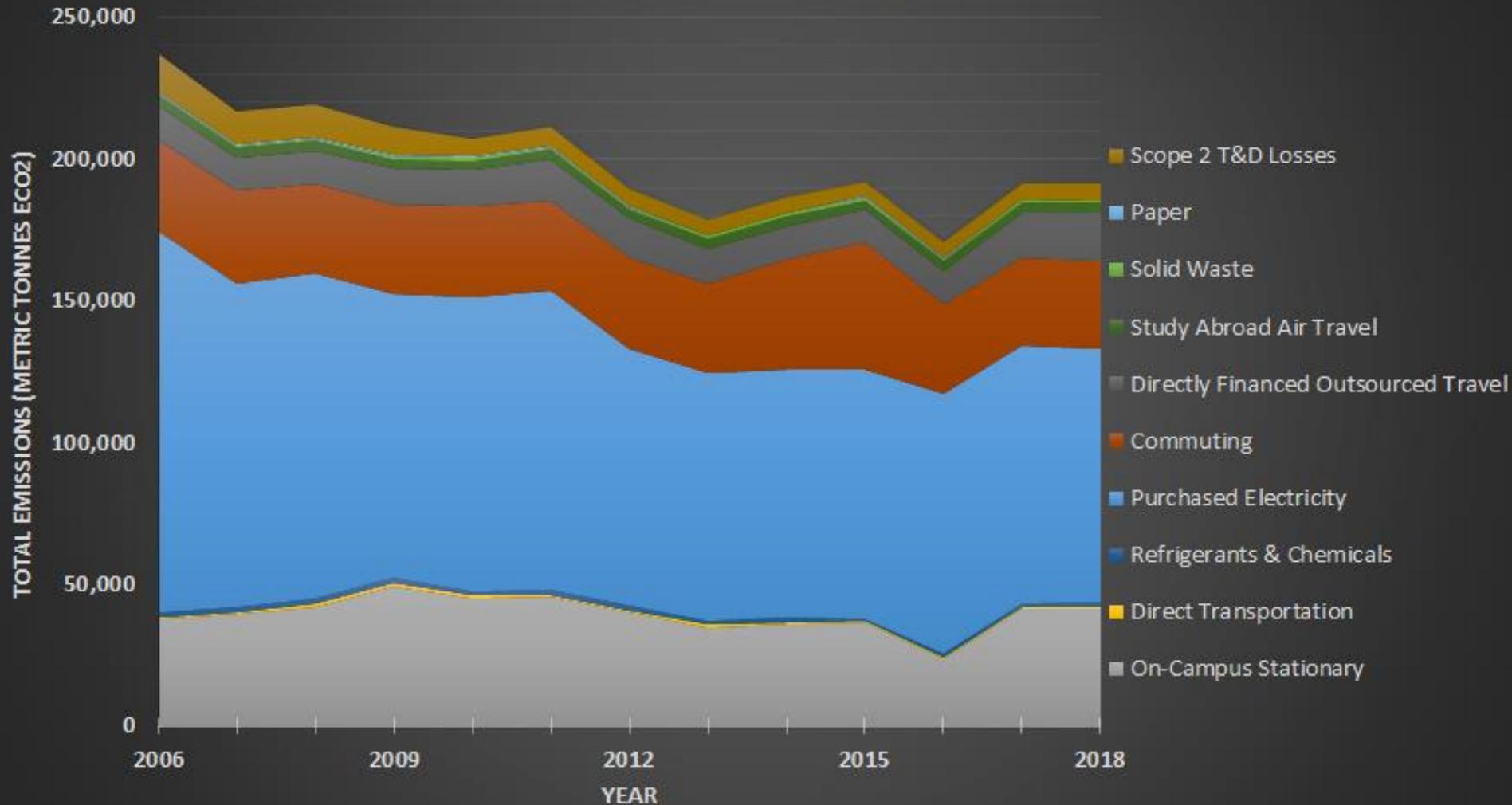
<u>Operations</u>	Greatest Weaknesses
	Strategies for Improvement
Air & Climate OP-1: Greenhouse Gas Emissions	Reduce GHGs per capita and per sq ft building space (points for reductions below 0.02 MtCO2e/sf - currently 0.013) See: Climate Action Plan
Buildings OP-3: Building Operations and Maintenance	Certify building space as LEED for Existing Buildings: Operations & Maintenance. And/or operate & maintain in accordance with sustainable policies, including: Indoor air quality (IAQ) management policy or protocol; Green cleaning policy, program or contract; Energy management or benchmarking program; or Water management or benchmarking program.
OP-4: Building Design and Construction	Increase % of building space completed during the previous five years which is LEED (or Living Building Challenge) certified and increase LEED rating levels.
Energy OP-5: Building Energy Consumption	Reduce building energy consumption per sf by 50%; and annual building energy consumption to 90% below the minimum performance threshold of 65 Btu/sf/degree day.
OP-6: Clean and Renewable Energy	Obtain energy from renewable sources (on or off site) and/or purchase RECs or green power from the electric utility up to 100% of total campus energy consumption
Food & Dining OP-7: Food and Beverage Purchasing	Reduce below 30% total expenditure on conventional animal products (currently 26.6%); and/or Increase up to 75% of food & beverage purchases as third party verified and/or sourced from local community-based producers.
Grounds OP-9: Landscape Management	Increase % of grounds managed in accordance with an organic land care standard or sustainable landscape management program that has eliminated the use of inorganic fertilizers and chemical pesticides, fungicides and herbicides.
Purchasing OP-12: Electronics Purchasing	Increase % of computers, tablets/slates, televisions and imaging equipment purchased that are EPEAT certified - more points for higher levels up to Gold.
OP-14: Office Paper Purchasing	Increase % of post-consumer recycled, agricultural residue, and/or FSC certified content in office paper purchased.
Transportation OP-15: Campus Fleet	Increase % of motorized vehicle fleet that are: hybrid, EV, CNG, hydrogen, B20+ (or or locally produced B5) biofuel for more than 4 months of the year.
OP-16: Student Commute Modal Split	Increase % students walking, bicycling, vanpooling, carpooling, taking public transportation, riding motorcycles or scooters to campus.
OP-17: Employee Commute Modal Split	Increase % employees telecommuting, walking, bicycling, vanpooling, carpooling, taking public transportation, riding motorcycles or scooters to campus.
Waste OP-19: Waste Minimization and Diversion	Reduce the total amount of waste generated (materials diverted + materials disposed) per capita relative to baseline and below the minimum performance threshold of 0.5 tons/weighted campus user. Excludes construction, demolition, electronic, hazardous, special (e.g. coal ash), universal and non-regulated chemical waste.
Water OP-22: Water Use	Reduce potable water use per capita, per sf building space, and/or per vegetated acre by up to 30% relative to 2006 baseline.

Aligning our STARS toward Platinum

Planning & Administration	Greatest Weaknesses
Coordination & Planning	Strategies for Improvement
PA-2: Sustainability Planning	Create and release a published sustainability plan that includes measurable sustainability objectives that address Investment & Finance.
PA-3: Participatory Governance	Develop written policies and procedures to identify and engage local residents in land use planning, capital investment projects, and other institutional decisions that affect the community.
Diversity & Affordability	
PA-4: Diversity and Equity Coordination	Ensure that ALL students, staff, and faculty participate in cultural competence trainings and activities.
PA-5: Assessing Diversity and Equity	Implement an assessment process that addresses student outcomes related to diversity, equity and success (e.g. graduation/success and retention rates for underrepresented groups) AND that addresses employee outcomes related to diversity and equity (e.g. pay and retention rates for underrepresented groups).
PA-7: Affordability and Access	Increase % of entering students that are low-income or aid eligible & graduation rate for low-income students or aid eligible students. Increase % of aid need met & % of students graduating with no interest-bearing student loan debt.
Investment & Finance	
PA-9: Sustainable Investment	Increase % of investment pool in sustainable industries, businesses selected for exemplary sustainability performance, sustainability investment funds, CDFIs, socially responsible mutual funds, or green revolving loan funds. Meet all of the investor engagement criteria.
PA-10: Investment Disclosure	Make a snapshot of UofL's entire investment holdings publicly available, including specific funds/companies and proxy voting record.
Wellbeing & Work	
PA-11: Employee Compensation	Increase % of employees and on-campus contract workers receiving a living wage (currently \$15.42/hr). Total compensation provided to lowest paid regular employee or pay grade meets or exceeds 200% of the living wage.
PA-14: Workplace Health and Safety	Reduce recordable workplace injuries and occupational disease cases to under 6 per 100 FTE employees in a year.

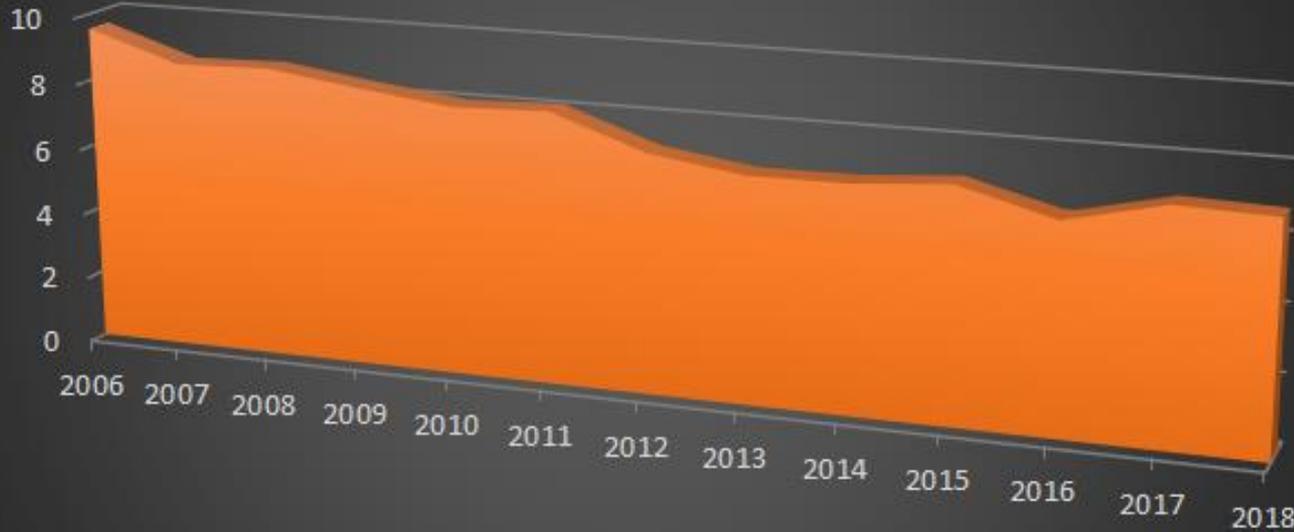
UofL's Carbon Footprint Decreased 13%

UofL Greenhouse Gas Emissions
(Metric Tons eCO₂)



Metric Tons eCO₂ per capita
(Students+Faculty+Staff)

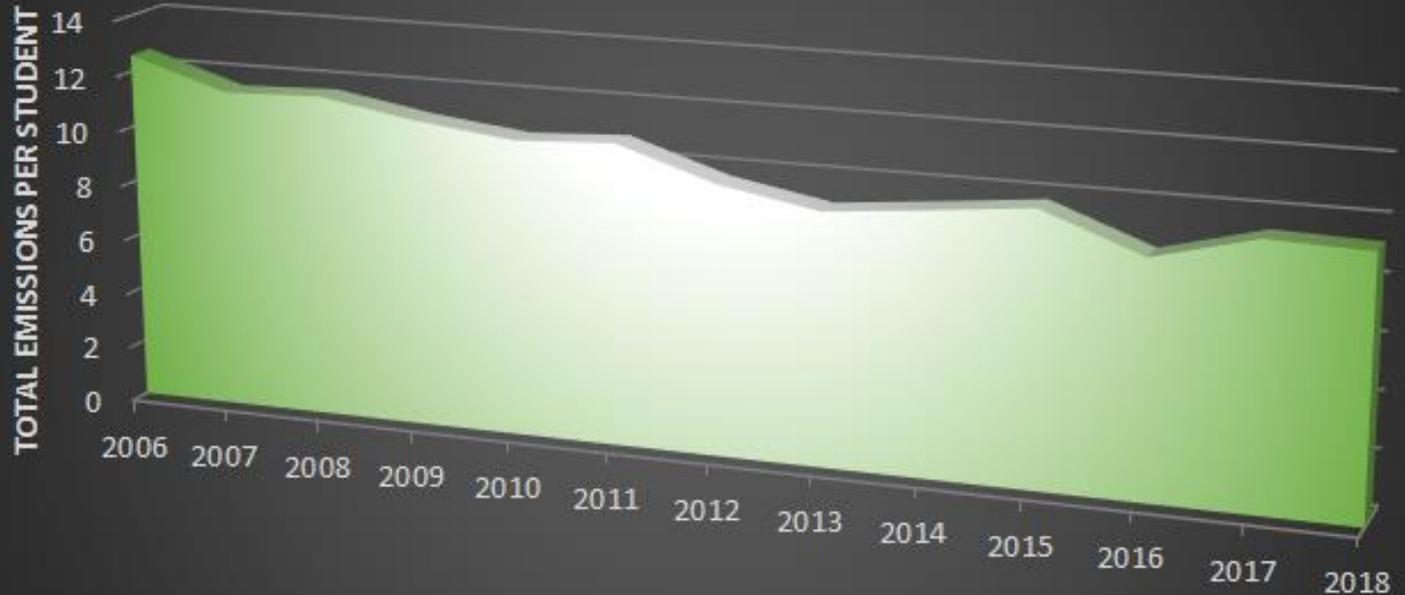
TOTAL EMISSIONS PER CAPITA



**Decreasing
emissions
even as we
grow**

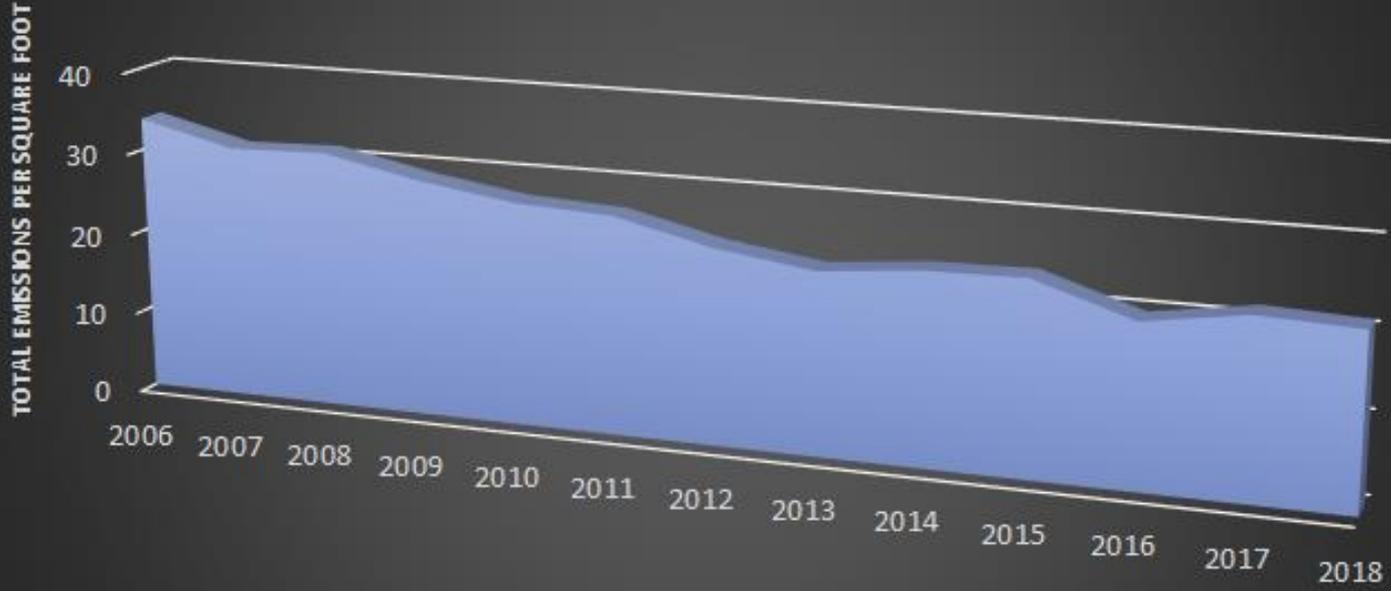
Metric Tons eCO₂ / Student

TOTAL EMISSIONS PER STUDENT



**Per capita
emissions
down
22%**

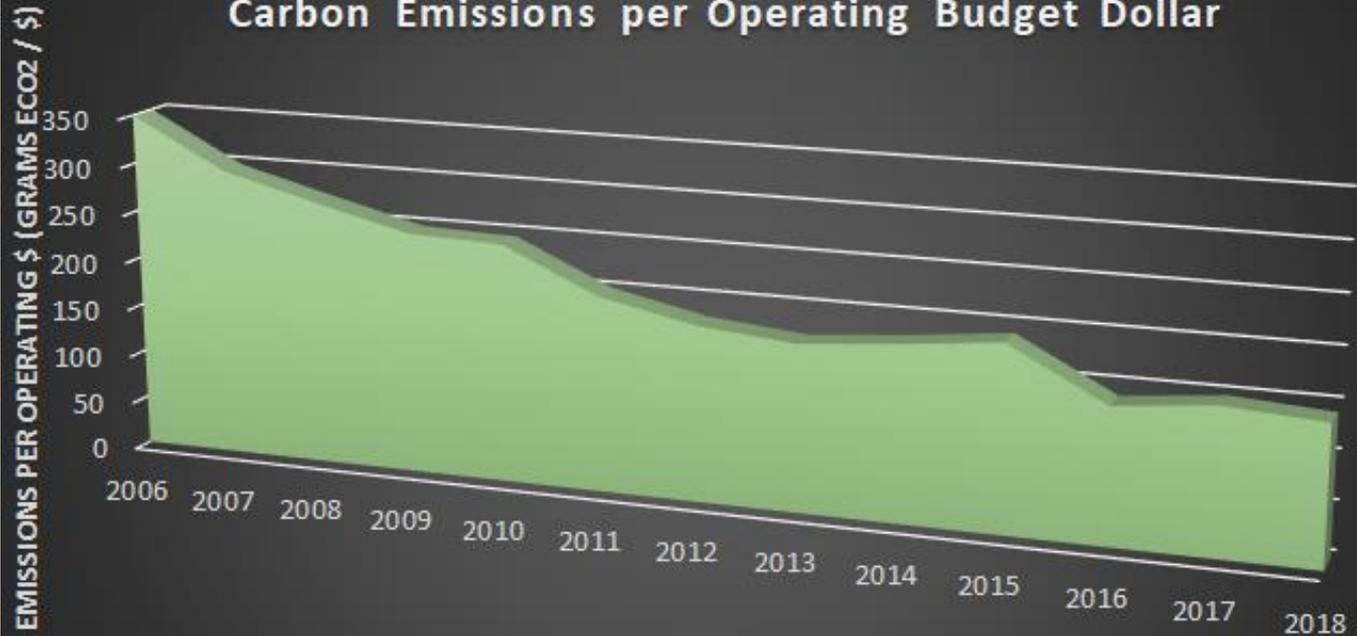
kg eCO2 / Square Foot Building Space



**Emissions
per sf
down
33%**

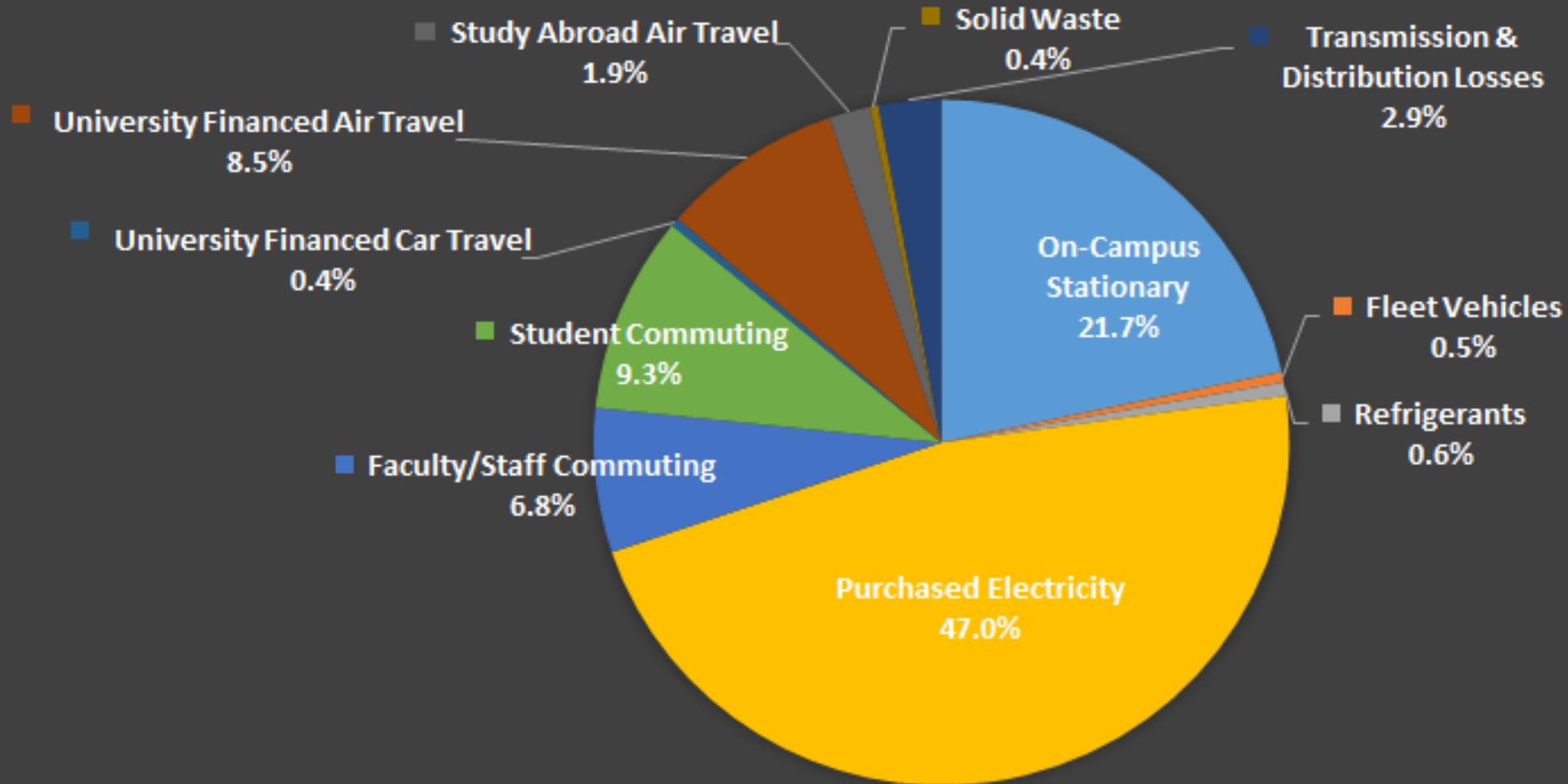
**Emissions
per dollar
down
48%**

Carbon Emissions per Operating Budget Dollar



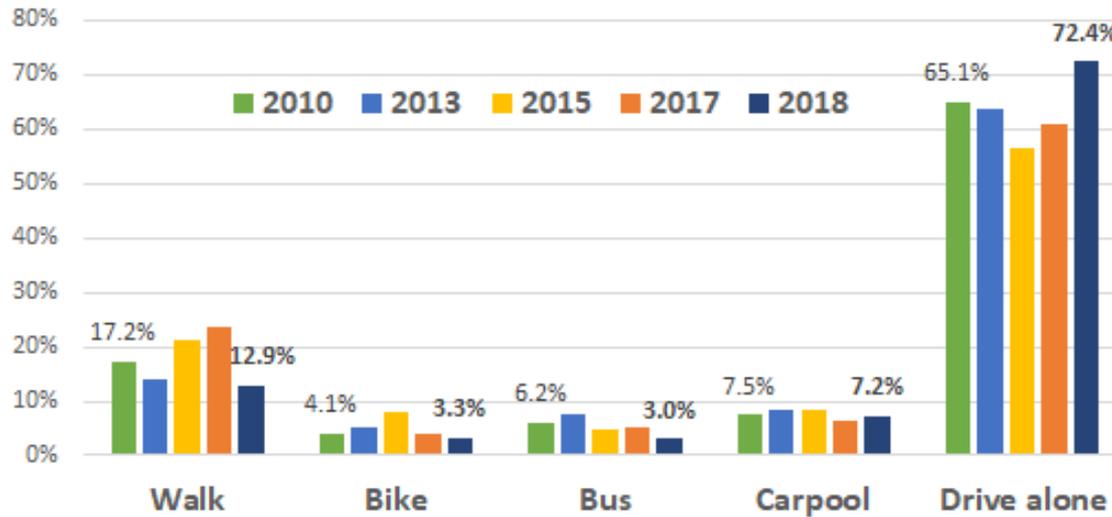
UofL's Carbon Emissions by Source

UOFL GREENHOUSE GAS EMISSIONS BY SOURCE (2018)

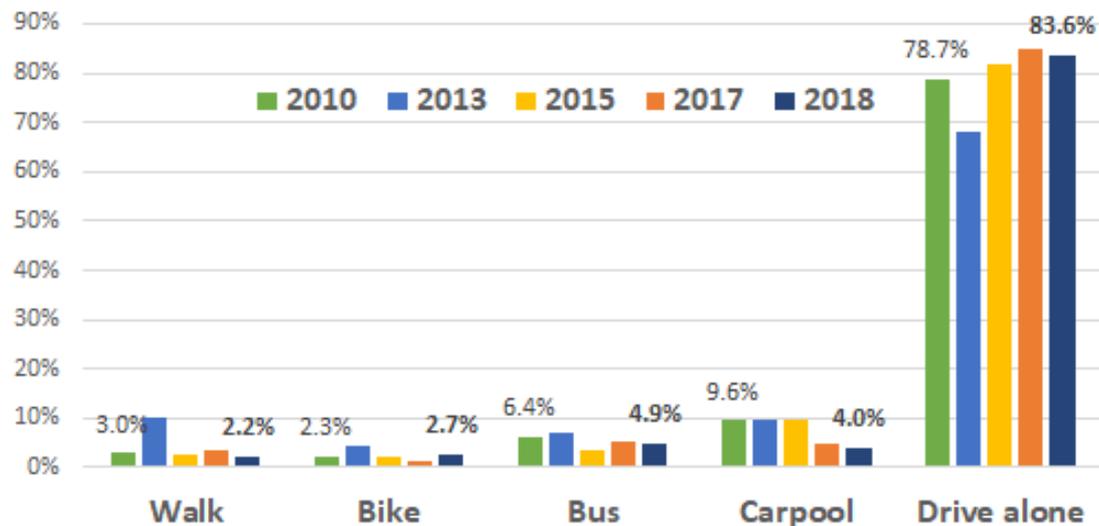


Transportation = 27% of emissions

UofL Students - Primary Commute Mode

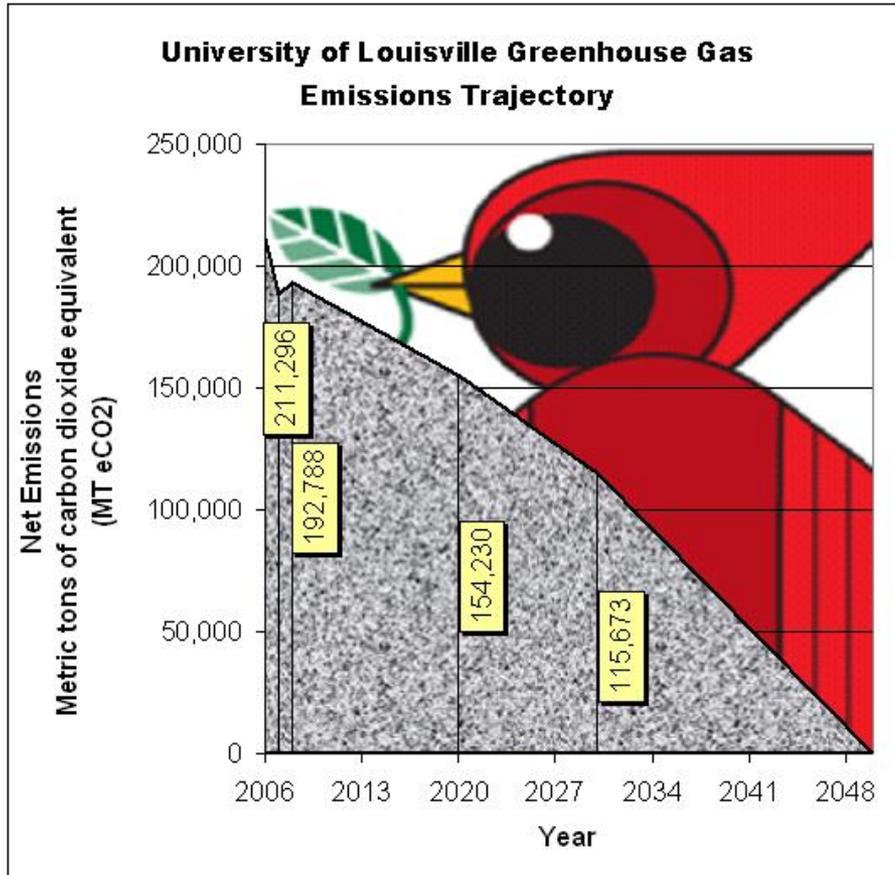


UofL Employees - Primary Commute Mode



UL Climate Action Plan

September 2010



How to achieve our goals:

- 1. Reduce driving through a Transportation Demand Management Plan** that invests in and incentivizes alternatives, caps parking, and transitions UofL from highly subsidized annual parking permits to market-rate, pay-per-use parking that subsidizes alternatives.
- 2. Invest in large-scale renewable energy, behavior change, and energy efficiency** measures beyond the scope of the recent performance contract.
- 3. Explore carbon offsetting and sequestration** solutions that would benefit our campus, community, and region.

UL Sustainability

Commitment to a Sustainable Future. It's Happening Here.

2018 Recycling Report



Total Solid Waste Generated at UofL

In 2018, we produced over 1 pound/person/day of waste



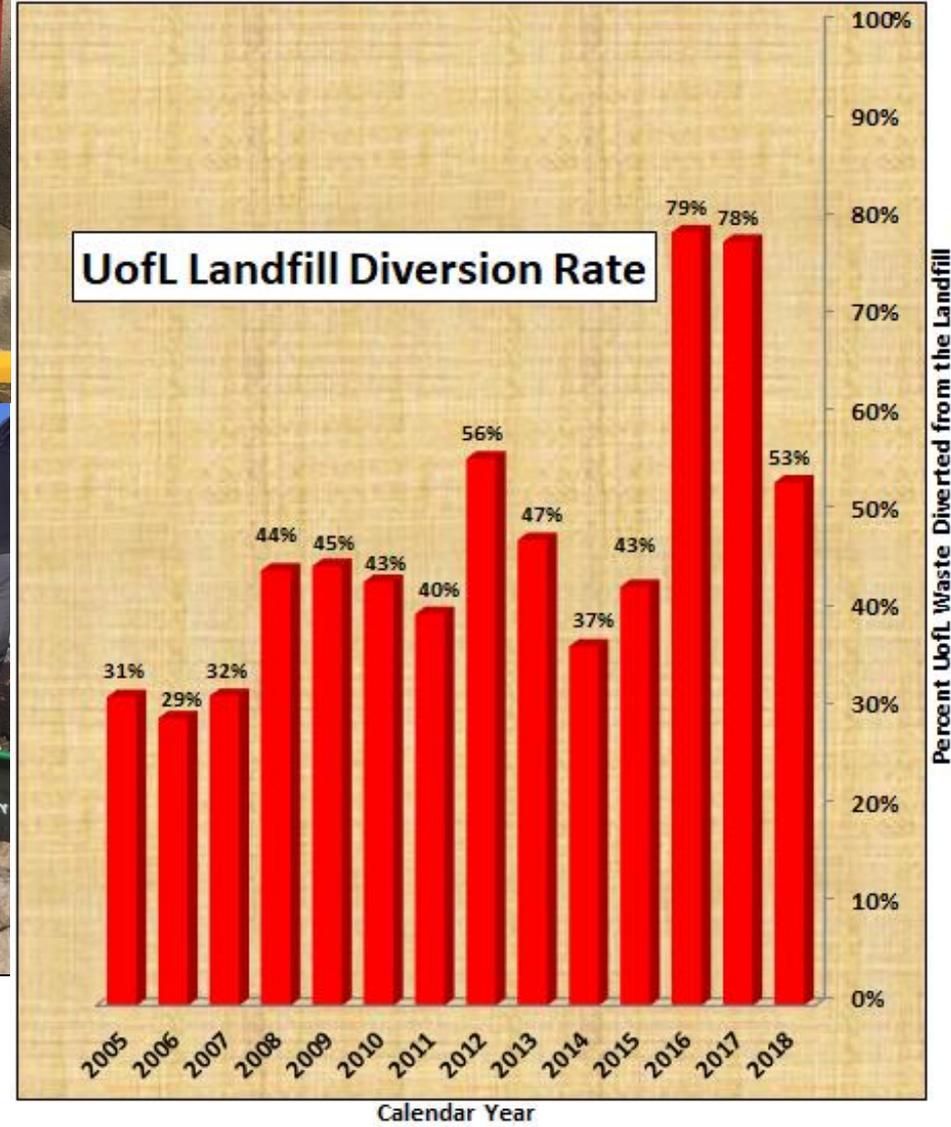


Recycling

- Single-stream recycling
- BLINKED = Batteries, Lamps, INK cartridges & Electronic Devices
- Exchange and reuse
- Composting



UofL Landfill Diversion Rate



Faculty Roles

1. Participate in our annual **Green Threads** faculty workshop (apply by 8/1)
2. **Code your courses** with sustainability content on your CIF as –related or -focused
3. Teach classes & advise students in **interdisciplinary Sustainability Major/Masters**
4. Engage in collaborative, interdisciplinary research & participate in the **Sustainability Roundtable**
5. Employ **Campus as a Living Laboratory** of Sustainability in your research & classes
6. **Lead by example** – share your sustainable actions
7. **Participate** in the Sustainability Council; become an EcoRep; advocate for sustainable policies & practices in your department & governing bodies

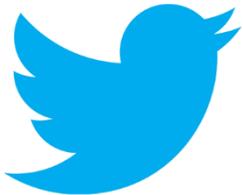




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