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Student Movement on Climate Action at UC San Diego:

How Colleges and Students can Combat Climate Change.

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Executive Summary

The effect of climate disruption is arguably the most imminent threat facing our generation. If we continue down the same "business as usual" model, we will be exposed to unforeseen climate disasters as early as the next decade¹. The University of California's *Bending* the Curve² report outlines the ways in which we can significantly mitigate the threat of climate disruption through ten scalable solutions that fall into six clusters: Science, Technology, Governance Solutions, Societal Transformation, Market-Based Solutions, and Ecosystem Restoration. Since climate change is such an imminent issue, mitigation on a global scale is necessary in order to bend the curve before unprecedented disruption. However, this call to action is rarely ever motivated through moral conviction alone.³ Most governments exist to satisfy the people within their constituencies, so the voice calling for climate action needs to come directly from the people. In this report, we find that students are key actors in climate action because of their youthful passion, access to education and technology, and incentive to get involved in their communities. Our report advocates for a global student movement against climate disruption. In this paper, we will analyze the current movement against climate change that is active at our university (University of California, San Diego), suggest solutions that clubs on campuses can take in order to strengthen the numbers and initiatives of the movement, and finally, propose ways in which students can get involved with climate action in the city of San Diego.

We have divided this project into three sections: what is happening in the current student movement at UCSD, what we can learn from movements at other schools, and how we can integrate the student movement into the surrounding community.

In section one, we researched the current initiatives of UCSD's environmental organizations. UCSD has over twenty student-run organizations on campus that incorporate the

¹ Bending the Curve Report Executive Summary

² Bending the Curve Report

³ Young, Kathryn; Sanchez, Lucero; Sabei, Jasmine. Stockholm Report. San Diego: University of California Press, 2018. Online.

education and promotion of a sustainable lifestyle. Our method of research was to gather data by communicating with as many of these organizations as possible through a series of questions via google form. The information provided let us know that there are a lot of opportunities for students to make big impacts. Organizations try to emphasize the relevancy of these opportunities to influence students to participate. However, challenges that the groups collectively communicated include maintaining student body engagement, strengthening cohesive coalitions between other orgs and faculty, and increasing the salience of sustainability efforts on campus. Important changes we suggest include better marketing strategies - like websites, recruitment events and concerts - and incorporating the relevancy of climate change into students' daily lives. We believe it necessary that the dialogue surrounding climate change be more narrative-like and understandable to the general public instead of spewing confusing, unrelatable scientific jargon. Lastly, we propose that some sort of institution, club or representative(s) on campus be responsible for breaking down propositions and public policy on the city, state, and federal level to inform the student body on its environmental impacts.

In section two, we researched student initiatives at 8 other universities (UCLA, UC Irvine, UCSC, UCSB, UC Berkeley, UC Davis; USD, SDSU) and gathered data on which organizations are active on campus and what their initiatives are both on campus and in the surrounding community. We looked at websites and other online resources describing these initiatives to analyze what we thought would be effective measures to implement at UCSD. After observation and analysis, we composed a 5 part proposal: creating a central website to connect all UCSD initiatives, partnering with non-environmental student orgs on campus and private organizations off campus, focusing on intersectional events, incorporating Greek Life, and training student leadership both on campus and in the community.

In section three, we researched ways students can get involved with the surrounding community in San Diego. In this section, we will briefly explain the history of climate action in the city of San Diego and propose solutions on how student organizations can better participate in the greater community. This section will identify pathways, such as joining political campaigns or partnering with local environmental organizations, in which student mobilization can be used to increase the salience and public support of local environmental initiatives. We have organized our proposal into four sections based on the clusters from the *Bending the Curve Report*: Societal Transformation, Governance and Market Solutions, Science and Technology, and Ecosystem Restoration.

In the Societal Transformation cluster, our main proposal addresses the goal of increasing the number of students involved in *meaningful* action against climate disruption both on and off campus. We suggest this by centralizing the movement both organizationally and through a unifying website. We also want UCSD to encourage students to take action against climate disruption in their daily lives. We suggest shifting a greater focus to educate students on how to make changes in daily behavior such as making sustainable purchases and limiting personal waste. Clubs and organizations at UCSD should encourage and incentivize this behavior with more intersectional events and campaigns. We want students to become leaders in their communities and giving them the opportunity to do so by educating the public on climate disruption is one way to do it. We encourage campus organizations to focus on training their students to be leaders, modeling a sustainable lifestyle, and advocating for political action against climate change.

In the Governance and Market solutions, we suggest five ways in which student organizations can use their outreach ability to increase the salience of knowledge in environmental issues and sustainable initiatives. The first is using student mobilization and resources to campaign for city and congressional candidates that are inclined to adopt 'green' policies while in office. The second is using student outreach to educate voters on the different environmental initiatives and plans that exist in the city and state. The third is working with local businesses to assure that their business models coincide with the environmental goals of the community. The fourth is to increase communication efforts between the different colleges, universities, and jurisdictions in San Diego to ensure that all parties are following the Climate Action Plan for the city. And lastly, we suggest that UCSD produce legally binding documents that incorporates enforcement mechanisms to ensure that all businesses and entities on campus are following a sustainable model.

In the Science and Technology cluster, we encourage UCSD student organizations to facilitate the expansion of science and technological environmental opportunities both on campus and in the community. The expanded engagement of students facilitates a culture of climate action and positive impact. For this reason, we propose that investing in student

organizations at UCSD to create sustainable technology, as well as providing research and internship opportunities for students can greatly contribute to both UCSD and San Diego's climate action goals.

In the Ecosystem Restoration cluster, we propose that student organizations collaborate on community projects that restore ecosystems in the greater San Diego area. This way, student organizations can take meaningful action to mitigate the effects of climate disruption on the city while simultaneously increasing the salience of the movement. We suggest that student orgs collaborate with environmental orgs in the city and provide more education about ecology and the importance of ecosystem restoration projects in the city. This will provide opportunities for students to get involved in the community while actively restoring precious ecosystem systems in San Diego.

Our research concludes that the UCSD student movement has changes to make in terms of organizational structure, the substance of their initiatives, and incorporating the community into their action against climate disruption. We hope that our analysis and subsequent proposal will prove useful to the current organizations on our campus and be applied to other schools who are struggling to find a good model for their campuses. We again want to emphasize that a student movement alone is not enough to mitigate the effects of climate disruption, but we believe this intervention will incentivize the desperately needed global political action that can bend the warming curve.

Endnotes

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Introduction

I. Why Climate Disruption?

The anthropogenic warming of the Earth is causing severe climate changes that threaten the livelihood of every living being, now and for generations to come. After three massive hurricanes that hit the United States' east coast two years ago¹, California's devastating wildfires², and now the polar vortex spanning the northern and eastern regions in the US³, it is clear that danger is imminent and action must be taken. In this paper, instead of using terms like "climate change" or "global warming", we want to switch the language to focus on a new term: climate disruption. If we continue down the same, lethargic path when it comes to climate mitigation - unprecedented changes to the weather and climate will disrupt millions of species' lives. None more so than our own. Climate disruption captures the urgency of this global change and incites a need for immediate action.

There are a significant number of people in the world who are either uninformed or ignorant of the devastating effects of climate disruption. When dealing with this part of the population, we want to reiterate and emphasize that there are a myriad of resources outlined in the *Bending the Curve Report*⁴ that prove beyond doubt that the Earth's warming is both unnatural and human caused. We have linked the warming of our atmosphere with the release of greenhouse gases - gases that naturally exist in the atmosphere and act like a blanket around the Earth. This greenhouse gas effect has been significantly exacerbated by the human emission of CO2 and other major offenders include methane, nitrous oxide, and black carbon⁵. The emissions of all these greenhouse gases have increased at an alarming rate throughout the past two centuries because of human activities (factories, agriculture, cars etc). This means we are making the blanket thicker and warmer.⁶ According to this science, the most effective solution is to decrease emissions and work toward adapting to the damage that will be inflicted. However, there are many other solutions in our arsenal of combating climate disruption - all effectively outlined in the *Bending the Curve Report* which proposes ten solutions to climate disruption organised in 6 clusters (themes)⁷.

While we already have the research and a proposal for solutions, global movement towards the implementation of these solutions is slow. Why is that? If this problem is so urgent, why have we yet to see action? While that question is almost impossible to answer, we believe one of the primary reasons is lack of information. If people do not understand climate science and are not educated on the tangible solutions, how are they to make choices in their daily and political lives that encourage action against climate change?

This paper will discuss a variety of possible ways to take action against climate disruption and increase education on a local level through the use of student organizations and movements on campus. We find students are key actors because of the opportunity they have to become leaders in this movement, their ability to influence their local communities, and their platform to provide education and information that will collectively produce meaningful action against disruption.

II. Why a Student Movement?

The primary question we must ask of our research is why we have chosen this specific focus on students? Students have access to education and technological resources. In addition, the student body on campus is an ambitious population that wants to make an impact on the world. They are receptive to new ideas and eager to find a fulfilling career path. The movement against climate disruption is desperately in need of individuals who are receptive, creative, innovative and eager to make a profound impact. We believe students could be the most resourceful in terms of educating the surrounding communities and taking meaningful action to mitigate the effects of climate disruption.

Another reason students are an essential part of climate mitigation is their access and knowledge of established organizations. Student organizations carry the responsibility of providing meaningful ways to unite the student populace over things they care about-specifically for the purpose of outreach and increasing the knowledgeability of issues and initiatives. The infrastructure of most universities is conducive to achieving this goal, and the culture of universities often encourages freshmen and other students to get involved. Organizations are also funded both privately and by their universities for the purpose of achieving these outreach goals. These are vital resources that should be taken advantage of to take action and expand education initiatives on climate disruption.

In addition, information and movements coming from universities have a certain credibility that is not easily replicated nor found elsewhere. Research from universities is universally seen as credible and needs only to be effectively communicated to the public in ways they can understand. We believe that students are the most capable of bridging the gap between academia and the general population.

The student mindset, university resources, and credibility as "academics" make college students an essential piece to the movement against climate disruption. For our project, we will specifically focus on our university (University of California, San Diego) and our potential effect on the surrounding San Diego community.

III. Our Generation : Focus on Human Rights Movements

Young activists have taken massive strides in the fight for human rights in recent years. Our generation has been very successful as it pertains to identifying, exposing and protesting violations against human rights. For example, young activists have banded together some of the largest networks and marches for human rights through things such as #Blacklivesmatter, gay pride parades, and the Women's march. However, there is not a significantly recognized organization, march, or protest for environmental rights that is as salient as other social issues. It would seem logical that students, faculty, and the university administration would do more to combat climate disruption given that it disturbs and displaces billions of people around the world. But while we find that many university centers and resources for these human rights issues are easily accessible, encouraged, and are even part of the curriculum (the DEI requirement at UCSD⁸) - getting involved with student organizations against

Climate disruption is fundamentally a human rights issue because it will most severely impact the poorest three billion people in the world despite the fact that they contribute the lowest amount of emissions⁹. Millions die every year because of toxic air (3 million from indoor air pollution alone¹⁰), and many of these communities don't have the resources nor political voice to do anything about the pollution that afflicts them. Climate migration is a pertinent threat to hundreds of millions of people around the world. Families are forced into becoming refugees as a result of fleeing extreme weather events, sea level rise, and other effects of climate disruption. These are all issues that disproportionately affect people of a low socioeconomic status that tend to be non-white, despite their lack of contribution to the problem¹¹. Climate justice is the definition we use to describe how the impact of climate change has a disproportionate effect on poor communities of color. Climate disruption is an intersectional issue that needs intersectional action. Student movements on college campuses

can utilize available resources and intersectionality to increase the effectiveness of their initiatives.

This project analyzes exactly what is happening on our campus and how we can build coalitions with more human rights organizations to promote sustainable initiatives. Another key part of this is analyzing what challenges sustainability movements have had in the past in forming coalitions, building numbers, and executing projects to fight climate change.

IV. History of Movement at UCSD

During the 1960's, many student protests occurred on campuses across the country. Aside from demonstrations against the Vietnam War, a really famous student protest was UC Berkeley's Freedom of Speech in 1964.¹² UCSD expanded as an undergraduate campus that same year. College campuses are usually recognized for their activism and involvement in the surrounding community and even across the world. However, UCSD's college system and campus layout deliberately restricts the growth of activism on campus.¹³¹⁴ The impact of this institutionalized division is that it is hard to gather a student collective.¹⁴¹⁵ Additionally, there is a lack of open quads for the university (not individual colleges) for potential student gatherings.

When reading through the archives of UCSD, there has been a common theme of demonstrations and protests on campus after incidents of attacks directly toward an underrepresented group.¹⁶ The most infamous being the Compton Cookout, an event where UCSD students hosted a party themed by racially charged stereotypes.¹⁷ However, of the few student movements that have occurred since the school opened in the 60's, none of them addressed climate change and very few have addressed our country's policies and government.

Although none of the previous movements have addressed the impacts of climate change, there is a general acknowledgement amongst the student body that sustainability and green policy is of massive importance. UCSD's campus is filled with solar-paneled trash bins, clearly labelled recycling bins, compost, gardens and sustainability posters everywhere. Students are aware, at least on a subconscious level, that sustainability is a common practice at UCSD. Library walk is a free speech zone on campus and because so, student movements have shifted towards Price Center. The Sustainability Resource Center is located in Price Center. Those who are aware of it and choose to take advantage of its resources have accessible information and the opportunity to be involved in sustainability projects on campus. The Sustainability Resource Center is one of many existing infrastructures that can be used in efforts to create a social movement through coalitions with other organizations on campus. The student body expresses interest in climate change, yet there is still a lack of knowledge about outlets for student action to take place. Once we can harness the full power of the student body to be involved with and perfect sustainability practices, then we can take these methods and introduce them to other college campuses until every single campus in America is zero waste and sustainable.

V. History of San Diego Climate Change Movements

The city of San Diego has a relatively long history of environmentalism and has since then established an extensive network of organizations committed to climate action. The city is often referred to as "paradise" by the locals, so environmental organizations have been successful in framing climate issues as threats to their local "paradise."¹⁸ For this reason, there has been a broad consensus at the city level that climate mitigation is a necessary process in order to protect the aesthetic and charm of San Diego.

Social movements at the city level began with the establishment of the Sierra Club Conservation Committee Board in 1948, which has played an instrumental role in the community through its involvement in the Desert Protection Act, establishment of the Torrey Pines State Park, stopping Desert Mining, protecting the La Jolla Seals, and preventing Jackson Drive from going through Mission Trails Park.¹⁹ The Sierra Club also acts as an important lobbyist for environmental legislation at both the local and national level - giving legitimacy to the organization because of its effort to create institutional change. Since then, dozens of local organizations have been established in San Diego that are dedicated to climate action.

Most of the environmental organizations in San Diego depend on student mobilization to increase the salience and outreach of their platform. The extensive environmental networks that already exist in the city provide students with a plethora of events or initiatives to choose from and join. This choice presents students with a genuine interest in sustainability to join an organization that is tailored to fit their individual interests. However, student participation in organizations is often unpredictable and unreliable mainly do to the fact that student schedules are subject to extreme fluctuations at all times of the year, making it especially difficult to commit to any one thing. The city of San Diego and its corresponding

environmental organizations can resolve this issue by creating incentives for students to join such as: providing scholarships, research opportunities and internships.

We will report on the history of initiatives and environmental organizations in San Diego and will identify ways in which students can work with the city in a collaborative effort to mitigate the impact of climate change through mobilization, increasing the salience of local initiatives, utilizing political opportunities to institutionalize sustainability and investing in student-made sustainable technology.

VI. Our paper

This is the context for the current student movement at UCSD. We will spend the rest of this paper describing what is happening in the current movement and our proposal for how it can be improved. The paper will be divided into three sections :

- 1. The current organizational structure, initiatives, and challenges of the movement at UCSD
- 2. An analysis of movements at other schools and what UCSD can learn from their organizations and initiatives
- 3. Proposal for the integration of the student movement into the city of San Diego's climate action plan.

A collective description of the proposal derived from these sections can be found in the executive summary.

Endnotes

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Section One

Anya Gumberg UCSD STUDENT MOVEMENT

When looking at the student body on campus and their attention to sustainability and climate change, there is a lack of information. Although there are many different organizations that address and promote different ways to educate students on sustainability, these organizations expressed the common challenge of not being well known amongst the student body. There are some websites and resources to allocate opportunities and workshops for those interested in sustainability and a green life at UCSD. However, some of these websites contain organizations that were either no longer active on campus or had emails that were invalid¹. This inhibits students' opportunities to get involved in sustainability, education, workshops, and projects both on and off campus. Our intention was to find a means of communicating with these organizations to discover each one's purpose and impact. We tried to follow up with each group to gain more of an understanding on each one's perspective of successful initiatives, incentives, and challenges in increasing the attendance and commitment of the student body at UCSD to be involved in sustainability. Organizations that we have not heard back from include: Engineers for a Sustainable World, Sierra Club, Ocean Lovers Club, and more. We reached out to a member of Greeks Gone Green personally during a mutual class and that is when we learned that the email the website presented was not the correct one.² Misinformation like this adds on to the lack of information for the students on campus and the inaccessibility of these programs and opportunities.

Challenges

There is a consensus amongst the organizations that a lack of communication between faculty, the student body, and other organizations exists and inhibits student involvement.

A lot of these organizations spend a good portion of their efforts on increasing attendance, whether it's in membership or towards their events. Many have mentioned that their resources might be better put to use towards projects instead of trying to expand audiences through recruitments.³ Although a lot of students are interested in combating climate change, they need specific action items to engage with because they rarely have the time to figure it out

themselves.⁴ Being informed is not enough. Promotion and accessibility of resources and initiatives on sustainability and climate action is crucial. When trying to discover and reach out for more information about the clubs and initiatives on campus, we often ran into the issue of incorrect email servers. This lack of correct and accessible information, for example, are the types of things that inhibit students from getting involved.

Another issue amongst the commitment of the student body towards climate-related issues is relevance and time. Everyone is in a rush and if, per say, there are not any recycling bins available, then students will probably throw away their bottles in an available trash can rather than hunt around looking for a bin to recycle. A simple solution to this would be to coordinate with facilities and management to include more recycling bins on campus; unfortunately this is not the case.⁵ The Sustainability Resource Center expressed the challenge in coordinating within different departments on campus making it difficult to promote improvements towards the campus's green approach because of their lack of positions and influence.⁶

Many organizations have had issues with promoting projects or altering habits through programs and administrations on campus, such as HDH, because of how spread out the roles are allocated amongst different faculty. There is often a theme of a wild goose chase when it comes to addressing different situations going on because of the dispersal of roles in faculty. A lot of organizations expressed how ineffective it has been when it comes to getting certain projects executed. Roger's Community Garden on campus collects all of the food waste at Price Center and the post-consumer waste at SIO and 64 Degrees to be composted or converted into biogas and organic fertilizer through an anaerobic digester⁷. Our anaerobic digester is much smaller than other campuses; at UCSD they only collect about 1000 pounds of food⁸. Expanding the aerobic digester would have to involve a lot of communication between faculty, staff and HDH on campus. However, since each different organization operates on their own funding, sustainability standards, and sovereignty, it makes it that much harder and slower for such projects to get completed.

Reflecting on how the college system separates or creates smaller communities (Introduction Section IV), sustainable organizations on campuses are limited in influence because of how small they are. Sometimes these organizations want to coordinate togetherwhether it's an event for sustainability or promoting organizations on Earth Day - but they have difficulty doing so because of limited communication with each other⁹. On campus, there is an Inter Sustainability Council that includes emails and promotes events, but this is only if you know to sign up with them.

The student organizations would like to see a cohesive coalition of student groups working together constructively on common issues.¹⁰¹¹

Successful Incentives

There have been some successful approaches to increasing the attendance of sustainability groups and events on campus. Recruitment drives, for example, usually consist of group leaders speaking in classrooms and trying to spread and promote information through weekly events, flyers, tabling, library walk, and making captivating projects to engage a variety of interests.¹²¹³¹⁴¹⁵¹⁶¹⁷ Some of these groups present their projects to Greek life or sports clubs to offer potential volunteer hours and opportunities that they would need.¹⁸ To keep attendance high, groups stress the importance of interpersonal relationships within the organization. This usually encourages a sense of belonging and responsibility amongst the members. In addition, groups provide compensation for members' time, whether it be through providing food at meetings or presenting new opportunities and responsibilities.¹⁹ Everyone wants to make their mark in college and different groups promote that interest through opportunities to work on projects and research. One of the most persuasive incentives for students to join sustainability is the co-curricular record, which upon completion, is added on one's transcript for community service recognition.

Making sustainability relevant to all people, not just people who are already environmentally inclined, is the key to taking widespread action.²⁰²¹ Additionally, making access to information and supporting sustainable products as a part of the overall social culture will create more awareness and change. The environmental groups and organizations on campus have a plethora of resources and opportunities available for students. However, their largest issue is getting students to show up and attend. One successful incentive is providing food at meetings.²² Students are less likely to pass up the opportunity for free food and some stay when they learn more about the event or organization. Free sustainable products are also a catalyst for people to see how simple or fun it is to incorporate sustainability into their daily lives.^{23 2425}

Proposed Solutions

Angela Davis is an associate member of the Blank Panther Party, a member of the Communist party and was a PhD student at UCSD. After Davis openly criticized and expressed her political beliefs, the UC Regents (governing board of UC's), state legislators, and Governor Reagan addressed academic staffing with intentions to dismiss Davis.²⁶ Essentially Angela Davis was not allowed to express her opinion as a student and potential faculty member. Climate disruption is something that affects everyone. It is not a discriminatory conflict. We believe all professors have the responsibility to inform their students of climate disruption, regardless if it coincides with their curriculum or not. One solution we propose in order to keep attendance high is to incentivize showing up to events and group meetings by offering extra credit through participation. This could be done by negotiating extra credit opportunities with professors who are passionate about promoting sustainability. This can broaden the horizon of educating the student body without intervening with the curriculum of the faculty member's course. With professors promoting the events and workshops, this can expand access to opportunity and add breadth to students. Sustainability awareness should not be major-specific. For example, organizations like Engineers for a Sustainable World is not exclusive to just engineering majors. By collaborating with different majors, they can maximize their technological advances, establish intersectional networks across majors and colleges and increase attendance rates.

Professors are not the only faculty who can collaborate with student organizations for climate action. If there were student representatives for businesses on campus such as HDH (Housing Dining and Hospitality) or Price Center, then they could serve as a direct line of communication for student organizations. Many of HDH's sustainability goals coincide with that of student-led orgs on campus. From what we know, endless loopholes of bureaucracy tend to get in the way or slow things down in terms of getting campus, business and student approval for sustainability projects. By including a representative for businesses on campus to collaborate with student organizations, this could help speed up the pace for how fast the university intends to implement climate action. They can help pitch projects or incorporate alternatives such as compostable straws, sustainable vendors, etc.

Another important matter is the impact of state and federal policies. When speaking to different organizations, many agreed that there should be some sort of policy breakdown during midterms and elections that way everyone can be informed of the impact some laws and

propositions have on the environment so students can make an informed vote. Many of these policies are written in complex jargon to deter people from investing and understanding what is going on. This is not just in the policy -it is also present in the scientific world. If workshops and events are too time consuming for the average busy student, then flyers or brochures on library walk are an alternative. When addressing climate disruption, it is important to present scientific facts without the complexity of the language that distracts from the severity of the issue.

A large student community on campus is Greek life and they have a collective allocated toward sustainability called Greeks Gone Green. They market well online, however, many students are unaware that the collective even exists. Within the Greek community, there are mandatory workshops each quarter influenced by the topics of Diversity, Equity, and Inclusion (DEI). Each workshop is demonstrating a different topic while still holding to the relevance of DEI. If Greeks Gone Green went into sorority and fraternity meetings at least once a year with a presentation or workshop to promote a sustainability initiative happening on campus, this could broaden the audience and expand membership.

All of the 20+ sustainability organizations on campus have a variation of different opportunities and projects both on and off campus. These organizations have different roles and goals. For example, bridging the gap between economic and sustainable products and supplies available to students, focusing on passing legislation on environmental protection (for example the passing of Senate Bill 100 for 100% clean electricity in CA by 2045)²⁷, and collecting post consumer waste to be converted into biogas and organic fertilizer through anaerobic digestion. Many students seek opportunities to make connections for jobs, things to mention on their resume, or an experience to search what their purpose could be. These are all points to incentivize student participation for sustainability projects.

The student orgs offer these opportunities through platforms, but the lack of information on campus can limit student involvement in these activities. Combined knowledge is better than an individual's. With membership expansions in organizations, this can allocate more roles and projects as well as include different perspectives to enhance advancement. If organizations had more participants then they could focus more of their efforts on their organizations' projects. With a coalition of organizations, this could enhance their representation on campus approach this issue. We suggest that the Inter Sustainability Council and other organizations get in touch with Associated Students to incorporate more sustainable vendors at school events like Sun God, Fall Y'all, Hullabaloo, etc. Additionally, by partnering with other vendors and companies, students could get more access to sustainable products or coupons to benefit from. There is a lack of green companies present on campus. FarmFreshToYou is an organization that delivers produce from local farmers - which helps limit the carbon footprint behind food transportation. They have a presence on library walk during the Week 4 Vendor Fair at UCSD. The Vendor Fair is another example of the many platforms the school holds that can expand student accessibility to effortless investments into sustainability. The Career Fair is another event that can provide even more opportunities to students. Additionally, organizations hold internships and opportunities to focus on the community at UCSD and in San Diego as a whole. Given the opportunities from these organizations and a sustainability representative in the planning of these events, the inclusion of sustainability can be expanded in current school event.

While looking at non-UCSD Student Movements, there is a centralized focus to engage students in sustainability through engaging events such as concerts and fairs. Additionally, there is one centralized website at other campuses like SDSU that directs students to programs, workshops, organizations, and events. This is something UCSD can definitely improve on to make opportunities more accessible. If there were to be a "student movement" of some sort at UCSD, then an organization in marketing and access to reach out to student needs is the foundation to this.

Conclusion

The current culture at UCSD lacks accessibility to the many sustainable organizations on campus as well as the information and plethora of opportunities it provides. Creating a centralized website for all sustainability initiatives, organizations and projects on and off campus, this could contribute to the expansion of membership, participation and saliency of climate disruption. Student representatives with decisions in HDH or AS events can also incorporate leaders, internships, and community involvement on and off campus. By doing so, we can minimize the dispersal and lag when it comes to executing projects that include sustainability and green technology.

The presence of faculty involvement has a huge influence on progress. Faculty members have higher authority on approval of certain projects and can guide organizations on campus to the proper administration to talk to. UCSD is expanding a 7th College centered around the theme of "A Changing Planet."²⁸ This is still under proposal, but a step in the right direction as far as expanding the engagement of students towards the conservation of Earth. Faculty could support workshops, events, and seminars revolving around the urgency of climate disruption by offering extra credit to promote attendance. This, in addition to the other incentives described previously, we propose will be successful in expanding the student movement at UCSD.

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Section Two

Alexis Orrick

NON-UCSD STUDENT MOVEMENTS

In this section we will discuss what is being done on other campuses (both in San Diego and across the UCs) to stimulate student initiative into action against climate disruption. Organizations on other campuses are taking a variety of action-based and information-based initiatives to get students involved in the fight against climate change. Here I have highlighted the most effective elements of their organizational structure and the nature of these initiatives:

Centralized Website

Many schools have centralized the environmental movement on campus through pretty, easy to use websites. This is an effective way for students who want to get involved in the movement to see what their options are - it's easily accessible (all you need is a computer or mobile phone). In the UCSD system, the lack of centralization takes power away from individual organizations. It disincentivizes students to get involved because they have to go to navigate all the information on how to get started, themselves. A centralized website is no panacea for getting students involved in the movement, but it certainly helps gather students at the margin who will get involved if it's convenient. Examples of these centralized websites are USD's sustainability website¹, UC Berkeley's Student Environmental Resource Center (SERC)², UC Davis's Sustainable 2nd Century³ and Campus Center for the Environment⁴, UCLA Sustainability⁵, and UCI Sustainability⁶. These websites aren't just lists of organizations or people to contact, but many of them are interactive beyond that.

For example, at UCLA, UC Davis, and UC Irvine - these websites describe the University's current initiatives to combat climate change with progress updates. This attaches the environmental movement to the university administration and allows the students to serve as an additional body of accountability for action against climate change. Other unique features of websites connect students not just to events on campus, but events in their communities. These include community education projects, ecological restoration, and direct interaction with local politics. For example, UCLA has an organization called "Clean Consulting"⁷ for business majors to work with local businesses on sustainable initiatives, while UC Santa Barbara has the A.S. Environmental Affairs Board⁸ to create opportunities for students to get involved with their communities. Lots of these websites also provide sustainable research and internship opportunities for students - which is brilliant because almost everyone in college (especially in STEM) will work in an internship or research at some point during their undergraduate education. Why not work on a sustainability project? UCI has a great website in particular with a myriad of options for work in engineering, health, environmental biology, poverty etc. Many of these websites also monitor university initiatives to become carbon neutral with updates about emission reduction on campus, serving as an evaluation process for the effectiveness of these initiatives - monitored by students.

All of these aspects of a "student movement" website should be implemented at UCSD : centralizing existing organizations into one website, monitoring University initiatives to be sustainable, providing opportunities for students to work in their communities and in professional environments through offering research jobs and internships. Again, we want to emphasize that a website will not be the end all solution to getting more students involved, but it will help keep organizations in communication and increase students' knowledge of what projects are available for them to work on.

Partnering

Another aspect of organizations on other campuses was the abundance of partnering with university and community resources. For example, SDSU's "Green Love" organization (the largest organization) partners with ride-share companies such as ZipCar and Zimride⁹. This can help organizations bring it funding, while promoting resources that students can use to live more sustainably (using ride-sharing programs instead of driving themselves everywhere). Another example is UCSC's Campus Sustainability Council¹⁰, a student body whose primary objective is to raise money to support all the environmental groups on campus. Both of these examples provide resources for organizations to have a greater impact on their schools and communities.

Another important partner for many university sustainability organizations is Associated Students. This is especially important because they are present on every UC campus - meaning

their commitment to climate action could have UC wide implications. They also tend to have more power to put pressure on the administration because they are a body designed to be a voice for the students. SDSU's GreenFest¹¹ and UC Santa Barbara's AS Environmental Affairs Board¹² are organizations that have partnered with their respective AS groups to promote sustainability on campus. Additionally, AS has more financial resources. They are often the student body that allocates financial resources how they see fit. This could help environmental organizations expand their impact.

Additional partners that I did not see at many schools could be green technology companies (especially at UC Berkeley - where silicon valley could be a huge provider of this resource) to recruit from and perhaps help fund environmental groups at universities. There are also positive externalities to this transaction as students could get involved in professional work during their undergraduate years and get additional training, while hopefully promoting sustainability in their communities and working for companies with the same initiatives. More partnerships can be set up between universities (student organizations) and green technology development in California and beyond.

Types of Events

This is perhaps the most challenging initiative because it is hard to predict what students will see as "cool" and put energy and time into. However, I thought a very effective strategy was to use concerts and music festivals to promote sustainability. Concerts and music are a huge part of student life; at UCSD I've noticed these types of events attract the biggest crowds of out of any other University event - so it makes sense to use this avenue for outreach. Festivals are also a largely social event, meaning the base would be bigger than just environmentalists at UCSD looking to get involved. This platform should be used to educate and promote events of sustainability initiatives and orgs on campus. Examples include SDSU's Greenfest¹³ (which I will describe in detail later in the section) and UCLA's Coastalong Music and Sustainability Festival¹⁴ - a zero emissions music festival with live musical entertainment and booths to educate students on niche issues in environmentalism that might interest them. Both of these events work on promoting ongoing initiatives both at their schools and in the community, while teaching students about small changes they can make to commit to a greener lifestyle.

Another effective initiative was creating events that are intersectional - for example related to both social justice and climate change, or green technology for engineers. This was prevalent for lots of organizations across schools : UC Berkeley's Sustainable Environmental Designers, Environmental Health Sciences, Students of Color Environmental Collective, Civil and Environmental Engineering¹⁵; UCLA's sustainable engineering organizations and naturalist organizations¹⁶; and a myriad others from Universities across the state.

An organization I want to describe more specifically is SDSU's "Greenfest". This organization holds events year round related to the intersectionality of student health and environmentalism, as well as a huge annual concert. Most of their events offer "destressing" activities for students while educating them about environmental issues. For example, they host yoga, meditation, sustainable fashion shows, and things such as "decorate your own reusable bag" etc¹⁷. This seems to be an effective way to reach students because another popular event at UCSD (specifically for freshman) is events like therapy fluffies or free food events. If UCSD organizations could figure out how to implement environmental education into events like this and recruit freshmen to get involved in environmental initiatives, the strength of their organizations could be greatly magnified. Greenfest also incorporates the music festival/concert with a similar style to the UCLA one - booths about niche environmental issues. This should be implemented at the UCSD Sun God Festival. A coalition between the sustainability organizations at UCSD and Associated Students could work on creating the annual Sun God festival focused around sustainable living.

The one concern I have about events like these is how deep they are tackling environmental issues. In terms of student recruitment these initiatives have potential, but it is important to ensure that the booths and activities at these events also focus on climate education and providing real ways for students to intervene and get involved on a grander scale. Basically this needs to be paired with much more effective initiatives in terms of environmental impact, but could be a good way to increase student involvement.

Greek Life

Greek life should be incorporated into the movement against climate disruption because of their already grounded social standing and infrastructure for outreach. While there were not many schools where Greek life took an active role in sustainability, UCSD could use utilize this avenue as a key part of UCSD's movement. UCSD does not have a very centralized social culture for students. There is not a lot of school pride, and I do not know many people who go to sporting events. In fact, the school's nickname is "UC Socially Dead." It's all divided by the six colleges, and most students find their place in smaller organizations like clubs or research internships. The only student organization that is both well known and seems to have the most active student commitment and involvement is Greek Life.

While Greeks Go Green exist at UCSD, there seems to be no initiatives taken by fraternities and sororities to take action against climate disruption. A model UCSD could follow is found at SDSU, where they are a proud home to the country's first environmental fraternity : Epsilon Eta¹⁸. They work in tandem with the Greeks Gone Green Committee¹⁹ (part of SDSU's "Green Love" to promote environmental initiatives from all fraternities and sororities on campus. Epsilon Eta takes education initiatives in their events that are open to both students and faculty - an important union in taking action.

Epsilon Eta should start a chapter at UCSD and revive UCSD's Greeks Go Green initiatives to encourage action among all greek life on campus. They can also form coalition agreements with environmental organizations on campus, contribute to a centralized website, and overall strengthen the UCSD movement in terms of numbers and the impact of student initiatives.

Training Student Leaders

Another key part of creating any type of social movement is training people (especially youth) on how to be leaders in the movement. Most of the schools I researched have organizations particularly related to training the next generation of politicians, engineers, and doctors (etc) on how to be leaders in climate change within their professional field. While every organization has the potential to do this, the Association of Environmental Professionals has particularly organized methods.

The Association of Environmental Professionals²⁰ is a national organization dedicated to connecting college students with professional work in their field related to environmentalism and sustainability. It is a state-wide organization with chapters at many campuses (including a largely inactive chapter at UCSD) and has connections to national and international organizations (the IAIA). A big part of this organizations professional connection lies in lobbying and politics,

which brings together the student movement with governance solutions to climate disruption - as governance is the only way this problem can be solved on a large scale. They focus on creation and enforcement of environmental laws. Implementing organizations like the AEP is critical in universities where the next generation of leaders is being trained to take action against climate change. It's also important that this already established organization has a vast and credible network - meaning it should be utilized at UCSD considering the potential it has to take actual environmental action. Students spend much of their undergraduate life worrying about getting professional experience, so an organization like this can also appeal to that aspect of student life.

Student organizations should also train students to be leaders on campus and in their communities. As I've talked about many times in this section, a key part of the initiatives of these clubs should be to extend their outreach into the community. But this outreach can only be as effective as the leaders who educate local people and unite localized action against climate disruption. Leadership training should teach students how to talk about climate disruption in ways that stress the urgency of the situation and work to bridge the gap in communication by translating scientific jargon into lay terms so the general public can understand. It should also teach students essential leadership skills such as organizing projects, managing large groups of people, conflict resolution, and coordinating with outside organizations. These are skills that all college graduates can benefit from, and would bolster the strength of the student movement against climate disruption. This leadership is an essential piece of our proposal for reform.

Conclusion

Based on the analysis of schools across California, there are five key changes UCSD sustainability organizations can make : the creation of a centralized website, partnering with groups both on and off campus, creating intersectional events, incorporating greek life, and training student leaders. These changes could largely increase in student involvement and enhance the impact of student-led initiatives at UCSD. And hopefully this proposal can serve as a model beyond just our campus, but for other schools struggling to organize their own sustainability movements.

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Section Three

Hallie Culotti

The city of San Diego has been leading the fight against climate change for over a decade. Through initiatives like the Climate Action Plan and Community Choice Aggregation, San Diego continues to set an example for all metropolitan cities that sustainability is compatible with economic growth and necessary for the survival of a bustling city. In addition, San Diego is home to three thriving universities and a multitude of community colleges and extension schools which altogether account for hundreds of thousands of students, staff and faculty members. That being said, the city is inextricably linked to its academic stature. In this section, we will demonstrate how coalitions between the city of San Diego and its colleges - specifically UCSD - can greatly improve the chances of meeting San Diego's climate action goals by 2035.

I. Societal Transformation Solutions

San Diego's relatively long history with climate action has created a culture of climate consciousness throughout the county. Residents of the city actively volunteer to clean up beaches and contribute their time to the preservation of our coasts. This has been spearheaded by regional grassroots and non-profit organizations, making up an extensive network of environmental groups throughout the county. This section will analyze the history of San Diego's environmental social movements and will highlight their successes and challenges. We propose ways in which student involvement can increase the salience of local environmental initiatives, expand the culture of climate consciousness, and educate the general public.

Sierra Club (1948)

San Diego's Chapter was founded in 1948. Its involvement in the Desert Protection Act, establishment of the Torrey Pines State Park, protecting the La Jolla seals, etc. has been instrumental in the conservation of our coast.⁴

Environmental Health Coalition (1980)

⁴ Sierra Club San Diego Chapter. <u>http://sandiegosierraclub.org/about/</u>

This organization is dedicated to achieving environmental and social justice. They believe that justice is accomplished by empowered communities acting together to make social change. Some of their outreach efforts include organizing and advocating to protect public health and the environment threatened by toxic pollution. EHC supports broad efforts that create a just society and fosters a healthy and sustainable quality of life. ⁵

Regional Energy Working Group (2003)

The San Diego Board of Directors established this group in an effort to permanently focus on bringing clean energy to the San Diego region. The EWG is comprised of a mix of elected officials, business organizations, environmental groups, regional schools/universities (specifically UCSD which represents higher education), transit and transportation expertise, regional energy expertise from the Energy Policy Initiative Center at USD Law School, San Diego Gas and Electric Company, and the California Center for Sustainable Energy. The EWG generally meets monthly to discuss the progress made by each group. ⁶

San Diego 350

This local, volunteer-based organization is building a movement around the prevention of climate injustice. They strive to create a future that supports a livable planet and just society through education, outreach, public policy advocacy, and

mobilizing people to take action. ⁷ They were responsible for organizing "The People's Climate March" in 2014 which demonstrated to local officials the pressing demands that San Diego residents had for climate action. ⁸

Solutions

⁵ Environmental Health Coalition. <u>https://www.environmentalhealth.org/index.php/en/who-we-are/mission</u>
⁶ SANDAG: Regional Energy Working Group.

https://www.sandag.org/index.asp?committeeid=67&fuseaction=committees.detail 7 San Diego 350: Climate Change Action. https://sandiego350.org/about/

⁸ Wilkens, John. "From San Diego to Oceanside: thousands call for action on climate change in marches" San Diego Tribune. September 8, 2018. <u>https://www.sandiegouniontribune.com/news/environment/sd-me-climate-march-20180906-story.html</u>

Local organizations have been successful so far in framing environmental issues as threats to maintaining the "paradise" of San Diego. These organizations have large audiences and volunteers which continue to grow and branch off into more parts of the community. A regional groundwork with extensive connections already exists within the city - giving organizations more legitimacy and political opportunities. In addition, collaborative efforts already exist between students and the city. One of these partnerships is demonstrated through an event called Green Talks, one of the biggest events of the year for the sustainability center on UCSD's campus. According to Katie Oberman, the President of the Inter-Sustainability Council at UCSD, the Green Talks is a Ted-Talk styled event for sustainability speakers to participate in throughout San Diego county including the Mayor of Imperial Beach, a city council member, one of the managers of Ale Smith brewery and Steven Mayfield, a biology professor on campus. ⁹

On the other hand, some of the most pressing challenges for organizations is getting people to commit and show up. As a student, schedules are constantly subjected to changes and fluctuations. In addition, there is very little incentive for students to participate in local organizations unless they are already interested in sustainability. Lastly, the presence of so many different organizations whom all have their own goals and purposes presents a challenge to coalition building.

We propose multiple solutions to these challenges. First, local environmental organizations should offer internships - specifically, paid internships - for students as an incentive to work for regional partners and increase the outreach of their movements. Students at UCSD are constantly flooded with offers to join different organizations and businesses but are curbed from doing so by the lack of opportunity it implies for them. Students have expressed extreme discontent with the idea of unpaid internships, which are almost always an exploitation of cheap labor with little to no pay off. ¹⁰ For this reason, local businesses and organizations need to demonstrate that their jobs or positions for students are meaningful in order to create a permanent alliance. A second solution we propose is to align the interests of student-sustainability groups on campus with local organizations that have the same or similar interests. For example, the Muir Environmental Corps student-organization at UCSD is committed to

⁹ Oberman, Katie. Interview by Hallie Culotti. March 2019

¹⁰ Greenhouse, Steven. "The Unpaid Intern, Legal or Not" The New York Times. April 2, 2010. http://www.bollettinoadapt.it/old/files/document/12323nyt_unpaid_inter.pdf

clean-up projects much like the San Diego Coastkeeper organization in the community.¹¹ Thus, creating a coalition between two similarly disposition groups can increase the outreach of projects and can create stronger lobbying blocs. Lastly, we propose a solution that would create a 'grand calendar' of environmental events happening on UCSD's campus and throughout the city. In the previous sections, we discussed the difficulty of navigating so many different websites with different information. For this reason, we believe it would be particularly effective to have a singular website where students and San Diego residents alike can easily access information, events and knowledge about climate action.

II. Governance and Market-Based Solutions

One of the biggest challenges to getting environmental legislation passed at the local or federal level is navigating the partisan divide. However, Republican Mayor Faulconer of San Diego is setting an example by being one of the strongest advocates for Community Choice Aggregation - an initiative which could make San Diego the largest city in America to achieve 100% renewable energy use by 2035.¹² Mayor Faulconer is setting an incredible example of how politicians should treat environmentalism and climate mitigation as a bipartisan issue. Unfortunately however, his support of climate action as a Republican is anomalous. In order to secure environmentally protective legislation at the county level, there must be broad public support. In this section, we will elaborate on the current governance and market initiatives in San Diego and will then identify ways in which UCSD can be used as a model for garnering political support and implementing economic incentives for sustainability.

<u>SB32</u>

This California Bill established sanctions and responsibilities for monitoring and regulating sources of emissions of greenhouse gases. The bill requires that statewide greenhouse gas emissions level in 1990 be achieved by 2020. It proposes to adopt rules and regulations in an

¹¹ San Diego Coastkeeper. Website

¹² Nikolewski, Rob. "CCA 101: How does Community Choice Aggregation work? What you need to know" San Diego Tribune. September 9, 2018. https://www.sandiegouniontribune.com/business/energy-green/sd-fi-cca-howtheywork-20180822-story.html

open public process to achieve the maximum, technologically feasible, and cost-effective greenhouse gas emissions reductions.¹³

Climate Action Plan

Modeled after SB32, the city of San Diego's Climate Action Plan identifies five bold strategies to reduce GHG emissions by the 2035 target: energy and water efficient buildings, clean and renewable energy, bicycling, transit and land use, zero waste and climate resiliency.¹⁴

Community Choice Aggregation

Community Choice Aggregation allows any city, county or combination thereof to form an entity responsible for the purchasing power for their community. CCAs typically offer customers three different energy programs — a default program, a program for solar and a more expensive program advertising use of 100 percent renewable sources.¹⁵

Solar Rebates

California has a series of Solar Initiative Programs that creates tax incentives for residents to invest in solar and renewable energy. ¹⁶

Solutions

SB32 demonstrates how legally binding legislation can subsequently spur behavioral change and open more competitive markets for clean energy. We propose that UCSD student organizations put pressure on the administration to renegotiate its contracts with vendors, corporations and regional stakeholders to include sustainable practices that fit in with the university's Carbon Neutrality Goal. For example, Yogurt World (a frozen yogurt vendor on

 ¹³ Bill Text - SB-32 California Global Warming Solutions Act of 2006: Emissions limit.
<<u>https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32</u>>
¹⁴ "The City of San Diego Climate Action Plan" December 2015.

https://www.sandiego.gov/sites/default/files/final july 2016 cap.pdf

¹⁵ Nikolewski, Rob. "CCA 101: How does Community Choice Aggregation work? What you need to know" San Diego Tribune. September 9, 2018. https://www.sandiegouniontribune.com/business/energy-green/sd-fi-cca-howtheywork-20180822-story.html

¹⁶ SDGE: Solar and Rebates Incentive Program. <u>https://www.sdge.com/residential/solar/solar-rebates-and-incentive-programs</u>

campus) donates its organic waste to Roger's Garden where it is composted. We believe that renegotiating contracts with vendors, corporations and regional stakeholders can greatly contribute to the school's Zero Waste goal.

A great example of coalition building between students and UCSD's private stakeholders comes from the HDH sustainability office. HDH, the private company on campus in charge of Housing-Dining-Hospitality, has dedicated a portion of its funding and resources to sustainability. It established the HDH Sustainability Office which works in partnership with UCSD's Econauts student organization. Together they develop ideas, like the 2019 Eco-Container Project which gives all UCSD residents credit for two Eco-Containers on their campus ID card.¹⁷ We propose that more student organizations should collaborate with sustainable businesses and stakeholders on campus.

Another solution we propose is to use student mobilization as a resource to campaign for environmental candidates. Local campaigns - city council, state representatives, etc. - constantly seek young, student mobilizers for unpaid intern and volunteer positions. We can utilize student's mobilization to campaign for environmentally inclined candidates dedicated to creating a sustainable future for San Diego.

Lastly, we propose that the city work in coalition with all colleges in San Diego to provide free or heavily subsidized transportation for all students, staff and faculty. In addition, the city could donate to student initiatives like Pedal Club and use the club's resources to integrate bike-transit culture into the city. We also propose that the city adopt UCSD's model of leasing subsidization for electric vehicles to the residents of San Diego.¹⁸ San Diego's local government should invest in grants to have professors at UCSD or elsewhere build an economic model that the city can use to transition into EV lease subsidization. By doing so, both the city and the universities can achieve their goals of reducing the use of single occupant vehicles. This could drastically lower the green-house gas and black carbon emissions.

III. Science and Technology and Ecosystem Solutions

UC San Diego is a tier one research university, meaning it is revered for providing greater opportunities for students to work with world-class faculty in nationally ranked

¹⁷ HDH Sustainable Dining. <u>https://hdh.ucsd.edu/dining/pages/Sustainable.html#ecocontainer</u>

¹⁸ Resource Management and Planning. UCSD. http://rmp.ucsd.edu/strategic-energy/ev/offers.html

programs.¹⁹ As students, we have access to cutting edge technology and nobel laureate faculty, giving our ideas the chance to become a reality. Student sustainability leadership on UCSD's campus has been foundational for the implementation of new technologies. For example, the student-designed anaerobic digester at Roger's Community Garden has been significantly important for reaching the University's Zero Waste goal.²⁰ We believe the city of San Diego could reach its climate goals by 2035 and restore local ecosystems if it subsidized the creation of student-made technology by donating to organizations.

We suggest that the city of San Diego invest in student organizations to build green technology and implement it throughout the city. Students at UCSD have built things like solar panels, anaerobic digesters, composts, etc. and continue to develop new ideas through fostering sustainability into education and engineering.²¹ For example, we would like to see the city establish more community gardens and partner with student initiatives on campus to provide compost and anaerobic digesters at these gardens. By implementing student-made technology cross-regionally, the city and UCSD could reach its goals of ecological and habitat restoration.

Another solution we propose is using city investments to expand UCSD's Microgrid technology as a source of energy for the La Jolla region. By doing so, UCSD could become competitive in the clean energy market when Community-Choice Aggregation is implemented.²²

Lastly, we propose the city offers research scholarships that students from all San Diego colleges can apply for. The research would focus around topics such as carbon sequestration, ecological restoration, maintaining ecosystems, clean energy use, zero waste or whatever else the city deems important.

IV. Ecological Restoration

San Diego is truly a local paradise surrounded by lush greenery and pristine coastlines. The locals here take great pride in the idyllic city. However, much of the coastline and natural ecosystems that make San Diego so incredible have been drastically reduced. Over 90% of local wetlands, one of the most important "buffer" ecosystems in the world, has been lost do to

¹⁹ University of Houston. <u>https://www.uh.edu/about/tier-one/tier-one-faq/</u>

²⁰ UCSD Sustainability. Zero Waste. https://sustainability.ucsd.edu/focus/zero-waste.html

²¹Engineers for a Sustainable World. https://eswtritons.wordpress.com/projects/

²² Microgrids at Berkeley Labs. UCSD. <u>https://building-microgrid.lbl.gov/ucsd</u>

commercial building and land use.²³Local environmental groups and activists have been fighting for the restoration of these habitats - successfully lobbying for some protections of the wetlands. We believe that local environmental groups and UCSD student-sustainability groups should work together in coalition to increase the resources available to save these wetlands.

V. Conclusion

We believe that San Diego can reach its five central goals of the Climate Action Plan energy and water efficient buildings, clean and renewable energy, bicycling and transit, zero waste and climate resiliency - by building permanent coalitions with UC San Diego studentsustainability groups as modeled through this report.

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