

UH Mānoa EARTH DAY SURVEY 2018 RESULT

Mānoa Institutional Research Office <u>https://manoa.hawaii.edu/miro/</u> UH Office of Sustainability <u>http://www.hawaii.edu/sustainability/</u>







Soarch	
Search	

Get Involved Education Energy About News

The University of Hawai'i integrates sustainability across its Operations, Education, Research, Campus & Community Engagement and Cultural Connections.

Executive Policy 4.202



What is sustainability?

Sustainability is defined as "serving the needs of the present without jeopardizing the needs of the future."

We refer to the principles of The Earth Charter which defines sustainability in all its dimensions: cultural, economic, environmental, and social.

We recognize the rich foundation of indigenous Hawaiian cultural values and knowledge, and seek to learn from this foundation in order to respond to climate change and sustainability challenges.

"We stand at a critical moment in Earth's history, a time when humanity must choose its future. We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace."

- The Earth Charter





Survey Administration

- Survey administered online for 2 weeks in April 2018
- Incentives: 3 (\$100) Bookstore gift cards
- 4 open-ended questions and 3 multiple choice questions
- Student Survey Response Rate: 9.6%

(Valid Email Invitations Sent: 16,690; Responses: 1604)

• Employee Survey Response Rate: 8.4%

(Valid Email Invitations Sent: 5943; Responses: 502)

• # of narrative responses: Almost 8000.

Sample Comparison



Sample Comparison



Four Open-ended Questions



Q3 What char in lease

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

Please list **different ways** you have learned about the issues described in Question 1, including any specific classes at UH.



Can you talk about how sustainability and climate change issues have influenced or might influence your **decisions** and life **choices**, no matter how small or big those choices are?

Three Multiple Choice Questions

>> LEVEL OF CONCERNS

Overall, how concerned are you regarding various sustainability/climate change issues we are facing?

>> LEVEL OF INTERESTS

How interested are you in seeking information about sustainability/climate change issues?

 Very Concerned 	 Very Concerned
 Somewhat Concerned 	 Somewhat Concerned
 Neutral 	o Neutral
 Slightly Concerned 	 Slightly Concerned
 Not at all Concerned 	 Not at all Concerned

Multiple Choice Questions

>> FOR FOLLOW-UP CONTACTS

Would you like to receive information about how you can learn more about sustainability, climate change, and related issues?

o Yes			
o No			



Data Analysis



MIRO Released Two Web App Data Tools



- Supportive Campus '16 🔳
- Campus Experience '17
- Campus Experience '18 -Students
- Campus Experience '18 -Employees

Earth Day '18 - Students (Beta)

Earth Day '18 - Employees

(Beta)

Web Tools that Display Both Multiple Choice and Open-ended Data

INSTITUTIONAL RESEARCH OFFICE

2018 Earth Day Survey Report - Employee (Beta)

Question 1: Most concerned sustainability and climate change issues

Question 2: Ways to learn sustainability and climate change issues Question 3: The sustainability and climate change issues to learn more about Question 4: Influence of sustainability and climate change issues have on your decisions and life choice Concern: How concerned are you about sustainability/climate change issues Interest: How interested are you in seeking information on issues Receive: Would you like to receive information about how to learn more Question 1: Most concerned sustainability and climate change issues

Eight Thousand Open-ended Responses

RANDOM SENTENCES BY RANDOM PEOPLE



Theme–Indicator Framework

Collaboratively Developed by Sustainability Officer/Scholar and IR

	Table of Contents (1571)					
Theme	Indicators					
Life Support Systems (1050)	Ocean and Beach issues (643), Earth (196), Fossil fuel energy (195), pollution (190), Food Consumption (163), Food Production (90), Renewable energy (57), Fresh water issues (40)					
global warming (843)	mitigation (523), marine (242), life on earth (202), weather (157), adaptation (4)					
Culture and lifestyle (598)	consumer culture (466), sustainable lifestyle (294), Social Infrastructure (47), U.S. Mainland (12), local (2)					
Attitudes (376)	Concern (320), Disgust (28), Anticipation (16), Joy (14), Sadness (8), Fear (7), Anger (3), Indifferent (2), Suprise (1)					
Long Term Decisions (25)	Where to live (14), general (8), family planning (1), investment (1), retirement (1)					
Civics (21)	Community Organizing (11), Policy and Regulation (7), Civic Education (3)					
Other (80)	No match (80)					



Key Results



How Concerned are You?



Of Survey Respondents are Concerned or Very Concerned

How Concerned Are Mānoa Community Regarding Sustainability / Climate Change Issues

	Students	Faculty	Non- Faculty Employee	Overall
Very Concerned	62%	79%	63%	64%
Somewhat Concerned	32%	18%	33%	31%
Neutral	3%	2%	3%	3%
Slightly Concerned	2%	1%	1%	2%
Not at All Concerned	1%	2%	0	1%
Total N. of Responses	1589	188	305	

Level of Concerns Among Students by Colleges

	Very concerned	Somewhat concerned	Neutral	Slightly concerned	Not at all concerned	N. of Responses
	100%	0%	0%	0%	0%	7
Ocean & Earth Sci & Tech	91%	9%	0%	0%	0%	43
Hawaiinuiakea	88%	13%	0%	0%	0%	8
Tropical Ag & Human Res	73%	26%	1%	0%	0%	110
Social Work	68%	28%	4%	0%	0%	47
Lang, Ling & Lit	68%	31%	0%	2%	0%	59
Social Sciences	68%	29%	4%	0%	0%	170
Natural Sciences	63%	33%	1%	2%	0%	218
Law	61%	35%	0%	0%	4%	23
Arts & Humanities	60%	29%	9%	2%	0%	65
Education	60%	34%	4%	3%	0%	109
Major Undecided	55%	37%	3%	5%	1%	111
Engineering	51%	38%	7%	3%	1%	96
Nursing & Dental Hygiene	48%	45%	2%	5%	0%	42
Business	48%	37%	6%	7%	3%	103
Architecture	47%	42%	5%	0%	5%	19
Travel Industry Management	47%	37%	11%	5%	0%	19
Medicine	47%	42%	8%	3%	0%	36

Level of Concerns Among Students by Geographic Origin

	International	State of Hawaii	US Mainland	US National/CFAS*
Very concerned	58%	57%	72%	70%
Somewhat concerned	38%	36%	24%	30%
Neutral	4%	4%	2%	0%
Slightly concerned	0%	3%	1%	0%
Not at all concerned	0%	1%	0%	0%
total	100%	100%	100%	100%

Level of Concerns Among Employees by Colleges

	Very concerned	Somewhat concerned	Neutral	Slightly concerned	Not Concern at all	Total N.
Natural Sciences*	100%	0%	0%	0%	0%	5
School of Social Work*	100%	0%	0%	0%	0%	3
Ocean & Earth Sci & Tech	95%	0%	0%	5%	0%	20
Lang, Ling & Lit	88%	13%	0%	0%	0%	16
Social Sciences	88%	13%	0%	0%	0%	16
Tropical Ag & Human Res	85%	15%	0%	0%	0%	13
Business Administration*	80%	20%	0%	0%	0%	5
Grand Total	79%	18%	2%	1%	0%	165
Arts & Humanities	78%	22%	0%	0%	0%	18
School of Law*	75%	25%	0%	0%	0%	4
School of Medicine	69%	19%	13%	0%	0%	16
Education	67%	30%	3%	0%	0%	30
Nursing & Dental Hygiene*	67%	33%	0%	0%	0%	9
Pacific & Asian Studies*	60%	40%	0%	0%	0%	5

Note: Colleges that have responses less than 3 are not shown.

Level of Concerns by Gender

		Students	Faculty			
	Female	Male	All	Female	Male	All
Very concerned	64%	57%	62%	79%	79%	79%
Somewhat concerned	31%	33%	32%	20%	17%	19%
Neutral	3%	5%	3%	2%	1%	2%
Slightly concerned	2%	3%	2%	0%	1%	1%
Not at all concerned	0%	2%	1%	0%	1%	1%
Total N.	1070	500	1589	117	72	189

How Interested are You in Receiving Related Information?



Of Survey Respondents are Interested in Learning More.

How Interested Are You in Seeking More Info Regarding Sustainability / Climate Change Issues

	Students	Faculty	Non- Faculty Employee	Overall
Very Interested	46%	56%	45%	46%
Somewhat Interested	38%	35%	41%	38%
Neutral	12%	7%	11%	11%
Slightly Interested	3%	2%	1%	3%
Not at All Interested	2%	1%	2%	2%
Total N. of Responses	1591	188	303	

Level of Interests by Gender

	Students			Faculty		
	Female	Male	All	Female	Male	All
Very Interested	49%	38%	46%	54%	58%	56%
Somewhat Interested	37%	40%	38%	35%	35%	35%
Neutral	10%	14%	12%	9%	4%	7%
Slightly Interested	3%	3%	3%	2%	1%	2%
Not at all Interested	0%	5%	2%	1%	1%	1%
Total N.	1070	501	1591	117	72	189

How Interested are You in Receiving Related Information?



Of Survey Respondents Wants to Receive More Information

Would you like to receive information about how to learn more about sustainability and climate change issues?

	Students	Faculty	Staff	Overall
Yes	66%	78%	69%	73%
No	34%	22%	31%	27%
Total N. of Responses	1591	188	303	

Issues People are Most Concerned About

Global Warming Ocean and Beach Consumer Culture

Top Three Issues Mānoa Community are Most Concerned About

Students' Most Concerned Sustainability / Climate Change Issues



Word cloud Captured on 1/5/2019, note the word could and word frequency are changing as MIRO refines the keyword structure.

Top 10 Issues Students Most Concerned About

Undergraduate Students

- 1. Global Warming (43%)
- 2. Ocean and Beach (39%)
- 3. Consumer Culture (27%)
- 4. Sustainable Lifestyle (18%)
- 5. Marine (17%)
- 6. Energy (17%)
- 7. Life on Earth (14%)
- 8. Food (14%)
- 9. Earth (13%)
- 10. Social Infrastructure (2%)

Graduate Students

- 1. Ocean and Beach (45%)
- 2. Global Warming (44%)
- 3. Consumer Culture (32%)
- 4. Food (22%)
- 5. Sustainable Lifestyle (18%)
- 6. Energy (13%)
- 7. Marine (12%)
- 8. Earth (12%)
- 9. Life on Earth (10%)
- 10. Social Infrastructure (5%)

Top 10 Issues Employees Most Concerned About

Faculty

- 1. Ocean and Beach (46%)
- 2. Global Warming (44%)
- 3. Consumer Culture (24%)
- 4. Sustainable Lifestyle (21%)
- 5. Food (21%)
- 6. Energy (20%)
- 7. Marine (13%)
- 8. Life on Earth (7%)
- 9. Earth (7%)
- 10. Social Infrastructure (4%)

Other Employees

- 1. Global Warming (47%)
- 2. Ocean and Beach (42%)
- 3. Consumer Culture (29%)
- 4. Food (20%)
- 5. Sustainable Lifestyle (19%)
- 6. Energy (14%)
- 7. Marine (14%)
- 8. Earth (12%)
- 9. Life on Earth (10%)
- 10. Fresh Water (5%)
Issues People are Most Interested in Learning About

What People Want to Learn about...



- MitigationSustainable Lifestyle
- Ocean and Beach
- Consumer Culture
- Renewable
 Energy





• Renewable

Energy

mployee

ш

Other

- Sustainable
 Lifestyle
- Mitigation
- Consumer Culture
- Ocean and Beach
- Food
 - Consumption

Where Do People Learning About Those Issues?

Where Do People Get Information



Word cloud Captured on 1/5/2019, note the word could and word frequency are changing as MIRO refines the keyword structure.

News as the Most Important Information Source

- 1. News is the most important information source for **both students and employees**.
- 2. News stories are delivered through **different outlets**: online, newspaper, TV, Youtube, UH newsletter, etc.
- 3. UH news stories and newsletters are among major information sources, to introduce new research and important issues.
- 4. News **generates interests** for more in-depth learning through classes, talks, and personal research.

"

"Most of my information comes from news but I took an **Oceanography** 201 course and lab which helped me better understand this topic."

"News and science periodicals."

"OCN 101 included a lecture about the pacific garbage patch and other **news** outlets constantly report of the accumulation of damage caused by plastic."

"The news and seeing it for myself."

"I have learned about this in our **UH** newsletters and in the media."

Selected Most Influential Courses for Students

- 1. Biology (101, 171, 172, 214, 280, 690)
- 2. Geology (100, 101, 151, 152, 201, 302, 309, 312, 401)
- Oceanography (201, 301, 309, 310, 320, 330, 331, 623, 627, 628)
- 4. Natural Resources and Environmental Management (600, 601, 612, 620, 631, 661, 682, 691, 701,)
- 5. Meteorology (101, 201, 449, 752)
- 6. Botany (101, 202, 301, 450, 690)
- 7. Urban Planning (473, 620, 625, 640, 673)
- 8. Travel Management (420, 425, 601, 607, 699)
- 9. Political Science (371, 380, 777)
- 10.Public Health 681; Philosophy 790; Hawaiian Studies 101, American Studies 150, Law 582, ACM 385, KRS 395, COMG 151, and many more.

"I took an **ARCH** 100 class and talking about the built environment in correlation to the natural environment and ways that are destructive and design methods to lessen the destructive nature of the human footprint in buildings, and city planning, material page. "

"I took a **GEO** 101 class and lab that talked about how climate is effecting the world. Through Reddit I read loss of articles about different animals that are becoming extinct and the detrimental effect of plastic and fast fashion."

"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!"

Integrated Ways of Learning

- 1. Courses and Classes (more important for students)
- 2. News and Media (more important for employees)
- 3. Internet (google, email, Netflix, Youtube) and Social Media (facebook, twitter, Instagram.)
- 4. Movies, Documentaries, and TV series.
- 5. Research Projects and Articles
- 6. Campus Presentation, Seminar, Talks, and Workshops.
- 7. Earth Day Events and Environmental Activities
- 8. People (students, faculty, researchers, colleagues, friends, family, community)
- 9. Organizations and Foundations

"I have been seeking out my own knowledge in these areas.....now that I work for the University, I see more visibility of sustainability and conservation. Definitely, do some engagement work on campus and then utilize my own free time to self-seek the knowledge about these topics. Some sources I do look at are through via **social media** (Facebook, Instagram, tweeter) and **news** (CNN, BBC, Washington post, Higher Ed Chronicles, etc.) and articles sent by colleagues."

"Discussions with Buildings and Grounds who handle such disposable wastes + Office of Sustainability at Manoa + UHM Calendar of Events + Sustainability Council + Student Organic Farm Training (SOFT)."

In What Ways Your Choices and Decisions are Changed?

In what ways people make different choices?



Word cloud Captured on 1/5/2019, note the word could and word frequency are changing as MIRO refines the keyword structure.

Students' Responses to Question 4

Question 4: Can you talk about how sustainability and climate change issues have influenced or might influence your decisions and life choices, no matter how small or big those choices are:

Table of Contents (1531)		
Theme Indicators		ndicators
Choices and Actio	ons (1107)	Lifestyle (832), Purchasing (785), Volunteer (335), Career Choices (80), Academic Choices (36)
Culture and lifes	tyle (993)	sustainable lifestyle (786), consumer culture (661), Social Infrastructure (18), U.S. Mainland (5), local (3), global (1)
Life Support Syste	ems (677)	Food Consumption (294), Earth (169), Ocean and Beach issues (145), Renewable energy (109), Fossil fuel energy (99), Food Production (33), Fresh water issues (14)
global warn	ning (341)	mitigation (262), life on earth (49), marine (36), weather (29)
Attit	udes (59)	Concern (18), Anticipation (16), Joy (11), Disgust (6), Anger (4), Trust (3), Sadness (2), Fear (1)
(Civics (52)	Civic Education (33), Community Organizing (13), Policy and Regulation (7)
Other (226)		No match (226)



Decisions of Minimizing Waste and Recycling

- 1. Reduce Plastic Usage
- 2. Carry Bags, Containers, and Utensils
- 3. Buy Small Quantities
- 4. Compost at Home



"I now try to not use any **straws**, **plastic** or unrenewable goods. I try to not waste electricity or water. I especially don't like to **waste** any food and try to **compost** when possible. In my home I **recycle** my plastics/metals that could be put in the trash."

"Concerns over **waste** generation make me rethink using **plastic** bags and buying small convenience sized food items."

"I have started to alter my behavior and consumption patterns (bring my own utensils, coffee mug...)".

"minimize my plastic and aluminum usage and exposure, **recycle** as much as possible, as well as try to be as 0 **waste** as I can."

"I am constantly aware of how many single use items i use everyday. I always have a **reusable** water bottle, straw, and utensils with me."

Transportation

- 1. Drive Less
- 2. Walk More
- 3. Carpool
- 4. Use Bus and UH Shuttle



"

"They have forced me to change habits that I know are bad.... walk/bike instead of drive if possible.

"I choose to ride **public transportation** or **carpool** whenever possible."

"I'd probably be more open to buying an electric or hybrid car in the future. Like I said I try to **drive** as little as possible, and usually **walk** to school or take the **shuttle**."

"I use **public transportation**. I bought a **bike** to cut back on using my car. Eventually I want to buy an electric car."

I **choose** to ride public transportation to reduce my impact (UH bus pass help encourage that)."

Food

- 1. Buy Local and season foods
- 2. Cook Own Food
- 3. Go Vegan
- 4. Organic Food
- 5. No GMO, No Fast Food
- 6. Be Aware of Food Packaging



"

"Purchase farmers market food (local production drives local **economy** and re-divided reliance of fossil fuel for shipping)"

"Try to cook most of my food instead of **purchasing** meals that use a lot of single-use packaging."

I can make a conscious decision not to purchase in globalized groups and opt to **buy local**."

"Spending money with **eco friendly** companies for food...trying not to buy non **organic** and gmo foods"

"Rethink buying small convenience sized food items"

Purchasing

- 1. Live with Minimum, Buy Less
- 2. Small is Big
- 3. Buy Local, Organic, and Fair Trade Items. Track Food Sources.
- 4. Support Environmental Friendly Business
- 5. Energy Efficient Choices: Electric Car, Solar, Appliances.
- 6. Buy Second-hand or Reusable



"I choose to buy fewer things, live in a smaller house, and drive a smaller car."

"try to live with minimum, waste less, buy less."

"I purchase products very consciously and carefully, from food to clothing. I try to buy **organic** and fair trade items.

"**Choice** in what products I buy (sun screen, shower soap, dish soap, etc.)."

"Helped me to try to **choose** recycled products at restaurants and pay more attention to where my food is from."

"Buy local, shop at Goodwill."

"When **purchasing** my next car, I will buy a hybrid or **electric** vehicle so that I do not contribute to the emissions problem."

Energy

- 1. Clean Energy: Electric and Solar
- 2. Energy Efficient Appliances, LED and Rechargeable Batteries
- 3. Energy Conservation, Do Not Waste Electricity, Water, etc.



"

"I **choose** to buy fewer things, live in a smaller house, and drive a smaller car."

"try to live with minimum, **waste** less, buy less."

"Living in Hawaii, I am always concerned about **sustainability**, since we live on an island. I am very careful not to **waste** water, food, and electricity."

"We use **low energy appliances**, we don't use the **air conditioners**, I use reusable menstrual products like cloth pads and silicon cups, all of our lights are LED."

"My family are very aware of our water and energy consumption, trying to **minimize** it as much as possible.

Academic and Career Choices

- 1. Life-long Mission
- 2. Choose Academic Program
- 3. Choose Research Project
- 4. Choose Job, Career, and Employer



"I would not be studying what I am today if it wasn't for an introduction to **oceanography class** back home in Washington. It really opened my eyes, I didn't realize how many ties the ocean had with all of the major climate change issues that are going on in the world. From that moment on I knew I wanted to study oceanography and **be part of the change**."

"I have dedicated my life to being an environmental steward. I am getting my Master's degree in **Natural Resource and Environmental Management** and plan to work in this field as my **career**."

"I decided to work for an environmentally friendly **company**."

"Sustainability and climate change issues highly influence my **career pathway**, as I want to improve labor conditions in the fashion industry in hopes of providing sustainable and ethical business practices for global companies."

Civic

- 1. Educate Themselves and Others
- 2. Vote for Green Leaders
- 3. Change Law and Regulations



"I will not support any **politician or lawmaker** or purchase goods from a business who is not also an advocate and practitioner of sustainability."

"I **vote** for politicians who support the pursuit of sustainable forms of energy and acknowledge climate change."

I am also determined to be a future advocate for environmental issues in ways that I may implement these concerns in a future in **law**.

"We are **teaching our children** to make good earth choices."

"I design creative reuse projects for elementary through middle school students as a program coordinator for a local arts education and environmental sustainability nonprofit organization."

Where to live

- 1. Move to Somewhere Safer
- 2. Move to Somewhere Close to Home
- 3. Move to the City
- 4. Live Close to Work



"

"It could eventually influence **where I choose to live** because based on population size & food availability that would factor in to cost of living. Also, as the climate changes that would eventually also impact overall cost of living since it would affect how much electricity I use, what prices get passed onto me from businesses, etc."

"I would like to **move closer to home** to prevent my reliance on heavy carbon-footprint air travel."

"In the future, I believe that I will have to **move away from Hawaii**. I have been researching areas on the globe that would be less impacted from climate change and may choose to retire to these places."

"I'd like to move to the city, which is more walkable and has superior **public transit** links."

Understanding Sustainability and Climate Change Issues Motivates People to Adopt a More Sustainable Life Style



"

food, etc."

"These issues influence most of my decisions. I **bike** when possible for commuting, alternatively I use a second hand **electric car** or take the **bus**. I opt to fly as minimally as possible. I follow a **vegetarian diet** to minimize the CO2 output of my food production. I am always working to minimize my single use of plastics including **carrying around silverware and metal straws**, as well as a **water bottle and coffee mug**. I also use **bees wax cloth** instead of plastic wrap at home, and **cloth paper towels** and tissues, I don't get takeout

p at nome, and **citt**

"I personally don't own a car and haven't own one since 2011. I don't believe my lifestyle requires one and I'd like to contribute to the reduction of carbon emissions. I use car sharing services to meet my needs outside of **public transportation**, **biking** and **walking**. I've switched to using **metal straws** at home to reduce the number of plastic straws I use. I try to ride my **bike** when I can to reduce carbon emissions. I've reduced the amount of **meat** I consume to reduce carbon emissions. When I **travel** outside of the country I try to stay in locations that are sustainable to the community I'm visiting. I purposely **donate** some of my taxes every year to nonprofit organizations focused on sustainability"

"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**."

"Eight years ago I went **vegan**, both because of what I was learning about the horrific torture that animals endure for their entire lives in CAFOs, and because of what animal agriculture is doing to the planet ("Cowspiracy", the UN report on "Livestock's Long Shadow", etc.) Since the CA droughts of my childhood, my family has used **gray water**, e.g., flushing toilets with used bath water or kitchen sink water. I hang-dry my clothes unless it's pouring down rain. I bring my own **reusable cutlery and shopping totes** and avoid using **plastic** as much as possible. I write to the HI Legislature to **support bills** that are intended to protect the environment (e.g., the recent ban-onpolystyrene bill.) I **compost**. I've planted 2 ulu trees in my yard (more **local food**.) I'd also like to look into comparing the environmental effects of ordering things online (Amazon) versus **purchasing** them in the store locally. At present, I try to only buy things on Amazon that I can't find easily locally."

- "My family and I: -don't leave the **water** running while showering/brushing teeth –don't flush toilet unless its #2 **unplug all electric plugs** i.e. wifi -eat less/no meat -wipe hands on towel or clothes to **reduce paper** towel waste -use bamboo toothbrushes –**reusable containers and utensils** -support companies who do not use Styrofoam and single use plastics -catch **bus** and **walk** instead of **drive** if the place nearby -**pick up trash** on the beach -**shop at thrift stores** to reduce production of new clothing -**turn the light off** once done with it -**catch rain water** to use to water our plants -**solar** water heating panels."
- "I try to use fewer **one-time-use containers** such as straws or coffee cups. I **pick up trash** any time I am at the beach. These are a couple of smaller things, but also making choices to **walk** instead of **drive** and choosing alternative forms of transport or food containers. Attempting to minimize the long term impact of my living here on earth."
- "After taking OCN 101, I thought about the amount of **paper towels** I use to dry my hands, when I could've used one sheet. When I think of the poor animals that are eating trash and dying, I stop myself from using **plastic utensils** as much as possible. When I think of our polluted air, I stop myself from using the **bus** as much as possible and **walking** to places within a walk-able distance. I think about the amount of electricity I use when I'm alone at home, so I **turn off the light** and study on the balcony in the **natural lighting** until it is impossible to see."

"I make a conscious decision to take the **bus** to UH Manoa campus instead of **driving** to **minimize** my contribution to greenhouse gases. Also I limit my purchase of **plastic products** not only does the waste impact our oceans, landfills, and roadsides, but the production of plastic generated toxic waste that disproportionately affects poor communities and people of color. My **sustainability** life choices are also humanitarian life choices."

"I decided to pursue an education in **natural resource and environmental management** and essentially have a **future career** that corresponds to sustainability and climate change. I've also cut back heavily on my **meat consumption**. I use **public transportation**. I bought a **bike** to cut back on using my car. Eventually I want to buy an **electric car**. I've been **recycling** since I was a child. I now encourage others to do so as well. I try to be resourceful and reduce my amount of **waste** going into the trash. I **volunteer** at malama aina base learning centers. Overall, I try to be more mindful of my choices and how it affects the environment."

"I go out of my way to **recycle** at least cardboard, newspaper, used copy paper, HI-5 redemption. Because these types of recycling are not offered where I live, I **pack everything in my car and drive the recyclables to places that accept such**. I do not just throw those particular items in the **trash** and for H-Power to separate and burn these items."

"Sustainability issues influence my everyday decisions and lifestyle, including but not limited to: buying locally sourced food, especially trying to buy from **local farmers** at the farmers market; tending my own **garden**; **walking** or taking the **bus** as much as possible vs my car; monitoring my **water use** (also reusing water); not using **plastic bags** for my groceries; not buying products that use excessive plastic material; using **non-toxic sunscreen**; recycling and SORTING my **recycling**; reading emails from the **Kukua** Hawaii Foundation about 'Aina in the schools; refusing plastic cup lids and straws and bringing my own utensils; not ordering takeout at restaurants; **voting** for people who support projects promoting sustainability; **monitoring** the amount of loads I wash, **hang drying** my laundry; **protesting** TMT; supporting people protecting our **watersheds**; buying and using **cleaning products** without harsh chemicals (as much as possible); buying a **small car** instead of a large truck; using glass and ceramic **reusable** containers/cups; choosing which **beaches** to go to depending of tide and bacteria contamination; picking up a bucket of **trash** before leaving the beach; running my errands in a way that uses the **least amount of gas**; and now planning to build a **chicken coop** in my backyard and raise two chickens for eggs."

"Living in Hawaii, I am always concerned about sustainability, since we live on an island. I am very careful not to waste **water, food, and electricity**."

"

"I choose to **dry clothes** outdoors, not use **AC** in my apartment, turn off **water heater** and not use TV most of the time, **grow** some of my own food, **buy bulk** packaging and **shop local** and or coop, use my own **flask** instead of bottled water, **carpool** to work and plan family schedule to reduce unnecessary driving, recently bought a more **efficient car** and when I can I buy energy star **electronics** and **appliances**. I'd prefer **solar water heat** but I rent."

"Sustainability and climate change has influenced me through my decision to pursue **Global Environmental Science** as my major with a Sustainability Science track and a Botany minor. In my day to day life, I carry my **reusable water bottle** with me everywhere, bring my **reusable utensils** with me to school, bring my reusable cup to Starbucks, bring my **reusable shopping bags** to the grocery store where I try to **buy local**, and try to **cook** most of my food instead of **purchasing** meals that use a lot of single-use packaging. I also aspire to pursue an **environmental master's degree program** after graduating from UHM."

"I ride an electric **bike** to school to lessen my carbon footprint, **prepare my own food** everyday with a **reusable container and chopsticks**, have **solar electric** and hot water systems on my roof, and try to **turn off the water** during showers/teeth-brushing when it isn't necessary for the water to run."

"

"The term 'sustainability' gets thrown around a lot nowadays. I've seen more people trying to live **zero-waste** lives, which I think is a more clear, more reasonable goal to aspire and try for on a daily basis. With waste, you have additions to landfills, usually purchases of non-local foods, and contributions to massive manufacturers who make the **plastic** or nonrenewable products/packages. Today, as **a steward and resident** of these islands, sea-level rise and heavy reliance on importation for food and goods, have influenced my **daily decisions**. I've purchased more **locally grown food** this year than any prior, and have helped my family **plant** more edible plants in our yard and my sisterin-law's yard. In doing the latter, I've also had the chance to **talk to my niece and nephews** about why growing food is important."

"Sustainability influences all of the decisions I can think of, from **minimizing energy use** in buildings I inhabit, to using low-emitting transportation methods, to preferring **local**, **vegetable**-based diet and limiting red **meat** consumption; to purchasing carbon offsets."

"We compost at home, buy organic locally grown foods and try to avoid plastics."

"It has completely shaped my lifestyle. I try to live a **waste free** life, whether that be physical waste (trash), or energy/fuel. I have dedicated my life to being an **environmental steward**. I am getting my **Master's degree** in Natural Resource and Environmental Management and plan to work in this field as my **career**."

What do UH Mānoa community members do?

- 1. Minimize waste and recycle
- 2. Use less plastic
- 3. Bring water bottle and containers
- 4. Buy less; be more conscientious about consumption choices
- 5. Buy local, organic, and fair trade items. Track food sources.
- 6. Buy second-hand or reusable
- 7. Support clean energy through electric vehicles, solar PV, and LED lighting

- 8. Eat healthier more veggies, less fast food
- 9. Cook own food (eat out less)
- 10. Opt for non-GMO food options
- 11. Educate and engage people
- 12. Bike, walk, bus, carpool
- 13. Support environmental friendly business and organizations
- 14. Get involved!

What do UH Mānoa community members want to learn about?



- MitigationSustainable Lifestyle
- Ocean and Beach
- Consumer Culture
- Renewable
 Energy





Renewable
 Energy



mployee

ш

Other

- Sustainable Lifestyle
- Mitigation
- Consumer Culture
- Ocean and Beach
- Food
 - Consumption

Students' Are Most Concerned About these Sustainability / Climate Change Issues



Word cloud Captured on 1/5/2019, note the word could and word frequency are changing as MIRO refines the keyword structure.

In what ways people make different choices?



Word cloud Captured on 1/5/2019, note the word could and word frequency are changing as MIRO refines the keyword structure.

Suggestions for Implementations at UH



Increase visibility about sustainability challenges and solutions

a. Organize campus-wide seminars, workshops, social gathering and movie viewing on issues and solutions of what people are most concerned about.

b. Utilize electronic screens in public gathering spaces on campus to display information and survey quotes.

c. Work with UH Communication's Office to better educate, engage and equip the UH community with more information and resources .

d. 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.

Help students find their interested 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. Work with the book store, food service, and commuter service to provide more green options and merchandise.

c. Increase water refill stations on-campus / Reduce single-use plastic options.d. Implement composting and other measures to divert waste from landfill.e. Increase healthy, locally & ethically sourced food options.

Keep the community well informed

a. Create UH News stories using information gathered from the earth day survey (main findings, pro'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.



Mahalo for Viewing

Prepared by Mānoa Institutional Research Office (MIRO) & UH Sustainability Office