To better understand the campus community’s perspectives on climate change, sustainability, and resilience issues, the Mānoa Institutional Research Office (MIRO) and the Office of Sustainability administered the first Earth Day Survey in spring 2018. The survey was conducted online and open for two weeks to all students, faculty, and staff. The short survey included four open-ended questions, three multiple choice questions, and took survey respondents on average five minutes to complete.

The response rate among students was close to 10%, and 8.4% among employees which is quite desirable for a survey mainly composed of open-ended questions. Altogether, we received almost 8000 pieces of narrative responses. The MIRO created a series of procedures to analyze and process the qualitative data and developed online data tools to disseminate both quantitative and qualitative survey data to all students and employees.

The four open-ended questions were designed to probe different aspects of community engagement with these issues. We asked the Mānoa community to talk about which sustainability and climate change issues concern them the most and why; how they learn about those issues; what topics they want to learn more about; and in what ways sustainability and climate change issues have influenced their decisions and life choices.

"Living in Hawai‘i, I am always concerned about sustainability, since we live on an island. I am very careful not to waste water, food, and electricity."
People learn about sustainability and climate change issues through integrated ways, including courses, news, internet, movies, research projects, talks, workshops, Earth Day events, people, and various organizations. News stories are the primary information resource for both students and employees. Below is a word cloud made using students’ responses.

“\text{I have learned a large amount about climate change from my Oceanography courses this semester, including OCN 623, OCN 627, and OCN 628. Also, I'm a TA for OCN 201- I try to teach my students about climate change and end up learning a bit too, myself!}”

**Q:** What sustainability and climate change issues are you interested in learning more about?

**Selected Most Influential Courses**

- Biology (101, 171, 172, 214, 280, 690)
- Geography (100, 151, 152, 201, 302, 309, 312, 401)
- Oceanography (201, 301, 309, 310, 320, 330, 331, 623, 627, 628)
- Natural Resources and Environmental Management (600, 601, 612, 620, 631, 661, 682, 691, 701)
- Meteorology (101, 201, 449, 752)
- Botany (101, 202, 301, 450, 690)
- Urban Planning (473, 620, 625, 640, 673)
- Travel Management (420, 425, 601, 607, 699)
- Political Science (371, 380, 777)
- Public Health 681; Philosophy 790; Hawaiian Studies 101, American Studies 150, Law 582, ACM 385, KRS 395, COMG 151, and many more.
Results show that sustainability and climate change issues have changed people’s choices and decisions in various aspects; from daily choices like choices of purchasing, transportation, food, and recycling, to major decisions on academic programs, research projects, career, employer, political decisions, financial investment, and place to live or retire. The following strategies are generated from the Mānoa community voices.

**MINIMIZING WASTE AND RECYCLING**
1. Reduce Plastic Usage
2. Carry Bags, Containers, & Utensils
3. Buy Small Quantities
4. Compost at Home

**TRANSPORTATION**
1. Drive Less
2. Walk More
3. Carpool
4. Use Bus & UH Shuttles

**FOOD**
1. Buy Local & Seasonal Foods
2. Cook Own Food
3. Go Vegan
4. Organic Food

**PURCHASING**
1. Buy Less & Minimalism
2. Buy Local, Organic, & Fair-trade Items
3. Clean Energy Choices
4. Buy Second-hand or Reusable

**ENERGY**
1. Clean Energy: Electric & Solar
2. Energy Efficient Appliances, Use LED & Rechargeable Batteries
3. Energy Conservation, Not Wasting Electricity, Water, etc.

**ACADEMIC AND CAREER CHOICES**
1. Life-long Mission
2. Academic Program
3. Research Project
4. Job, Career, & Employer

**CIVIC ENGAGEMENT**
1. Educate Self & Others
2. Vote for Green Leaders
3. Change Law & Regulations

**WHERE TO LIVE**
1. Move Somewhere Safer from Global Warming Consequences
2. Move to the City or Closer to Work to Reduce Commute

"Currently, I try to save energy and reduce the amount of waste I create in small ways. I recycle cans, plastic and glass bottles, paper and cardboard products. I try to limit the amount of paper I use and recycle it. I like to use reusable bags. I try not to use so much water when I shower. I switch off lights and appliances when not in use. I would like to get a hybrid car and install solar panels in the future. I am open to walking and catching the bus to destinations than always driving."
Campus-wide seminars, workshops, social gatherings and movie viewings on issues and solutions to issues that people are most concerned about: sustainable lifestyles (vs. consumer culture), climate change mitigation, ocean and beach, food systems, and renewable energy.

a) Utilize electronic screens in public gathering spaces on campus to display information about campus events, quotes from campus surveys, and campus improvements.
b) Work with UH News to develop strategies that can better educate, engage, and equip the UH community with more information and resources, such as information displays, newsletters, etc.
c) Tell stories about solutions at all scales – from small things you can do in your daily lives to large-scale, outcomes-based, applied research to solve complex sustainability challenges.
d) Work with the book store, food service, and commuter service to provide more green options, and merchandise.

Students are interested in sustainability related courses, majors, and careers.

a) Make sustainability courses more visible.
b) Develop sustainability certificates, majors, and post-graduate programs.
c) Create a repository to share sustainability-related research projects more easily.
d) Make scholars and subject matter experts more visible / accessible.
e) Provide more information sessions on related career opportunities.
f) Invest in student leadership development for sustainability.

a) Help people to improve waste reduction, plastics reduction, reducing / reusing / recycling in daily interactions with campus environment.
b) Increase water refill stations on-campus / reduce single-use plastic options.
c) Implement composting and other measures to divert waste from landfill.
d) Increase healthy, locally and ethically sourced food options.

Keep the community informed of progress on the university’s sustainability goals, community’s feedback to improve our campus, and opportunities to contribute.

a) Create UH News stories using information gathered from the Earth Day survey (main findings, expert’s stories, and sustainability initiatives on-campus).
b) Create an online dashboard to publicly track & monitor progress on the university’s sustainability goals.
c) Inform campus community of volunteer opportunities on-campus.

Understanding Sustainability and Climate Change Issues Motivates People to Adopt a More Sustainable Lifestyle.