



# Lane Community College Climate Action Plan 2.0

September 13, 2018



# Background

- ✓ **LCC's** first Climate Action Plan (CAP) was approved by the Board of Education in 2011
- ✓ CAP strategies were revised and updated in 2014
- ✓ LCC committed to updating the CAP every 5 years
- ✓ 1 Goal = Carbon Neutrality & Increased Resilience by the year 2050



## 5 Strategies

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

## 61 Actions

Actions we can all  
take to help reach our  
goal

## 1 Goal

Carbon Neutral by  
2050

# Acknowledgements

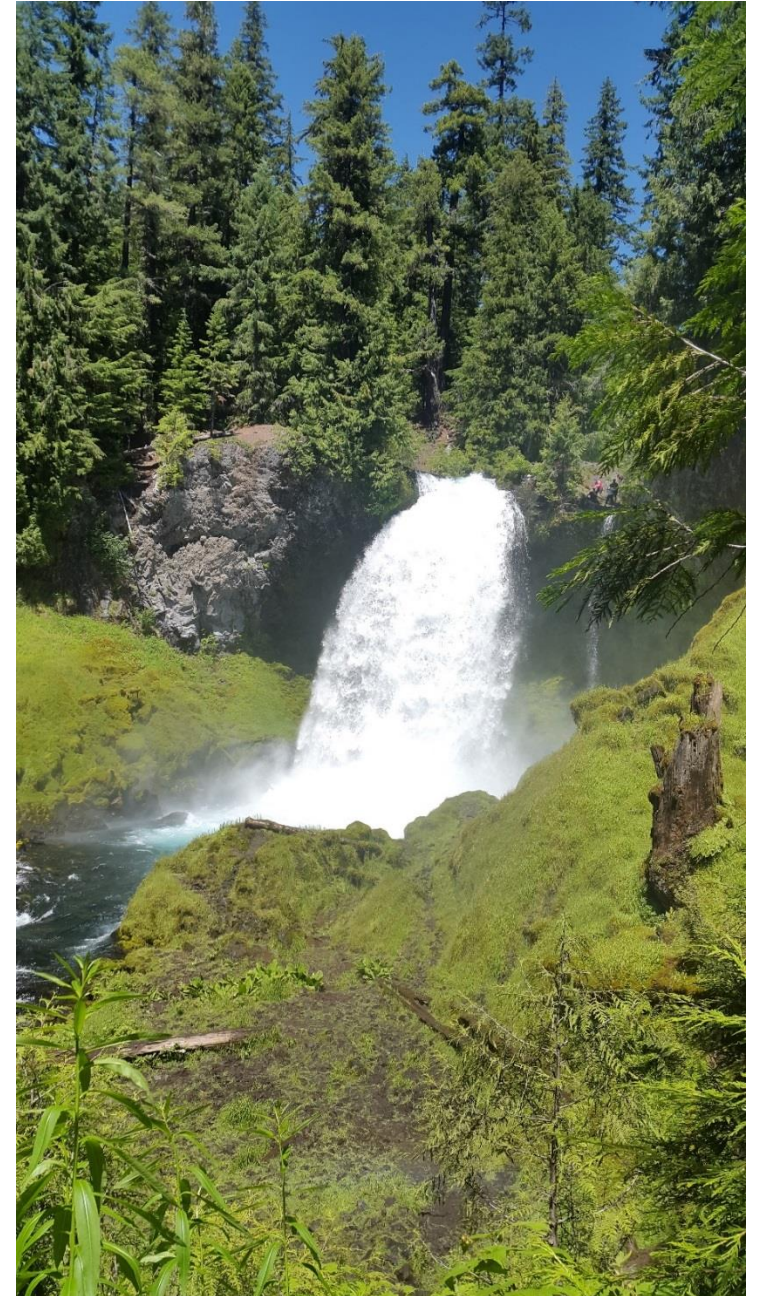
- Zhasmene Bowles, Administrative Specialist Science Division
- Deborah Butler, Executive Assistant to VP of College Services
- Susie Cousar, Faculty Health
- Margaret Hamilton, President of Lane Community College
- Troy Hanson, Facilities Planner
- Jennifer Hayward, Director of Facilities Management & Planning
- Brian Kelly, VP College Services
- Luis Maggiori, Sustainability Coordinator
- Claudia Owen, Faculty Science Division
- Margaret Robertson, Faculty Drafting
- Paul Ruscher, Dean Science Division
- Anna Scott, Energy and IEQ Analyst
- Michael Sims, Recycling Coordinator
- Becky Thill, Recycling Operations Coordinator
- Diego Llewellyn-Jones, Learning Garden Specialist
- Sustainability Committee
- Facilities Council



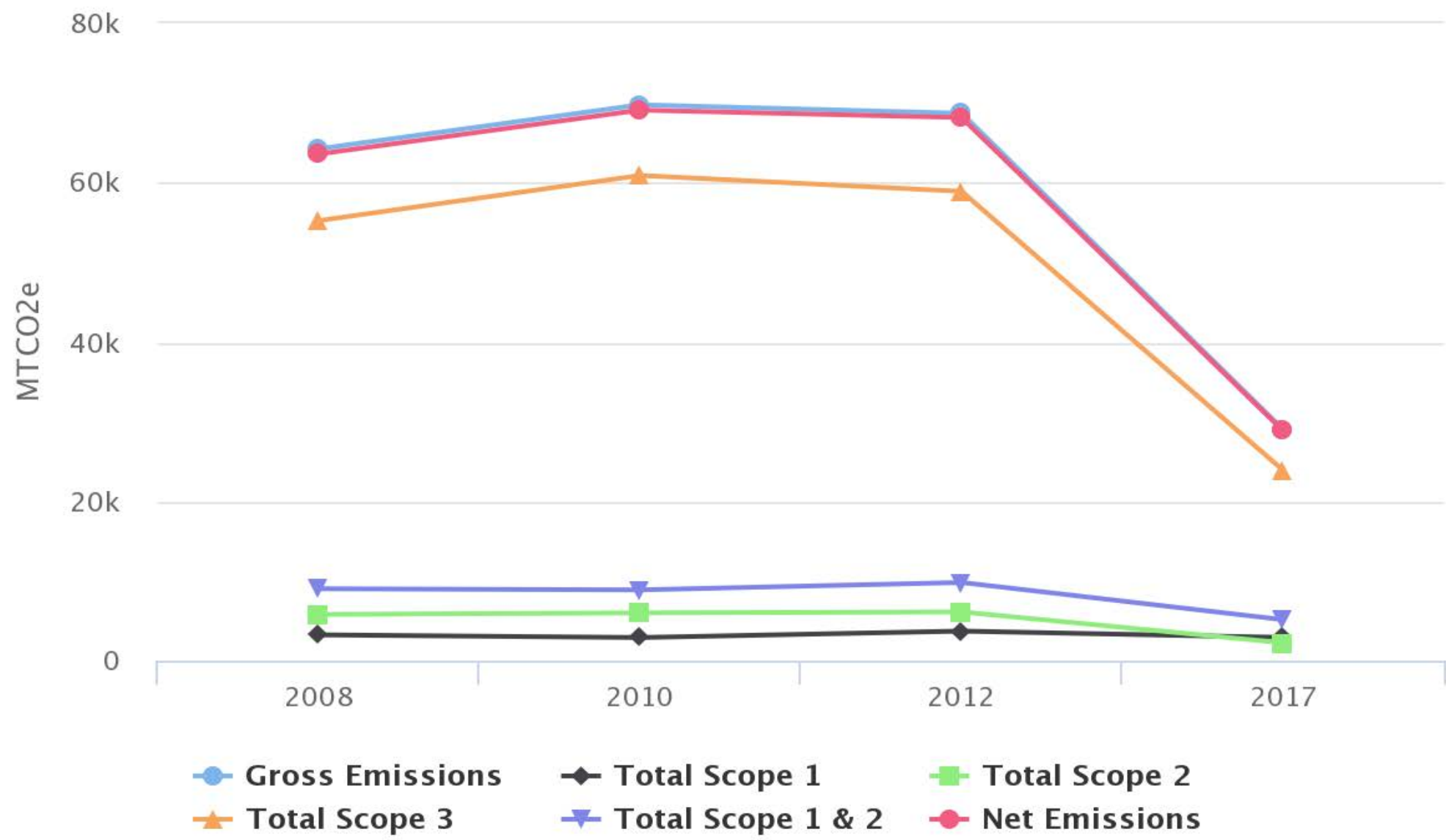


# Mitigation Strategies CAP 2.0

1. Energy Use Reduction
2. Renewable Energy
3. Waste & Purchasing
4. Transportation
5. Agriculture & Land Use
6. Adaptation / Habituation / Education

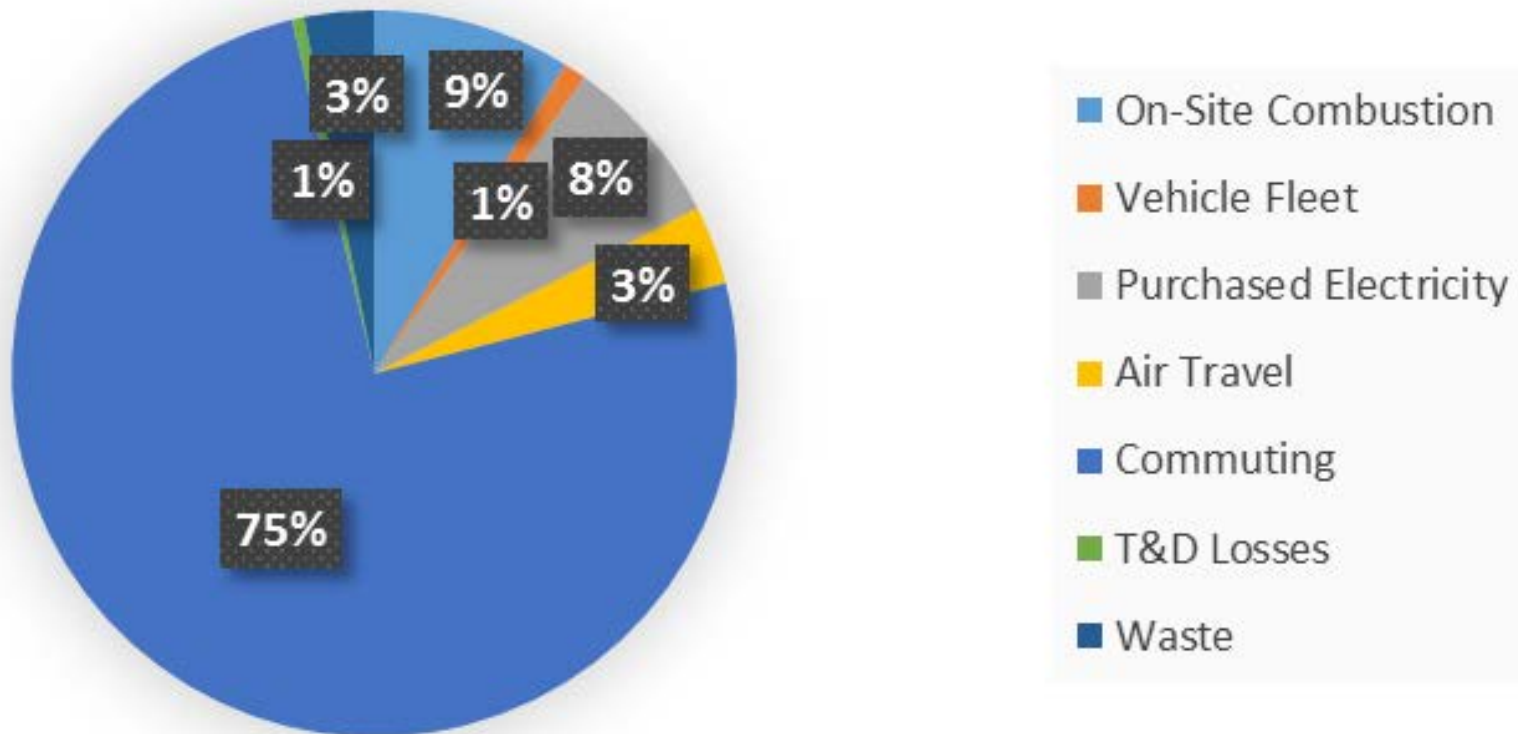


# EMISSIONS MTCO2E





# Lane Community College Greenhouse Gas Inventory FY 2017 27,526.61 MTCO<sub>2</sub>e



# Energy Use Reduction

FY 17 Energy Baseline 20 kWh / sq. ft.

| Actions   | Objective   | Timeline  | Resources                          | Responsible | Result  |
|---|---|-----------|------------------------------------|-------------|---|
| Review & adjust occupancy schedule, runtimes and setpoints for each building        | Efficient use of College conditioned space and energy resources                                     | 2018-2019 | Occupancy information / staff time | ISP / FMP   | Energy savings  |
| Develop & implement a Re-Commissioning and Retro-Commissioning plan for the College | Optimal operation of complex building systems   | 2018-2022 | Staff time / Operational budget    | FMP / ISP   | Energy savings / Extended equipment life  |
| Update existing Design and Construction Policy                                      | Adoption of sustainability standards in all of the College's remodels and new construction projects | 2018-2019 | Staff time                         | ISP / FMP   | Energy savings / Increased occupant comfort   |
| Develop and implement a plan based on the Facilities Assessment report findings     | Prioritizes infrastructure upgrades based on occupants, equipment condition and energy savings      | 2018-2022 | Staff time / Capital Investments   | FMP / ISP   | A plan that integrates and prioritizes student success, infrastructure reliability and energy savings |

# Renewable Energy

1% of the College total Energy Consumption

| Actions  | Objective   | Timeline  | Resources   | Responsible | Result   |
|--|---|-----------|---|-------------|--|
| Gradual installation of rooftop photovoltaic systems in College buildings, identified with the highest feasibility | Increase the percentage of renewable energy generation                    | 2018-2022 | Capital Investments / Lane's Living Green Loan Fund | ISP / FMP   | Reduced electricity consumption from the local utility |
| Develop a plan to offset 45% of Lane's energy consumption with renewables by 2050                                  | Supplement energy efficiency efforts to achieve overall carbon neutrality | 2018-2022 | Capital & operational budgets                       | ISP / FMP   | Reduced Source Energy Consumption and GHG emissions    |
| Create a plan to install renewable energy systems with storage capacity for each critical system on campus         | Resiliency of critical systems  | 2019-2020 | Staff time  | ISP / FMP   | Reduced Source Energy Consumption                      |



# Adaptation / Education / Habituation

| Actions   | Objective   | Timeline  | Resources                            | Responsible                          | Result   |
|---|---|-----------|--------------------------------------|--------------------------------------|--|
| Be a constant presence at College in-service and programs                                       | Maintain a constant and updated message about how to get involved with College sustainability and its relevance | 2018-2022 | Staff time                           | ISP                                  | A College community that is well educated on sustainability and the actions they can take as individuals                 |
| Increase the number of sustainability-focused courses   | Facilitate student success for those interested in sustainability   | 2018-2022 | Staff time                           | ISP / Different academic departments | Assign designation to sustainability focused courses   |
| Continue to recruit offices or departments to go through the Green Office Certification Program | Infuse sustainability awareness to all of the College's staff   | 2018-2022 | Staff time / Department's commitment | ISP / Certified Departments          | Certify and educate different offices and departments on actions they can take to improve sustainability for the College |
| Continue to expand the Sustainability Committee   | College cross-collaboration for the advancement of sustainability   | 2018-2022 | Staff time                           | ISP                                  | A sustainability engaged College community   |



# Agriculture & Land Use

1,920 pounds of food & 1,330 student contact hours in FY 17

| Actions  | Objective   | Timeline  | Resources                            | Responsible                  | Result  |
|--|---|-----------|--------------------------------------|------------------------------|---|
| Develop & implement a plan to replace previously landscaped areas with vegetable crops and native edibles. | Increase the presence of vegetated spaces on campus                               | 2019-2022 | Operational budget                   | ISP/ FMP                     | Increase food production and Promote biodiversity   |
| Expand the Learning Garden fence to encompass the greenhouse   | Incorporate different agricultural methods to increase the educational experience | 2018-2019 | Operational budget                   | ISP/ FMP                     | More space to grow crops, increased food production |
| Work towards assessing multiple forested and wetland plots for their carbon storage offset potential       | Obtain a realistic net campus assessment of carbon storage                        | 2018-2022 | Student projects and guided research | Science Division / ISP       | Reliable carbon storage sequestration data          |
| Develop a plan to maintain and use forest lands surrounding the campus                                     | Use the areas as outdoor classrooms   | 2019-2020 | Operational budget                   | FMP / Science Division / ISP | Expand educational resources                        |

# Waste & Purchasing

| Actions  | Objective  | Timeline  | Resources   | Responsible           | Result   |
|--|--|-----------|---|-----------------------|--|
| Current Baseline 0.44 lb / sq. ft.   |  |           |   |                       |  |
| Maintain and improve the existing recycling program  | Guarantee continuous improvement over time. Reduce production of waste at least 25% in the next 5 years                        | 2018-2022 | Staff time / operational budget / <b>Lane's Living Green Revolving Fund</b> | ISP / FMP             | Maintain a steady waste reduction trend  |
| Develop and implement a Sustainable Purchasing Policy for all durable goods and on-going consumables | Reduce or eliminate the environmental harm of materials purchased for college operations                                       | 2019-2022 | Staff time  | ISP / College Finance | Reduce overall college purchases and establish a guideline for sustainable purchases |
| Maintain and improve the existing Surplus Property program   | Maintain and increase a steady source of revenue for the College and diversion of materials that otherwise would be landfilled | 2018-2022 | Staff time / operational budget   | ISP                   | Revenue stream for the College and resource conservation through reuse               |



# Transportation

| Actions  | Objective                                 | Timeline  | Resources   | Responsible     | Result  |
|--|---|-----------|---|-----------------|---|
| Continue to work with the local government to increase and improve access to sustainable commuting options | Reduce GHG emissions related to commuting | 2018-2022 | Staff time  | ISP/ FMP / PR   | Increase accessibility to LCC by alternative modes of transportation            |
| Improve utilization of satellite campuses and offerings of online classes                                  | Reduce the need of commuting trips        | 2018-2022 | Staff time / Infrastructure improvements                      | ASA / FMP / ISP | Less commuting trips to LCC and reduced GHG emissions related to transportation |
| Implement data collection methodologies  | Determine transportation patterns         | 2018-2022 | Surveys / Car counts / Bicycle loan data / LTD ridership data | ISP/ FMP        | Information on transportation patterns to develop plans of improvement          |

# Why Carbon Neutral by 2050?

## 1. Higher Education has an ethical responsibility:

- ✓ To help find a path toward sustainability
- ✓ To train our future leaders
- ✓ To model sustainability for our communities

## 2. Operational Resilience:

- ✓ To provide additional funds for student success
- ✓ To maintain steady business continuity



# What you can do

- Join the Sustainability Committee
- Apply for Green Office Certification
- Consider purchasing decisions
- Join the 2018 Eco-Challenge
- Participate in Meatless Mondays





# What you can do

- Use the LTD benefit
- Do carpooling
- Use daylighting whenever possible
- Use our Surplus Property Program & Rose Room
- Attend campus sustainability events

