

Engaging Students in Climate Action Planning

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Introduction

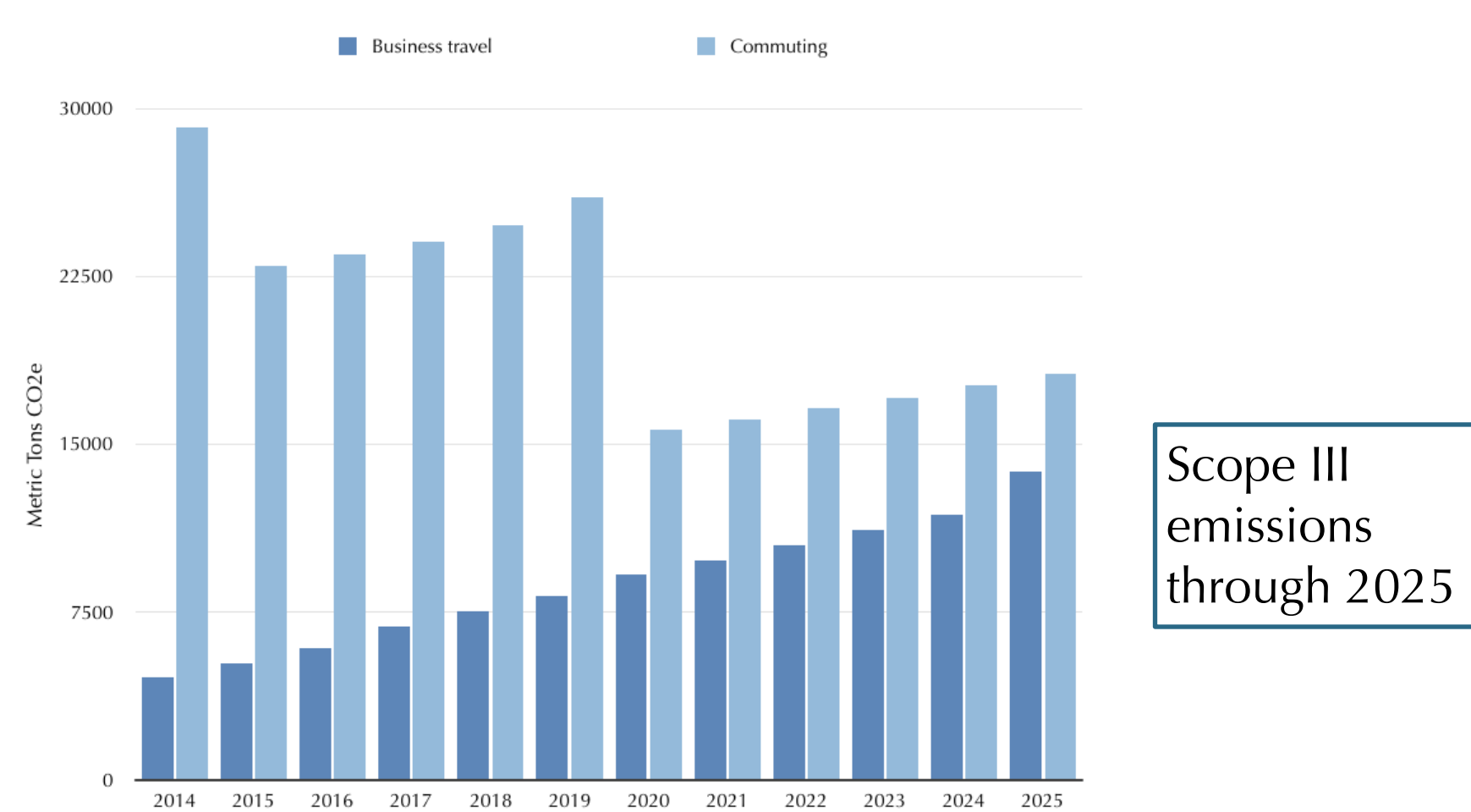
The campus Climate Action Plan (CAP) outlines how UCR will reach net carbon neutrality by 2025, and the interim goal of 1990 level emissions by 2020- 82,167 MTCO₂e. This will involve reductions in Scopes I and II in 2020, and bringing Scopes I and II to complete zero in 2025, with the exception of refrigerants which will be offset and currently account for 4% of total emissions.

However we are still left with a projected 32,000 MTCO₂e in Scope III in 2025, with student commuting accounting for 18,000 MTCO₂e. Student choices and lifestyle on campus also contributes to Scope II emissions. Students have a crucial role to play in reaching the UC-wide goal of Carbon Neutrality by 2025. Emissions generated by students can only be reduced by changing behavior and creating a campus culture of sustainability.

My project has two components: the revision of the Climate Action Plan itself, and engaging students in the implementation of its goals. The revision of the plan includes:

- An updated GHG inventory including measures from 2009-2015
- A cost analysis of proposed projects and scenarios
- New sections on climate education and resiliency planning
- A new section on the Carbon Neutrality Initiative

Additionally, I am interested in undergraduate opinions and perception of the Climate Action Plan and carbon reduction goals. I surveyed 50 undergraduate students to determine their knowledgeability of the Carbon Neutrality Initiative, their perception and attitudes surrounding the initiatives goals, and how they see themselves in the process of achieving them.



Project Goals

Develop a new CAP that is current with UCR's goals and records from 2009 (year of the last CAP) to present. My work on the Climate Action Plan will include details about the Carbon Neutrality Initiative and UCR's options for reaching net neutral.

Have undergraduates become more active in supporting the goals outlined in the CAP, and be involved in the planning and implementation process. Sharing their own ideas, and connecting our goals to their current concerns will connect students to sustainability in a way that cannot be achieved through information sharing alone.

Gauging students current attitudes and level of interest will hopefully allow us to:

- Increase participation in carbon reduction initiatives
- Spread awareness about the Carbon Neutrality Initiative
- Change personal behavior
- Have increased student body support for implementing future sustainability goals

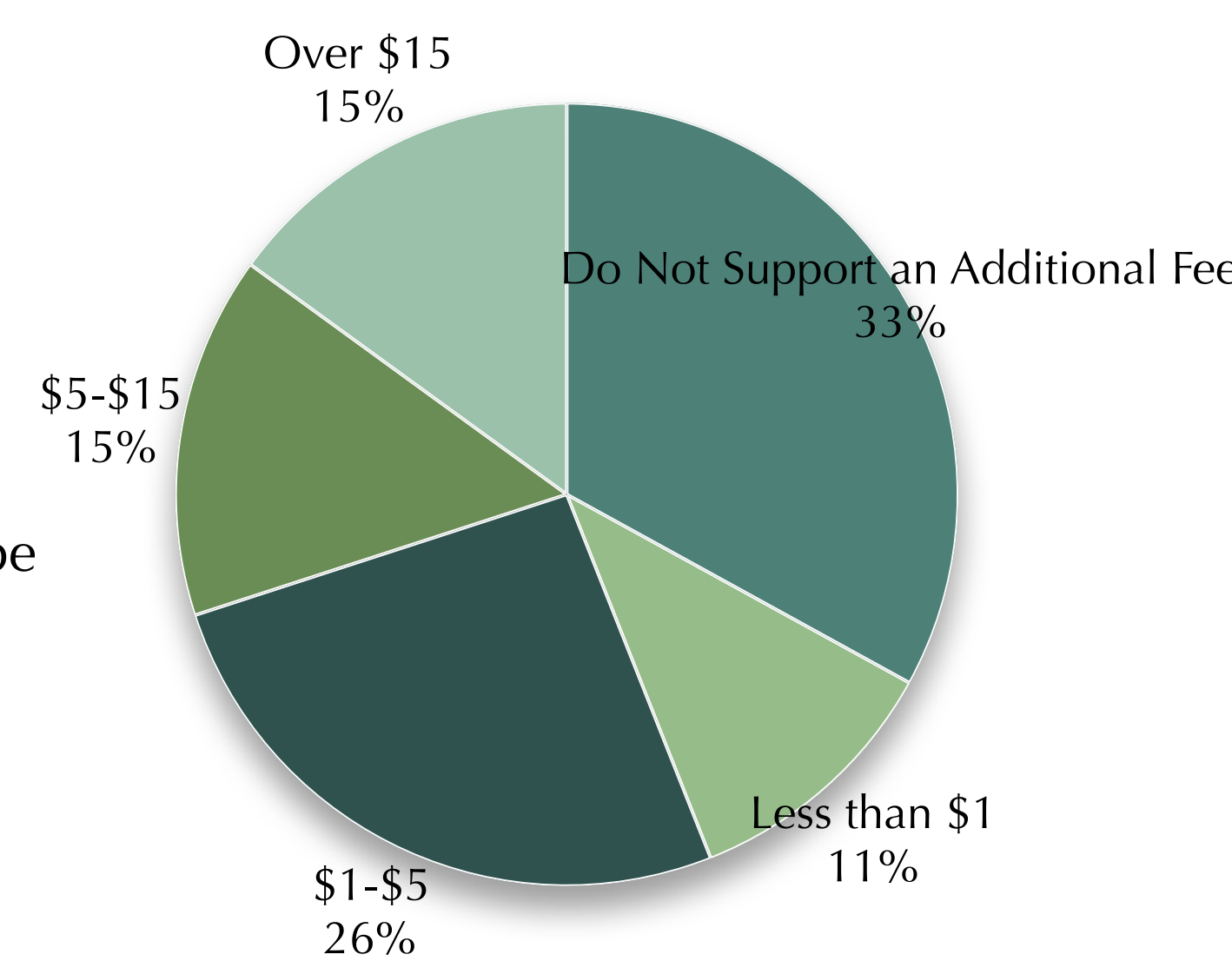
This will allow UCR to move closer to the campus vision outlined by students, staff, faculty and other members of the UCR and City of Riverside communities.



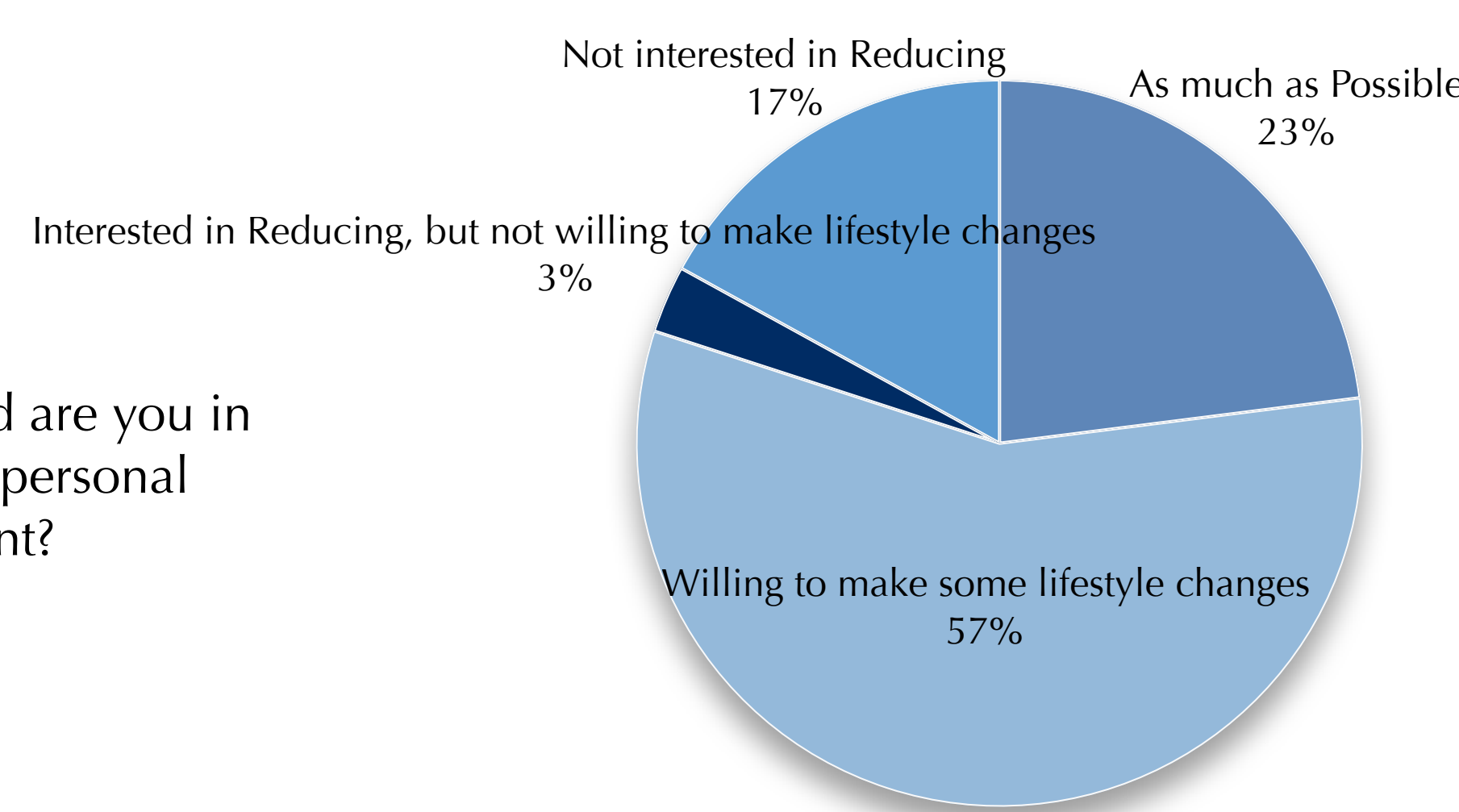
Word cloud developed at the UCR Climate Action Planning Charrette on February 29th, 2016. The ideas represented are what various UCR stakeholders thought was most important in developing a sustainable vision for the campus.

Survey Results

Would you support an additional quarterly fee when paying tuition to support investment in renewable energy? If so, how much would you be willing to pay?



How interested are you in reducing your personal carbon footprint?

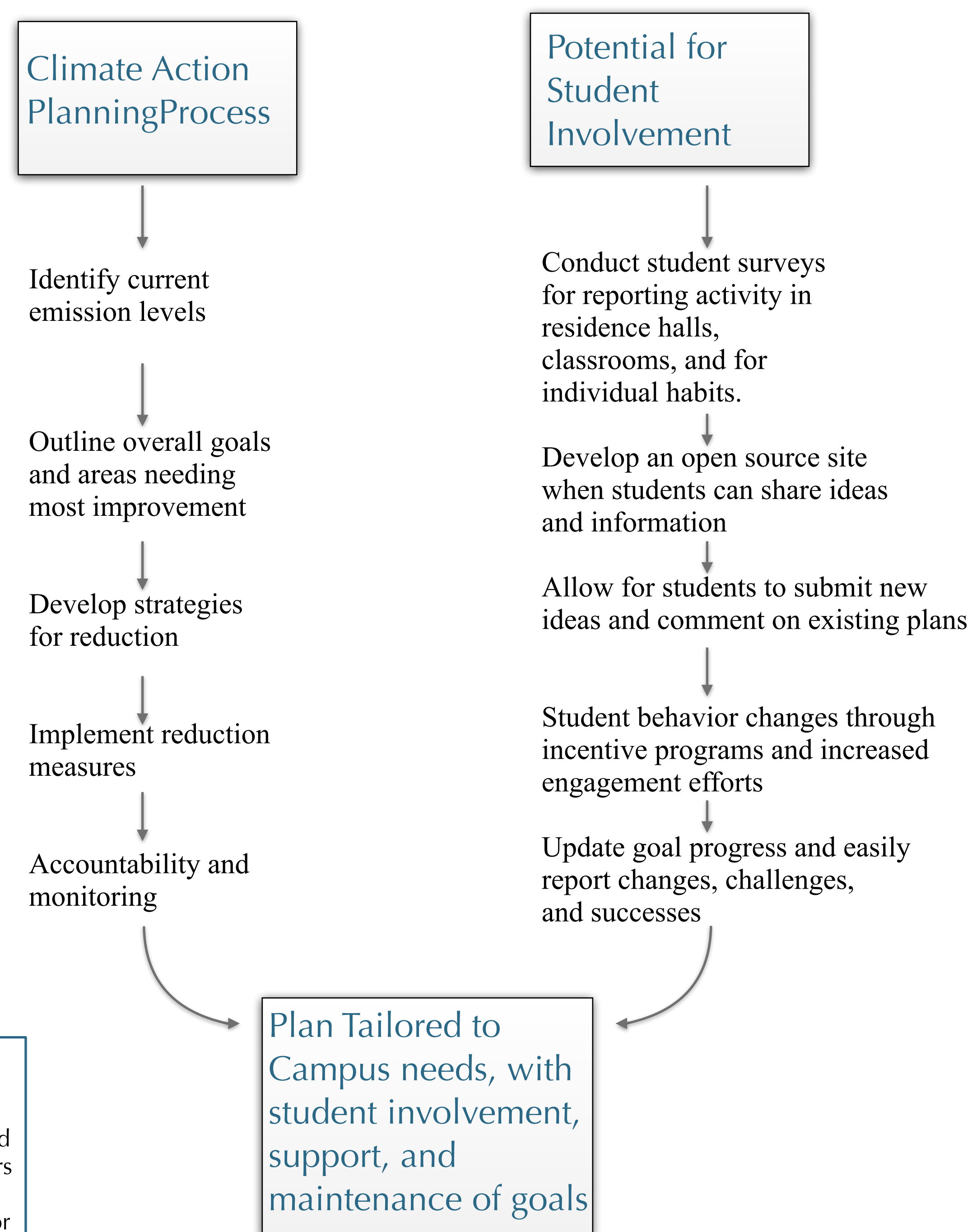


88% of Students surveyed said they support the Carbon Neutrality Initiative

95% said they thought the initiative would have a positive impact on campus if it was successful

One surveyed student said:

“As a leading university in southern California, it is UCR's responsibility to lead by example. I would be happy to see my fees go toward changing a few of UCR's lawns to astroturf and continuing to implement landscape that is conducive to SoCal weather, even if it meant cutting one of the big concerts thrown at UCR for a few years.”



Conclusions

Students have shown widespread support for the Carbon Neutrality Initiative, but seem to have a very top-down view of how this issue should be approached. Outside of fees, they do not see their place in accomplishing carbon-reduction goals, and currently do not seem willing to make any major lifestyle changes. But students have high expectations of how the campus should be approaching sustainability projects.

Over the course of the year, the new Climate Action Plan that has been developed contains trends that were not accounted for in the 2009 plan. We have seen some good signs, such as per capita energy use declining enough to create a downward trend in some sectors even with population growth.

It would cost between \$150,000 and \$250,000 to purchase enough carbon offsets to bring the university to net neutral, which would be far more cost effective than building retrofits or expanding the capacity for renewable energy.

Behavior change is the most cost efficient means of carbon reduction. More involvement from students can not only reduce Scope III emissions that could otherwise only be offset, but also expand on ideas and keep pressure on decision makers to consider the CNI in all plans for the university.

Future Goals

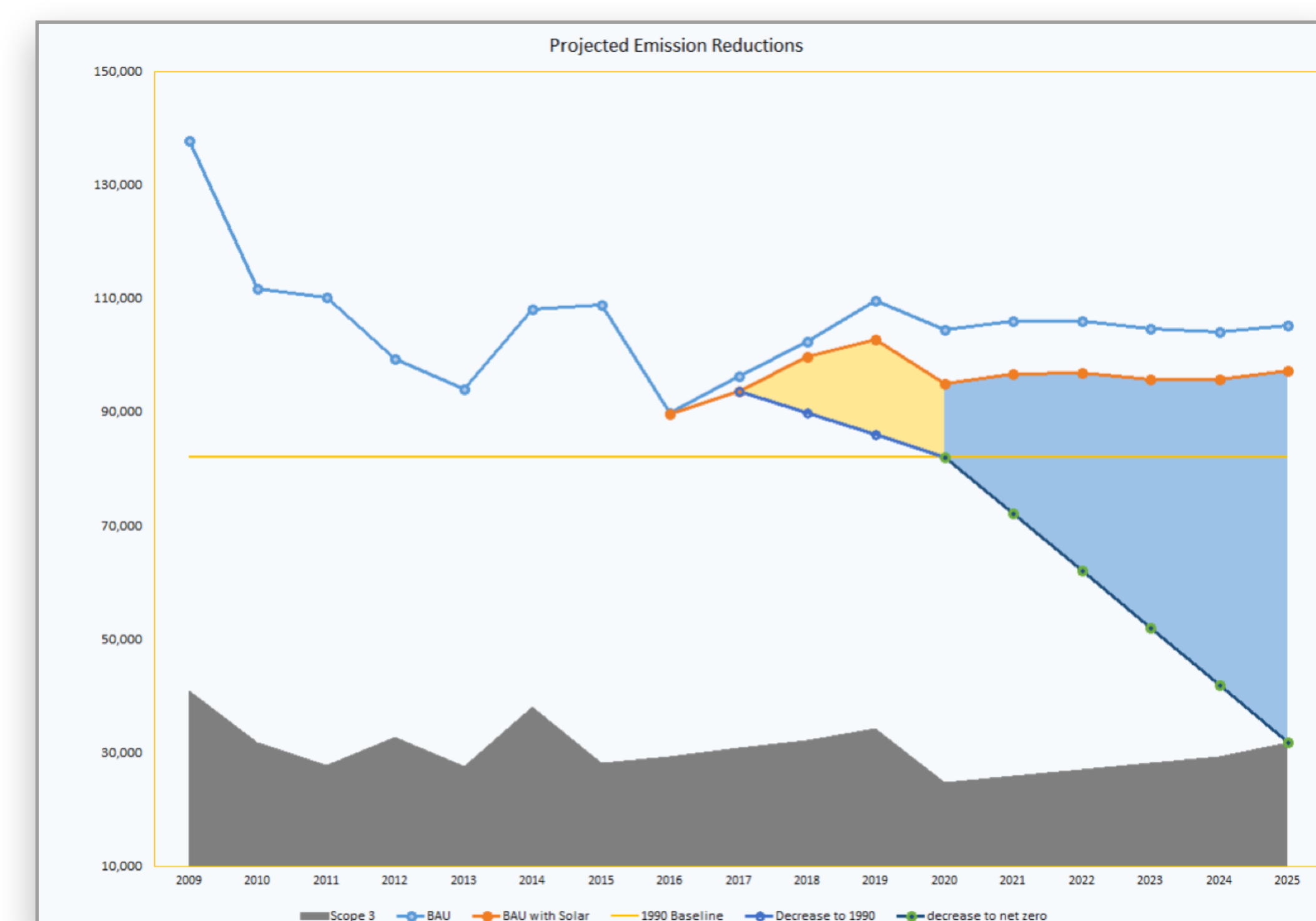
Allow for easy updates to the CAP as new annual information is gathered, and for tracking and maintenance of goals past the 2025 benchmark.

Promote the finished document and allow people to quickly and easily locate any information within the plan.

Expand outreach and awareness efforts, training programs, internship and volunteer opportunities.

Fully develop an open source for ideas and information sharing. In the long term this could also be done between campuses to easily share best practices, obstacles, and strategies.

Reach carbon neutrality through reduction measures outlined in the CAP or developed as we approach 2025.



Acknowledgements

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