



FIRST ANNUAL CLIMATE SUMMIT

April 21,
2014



Institute for
Sustainable
Practices

AMERICAN COLLEGE AND UNIVERSITY PRESIDENTS' CLIMATE COMMITMENT

- Signed by 680 Colleges and Universities
- Commitment to:
 - Develop and implement a plan to become carbon neutral
 - Track greenhouse gas emissions
 - Make climate neutrality and sustainability a part of the curriculum and other educational experience for all students



Lane's
President
Mary Spilde

WHAT IS CARBON NEUTRAL?

- Having no net greenhouse gas (GHG) emissions



LANE'S COMMITMENT: CARBON NEUTRAL BY 2050

■ 5 Strategies

- Energy Efficiency
- Renewable Energy
- Transportation and Land Use
- Reduced Waste and Purchasing
- Adaptation-Education-Habitation

■ 61 Actions

■ 1 Goal: Carbon Neutral by 2050



5 Strategies

Energy Efficiency
Renewable Energy
Transportation & Land Use
Reduced Waste & Purchasing
Adaptation-Education-Habitation

61 Actions

Actions we can all
take to help reach our
goal

1 Goal

Carbon Neutral by
2050

WHY CARBON NEUTRAL BY 2050?

- 2000-2011 was the hottest period on record and included ten of the eleven warmest years with 329 consecutive months having temperatures higher than the 20th Century average.



Hansen et al., PNAS. 2012

WHY CARBON NEUTRAL BY 2050?

“Realities of the Environmental Century” [21st]

1. The pace of ecological change is *accelerating*.
2. Communities, ecosystems and biomes *will change* in fundamental ways.
3. *Much will be lost*. How much depends on what we do now.
4. 20th century paradigms for conservation are *inappropriate*.
5. Because of environmental and resources limitations, *economic growth will cease* sometime this century.
6. Adaptation in *food production* must begin now and anticipate change (resilience).”

-Stephen Mulkey, PhD, President, Unity College

WHY CARBON NEUTRAL BY 2050?

- Reasonable stretch goal.
- If we all work together, we can do this.



WHAT HAVE WE DONE?

2006

Signed the American College and University Presidents' Climate Commitment

2007

Adopted sustainability core value

Committed to

ACUPCC "tangible actions":

1. participate in recycling competition
2. adopt an energy-efficient appliance purchasing policy

2008

Inventoried greenhouse gas emissions

2009

Won 9th place in recycling competition out of 148 colleges and universities

2010

Submitted Climate Action Plan

Inventoried greenhouse gas emissions

Adopted sustainability strategic direction



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WHAT HAVE WE DONE?

2011

Implemented
Climate Action
Plan strategies

2012

Inventoried
greenhouse gas
emissions

Implemented
Climate Action
Plan strategies

2013

Submitted
progress report
to ACUPCC

Implemented
Climate Action
Plan strategies

2014

Improving
greenhouse gas
emissions inventory

Sustainability
Committee **focusing**
on climate action plan
projects

Improving Climate
Action Plan strategies

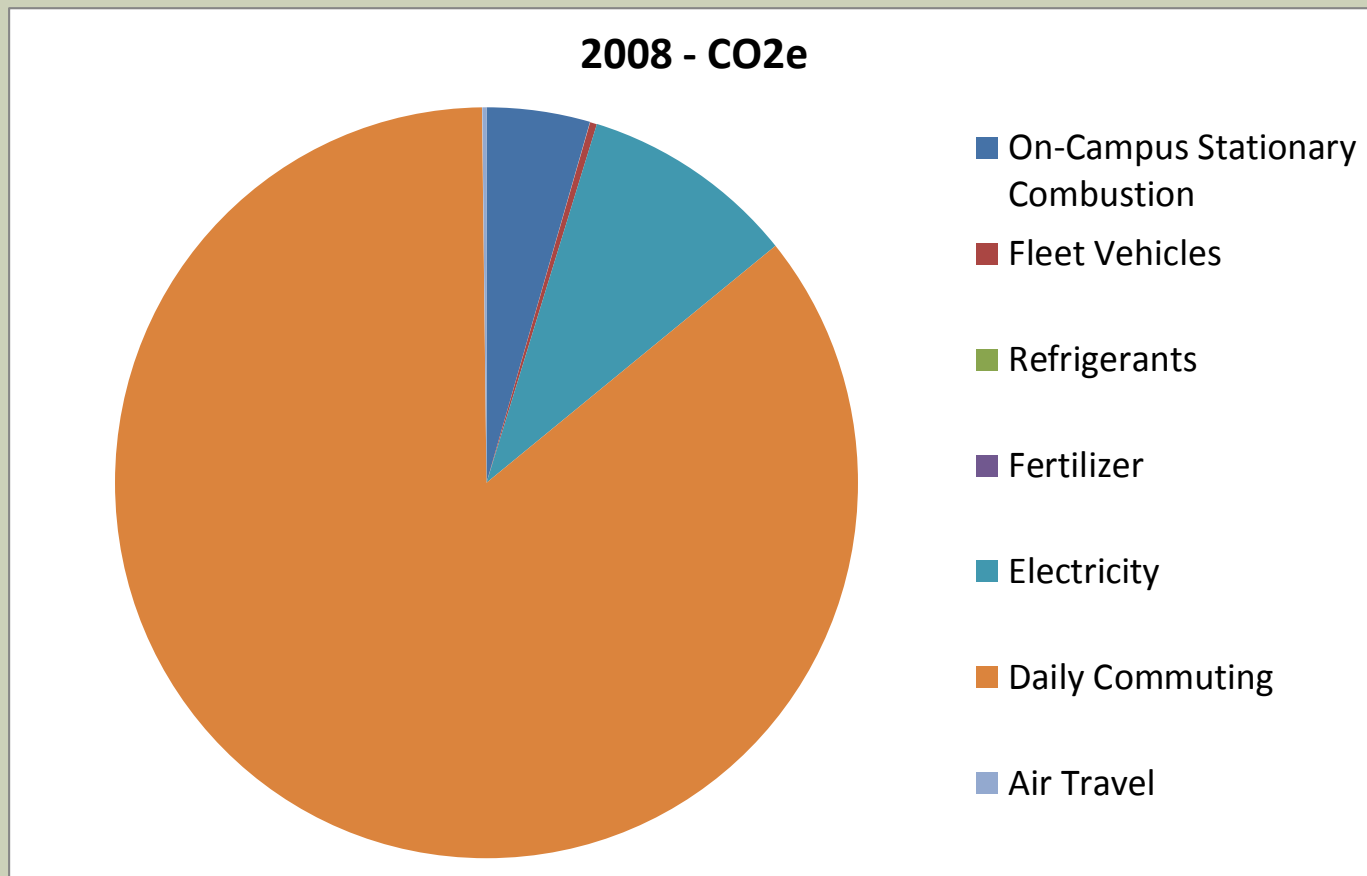
Educating students
and employees on
Climate Action Plan



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GREENHOUSE GAS INVENTORY - 2008

61,845 MT CO₂e












STATUS OF 61 ACTIONS













Strategy 1: Energy Efficiency 12 actions

- | | |
|----|---|
| 1 |  |
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| 11 |  |
| 12 |  |








Strategy 2: Renewable Energy 9 actions

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| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |

Strategy 3: Transportation and Land Use 14 actions

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| 7 |  |
| 8 |  |
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| 10 |  |
| 11 |  |
| 12 |  |
| 13 | |
| 14 | |

Strategy 1: Energy Efficiency 12 actions

- | | |
|----|---|
| 1 |  |
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| 10 |  |
| 11 |  |
| 12 |  |

 = complete  = started  = not started

STATUS OF 61 ACTIONS

Strategy 2 - Renewable Energy		
Actions	Complete	Status
13. On-Site Generation – Solar Electric - 43 kW	X	
14. On-Site Generation – Solar Thermal	X	In repair
15. On-Site Generation – Geothermal - Buildings 24, 25, 26, 27	X	
16. Purchased Resources - 10% EWEB Greenpower; 25% EPUD Greenpower	X	
17. Update Solar Energy Master Plan		Not started
18. On-site Generation – Main Campus		
a. Continue with small annual solar installations that are funded by Lane's revolving loan fund.		Not started
b. Include solar thermal in the upgrade to the main campus central plant. Lane's central plant uses natural gas fired boilers for campus heating water.		Changed to geothermal
c. Invest funds from business energy tax credits into a solar station for the east parking lot.		Not started
19. On-site Generation – Downtown Campus	X	
20. Finish Connecting Solar Electric at Building 24	X	
21. Carbon Neutral Energy Purchased from Utility Providers - 25% EWEB Greenpower; 10% Northwest Natural; Develop long term strategy for 100%		Not started

STATUS OF 61 ACTIONS

Strategy 3 - Transportation & Land Use		
Actions	Complete	Status
22. Reducing Emissions from Daily Commuting (LTD group bus pass program, emergency ride home, carpool matching, bike parking, solar station)	X	On Going
23. Reducing Emissions from Fleet Vehicles	X	
24. Preserving Forested and Wetland Properties	X	On Going
25. Improve Methods for Measuring Emissions from Transportation		In Process
26. Improve Access for Bicyclists		Started
27. Continue to Improve Accessibility, Convenience, and Sustainability of Public Transit		Started
28. Carpool		In Process
29. Improve Access for Lower-Emitting Vehicles		In Process
30. Expand Outreach, Marketing and Education About Climate-Friendly Transportation Alternatives		In Process
31. Greening the Fleet		Not Started
32. Parking Fee/Financing of Climate-Friendly Transportation		Not Started
33. Integrate the Climate Action Plan with Other College Plans and Policies		In Process
34. Air Travel - Track air miles and promote web-based conferencing		In Planning
35. Offsets		
Develop a plan for purchasing or documenting offsets that will mitigate remaining emissions from transportation.		Not Started

STATUS OF 61 ACTIONS

Strategy 4 - Reduced Waste and Purchasing		
Actions	Complete	Status
36. Composting	X	On Going
37. Surplus Property Reuse	X	On Going
38. New Recycling Center	X	
39. Built-In Recycling and Waste Collection in New Remodels		In Process
40. Energy Efficient Hand Dryers		In Process
41. Green Purchasing Policies	X	
42. Green Cleaning Chemicals	X	On Going
43. Incentives to Reduce Paper Use and Printers		In Process
44. Bookstore, Library, and Student Learning Center offering more paperless solutions	X	On Going
45. Expand Surplus Property		Not Started
46. Expand the Reusable Office Supply Exchange	X	
47. Provide Composting Collection Stations in More Locations	X	On Going
48. Encourage Green Purchasing Practices	X	
49. Develop and Implement Strategies to Reduce the Use of Common Disposables		
a. Fewer desk top printers in offices. Promote and encourage paperless processes.		In Process
b. Take Back The Tap	X	

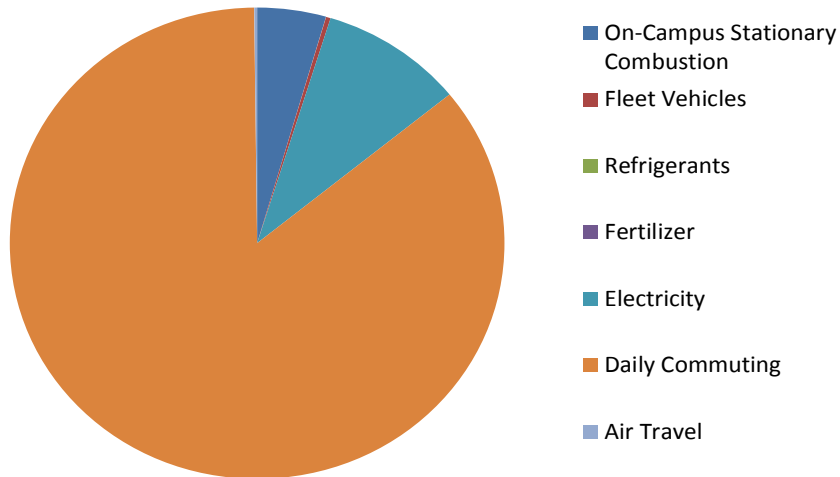
STATUS OF 61 ACTIONS

Adaptation / Education / Habituation		
Actions	Complete	Status
50. Sustainability Degrees	X	On Going
51. Sustainability Suggested Course of Study		In Process
52. Sustainability-Focused Courses - Develop application	X	On Going
53. Sustainability-Infused Courses - Training for 105 Instructors	X	
54. Campus Learning Laboratory	X	On Going
55. Events and Marketing	X	On Going
56. Infusion of Sustainability Across the Curriculum		In Planning
57. Sustainability-Focused Courses		
a. Increase the number of sustainability-focused courses: Develop methods for encouraging faculty to submit applications for sustainability course status.		Not started
b. Improve visibility of courses: Designate sustainability-focused courses in print and online catalogues.	X	
58. Sustainability Education in Targeted Areas		Started
59. Campus Learning Laboratory		
a. Install a solar training lab on the main campus.		Upcoming Bond
b. Construct a new downtown campus that acts as an energy efficiency and renewable energy training laboratory.	X	
c. Improve the use of campus buildings as learning laboratories.		
o Install a building automation system that students can view online.		In Planning
o Install a web-based front end to the building level sub-metering system so that students can view real-time energy use.		In Planning
60. Events and Marketing		
a. Offer two to four events per year that are open to students, employees, and the community.	X	On Going
b. Improve sustainability website and update it frequently.	X	On Going
c. Hold a one day conference for Lane employees focused on implementing Lane's sustainability strategic direction and climate action plan in 2011.	X	
d. Utilize a wide variety of communication mechanisms to promote and celebrate sustainable and climate friendly activities.	X	On Going
61. Graduation Requirement		Not started

GREENHOUSE GAS INVENTORY - 2012

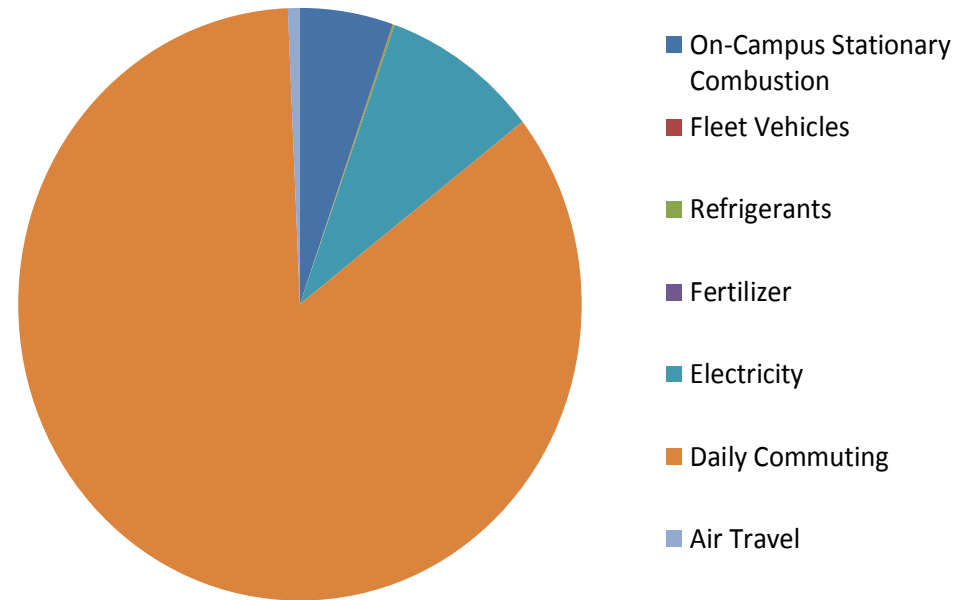
61,845 MT CO₂e

2008 - CO₂e



67,811 MT CO₂e

2012 - CO₂e

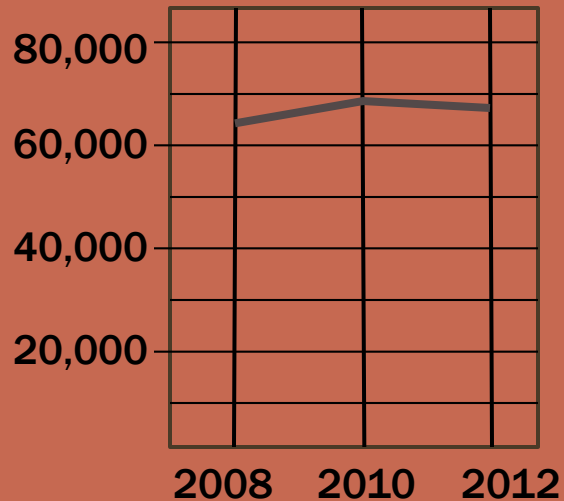


10%

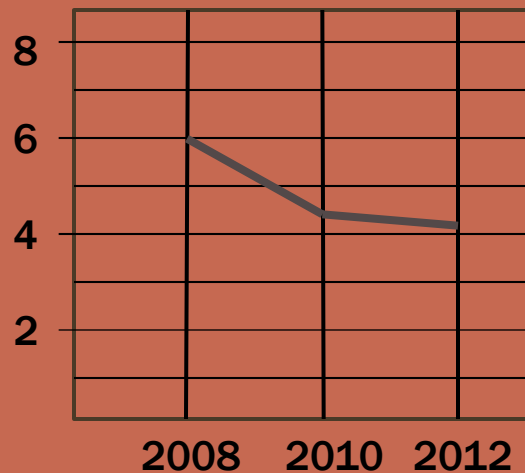


INVENTORY TRENDS

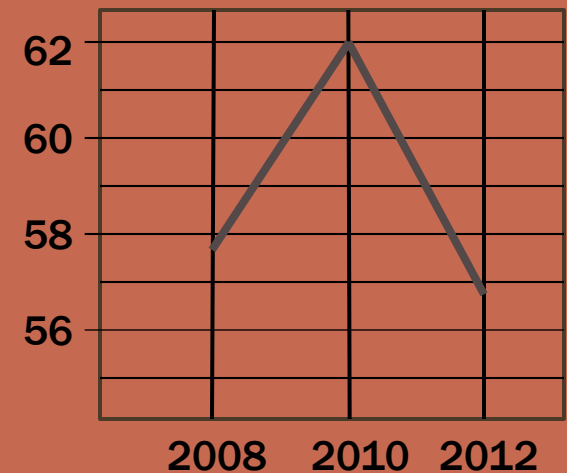
Total emissions in metric tons CO₂ equivalent



Emissions per FTE in metric tons CO₂ equivalent



Emissions per 1000 ft² in metric tons CO₂ equivalent



WHAT ARE WE DOING? THIS YEAR

- Institute for Sustainable Practices
- Sustainability Committee Focus
- Health and Wellness Fair Healthy Transportation Habits Table
- Central Plant Sustainability Study
- Inventory Process Improvement
- Workshop: Planning for 35% Building Energy Use Reduction.
- Transportation Habits Survey
- Earth Day Focus on Healthy Transportation Habits
- Climate Action and Education Forum
- Outdoor standard for recycling collection
- Weekly, Facebook, Twitter, Torch

FUTURE – ENERGY EFFICIENCY AND RENEWABLE ENERGY

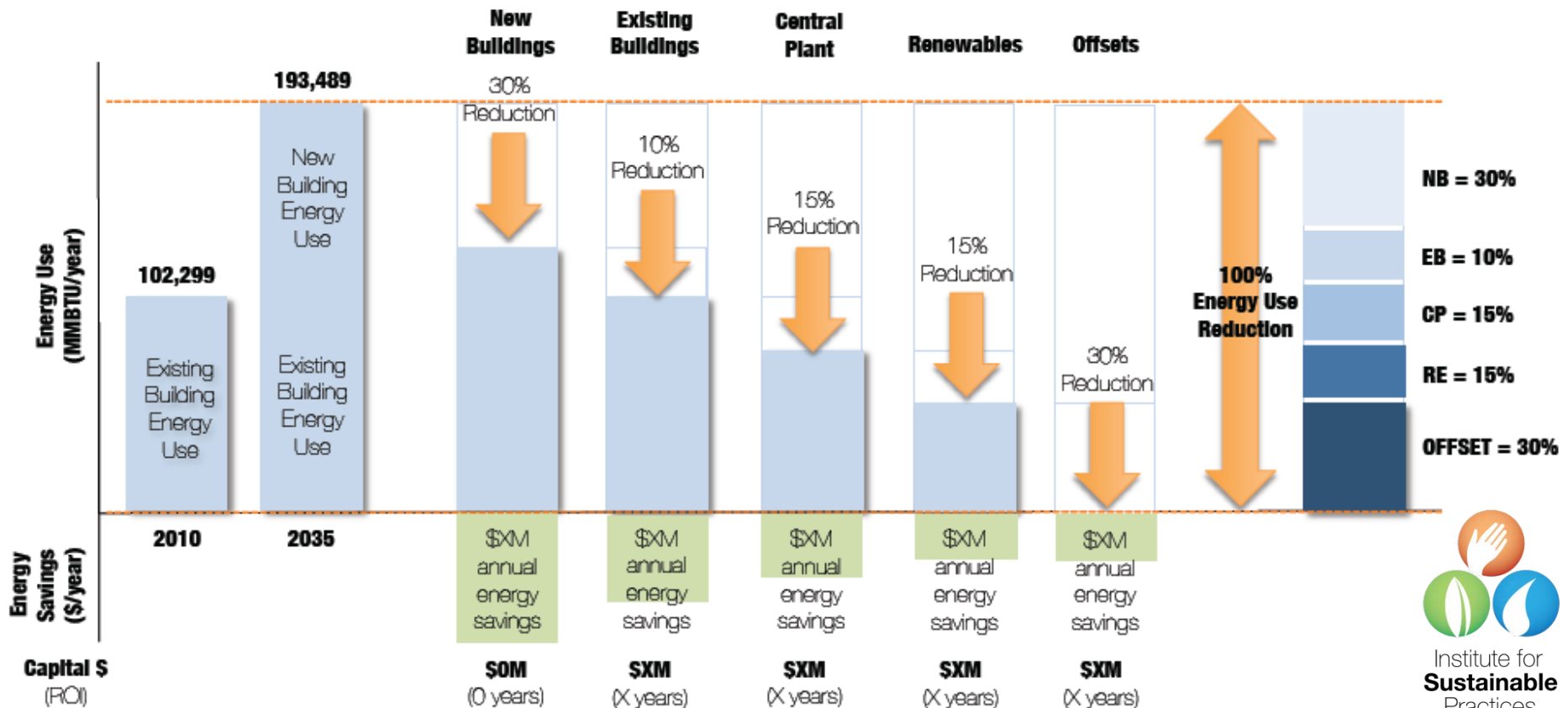
ENERGY USE

ENERGY USE REDUCTION STRATEGIES

OVERALL

Energy Use Reduction Benefit by Focus Area

Overall Energy Use Reduction Benefit



FUTURE – TRANSPORTATION AND LAND USE

- Work with City and County agencies to have safe bike/pedestrian lanes installed from Eugene and Springfield to main campus
- LTD rapid transit to main campus
- Restructure transportation demand management program to charge for parking

FUTURE – REDUCED WASTE AND PURCHASING

- Lane pays \$446/ton for recycling*
- Lane pays \$747/ton for trash*
- FY15 Unit Plan requests increased funding for recycling that will result in more material handled more cost effectively
- Sustainability sub-committee drafting sustainable purchasing policy

*Includes labor, materials, dump/recycling fees, and revenue.

FUTURE – EDUCATION/ADAPTATION/HABITUATION

- Professional development for instructors
- Infuse sustainability into 10% of all courses offered
- Graduation requirement
- Community outreach??

WHAT YOU CAN DO

■ ?