



SUMMARY OF RESPONSES

**SURVEY ON PROPOSED GREENHOUSE GAS CLIMATE
ACTION STRATEGIES**

**Kaua'i Climate Adaptation and Action Plan
December 13, 2023**

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POLL OVERVIEW

The County of Kaua'i is in the process of creating a Climate Adaptation and Action Plan (KCAAP). The KCAAP is a roadmap for how the community will prepare for the impacts of climate change and natural hazards, as well as reduce the Countys greenhouse gas emissions and meet emission reduction targets.

The Greenhouse Gas Climate Action Strategies poll (poll) aimed to garner community opinions of and levels of support for proposed mitigation strategies through an online format. The Poll was open from September through October 2023.

POLL METHODOLOGY AND PARTICIPATION

The poll was developed by County of Kaua'i staff and the CAAP consultant team. In developing the poll, the team organized proposed climate action strategies into four critical sectors:

- Critical Energy
- Transportation + Land Use
- Waste Reduction
- Natural Resource Management

The proposed action strategies included in the online poll were identified based off a greenhouse gas reduction measure analysis and existing policy and plan review. Each strategy contained a brief description with information about the timing of implementation, and the GHG reduction potential.

For each proposed strategy, participants could indicate their level of support and share their thoughts about its advantages (pros) and disadvantages (cons). In addition, the poll included a tab labeled 'Other Strategies,' in which members of the public could provide their climate action strategy ideas.

To view the online poll, please visit [KCAAP Strategies \(consider.it\)](https://kcaapstrategies.consider.it).

Sampling

This survey was completed by a non-randomized sample (often called a convenience sample) of people who live, work, go to school, or spend time in the County of Kaua'i. A non-randomized sample is commonly used to understand the range of perspectives and experiences of a group of people ("population"). Data from non- randomized samples are typically considered more reliable (i.e., more

generalizable to the larger population) when they are “triangulated” or validated through additional sources. Results from this survey will be considered alongside data from other KCAAP community engagement, including from the online and in-person Climate Action workshops, to inform decision making.

Distribution and Outreach Methods

The survey was available to take online using the Consider.It platform¹. The project team developed several outreach graphics and materials, such as social media images and flyers, which were distributed through various methods, including but not limited to:

- Internet-Based Outreach: County’s GovDelivery listservs; KCAAP Project Website; County’s social media accounts (Instagram), Organizations focused on climate work
- In-Person Outreach: pop-up events and online and in-person deep dive workshops.

RESULTS

This document summarizes the poll responses from 59 participants.

On average, there were about 14 opinions provided on each proposed mitigation strategy included in the four critical sectors. In total there were 608 opinions provided on all the proposed climate action strategies. In addition to this, six climate action strategy ideas were suggested by members of the public, which garnered a total of 77 opinions (an average of 13 opinions on each suggested strategy).

Participants could provide their level of support for each strategy using the sliding scale (Image 1). In analyzing the results of the opinion spectrum, -1 indicated less support and 1 indicated more support. A key to the ranges within each level of support are included below.

- **Low Support:** -1.0 to -0.6
- **Somewhat Unsupportive:** -0.59 to -0.2
- **Neither Supportive nor non-supportive:** -0.19 to 0.19
- **Somewhat Supportive:** 0.2 to 0.59
- **High Support:** 0.6 to 1.0

A summary of opinions for each proposed mitigation strategy is provided below. Please refer to *Appendix A: Online Poll Opinions* to view all poll ratings.

Clean Energy

¹ To learn more about Consider.It, please visit [Consider.it](https://www.consider.it)

An average of 17 opinions were provided for each mitigation strategy related to clean energy, in which there was a total of 188 opinions. Results for each specific strategy regarding clean energy are summarized below.

Renewable Energy

Expand County renewable energy projects

Participants indicated high levels of support (poll rating= 0.67) to expand County renewable energy projects/solar panel and battery installation at County facilities such as baseyards, and focusing on opportunities at Solid Waste Facilities, the landfill, and facilities with the highest energy consumption. One participant commented on the importance for the County to become independent from fossil fuels. Another participant commented on their concern for the landfill's capacity.

Streamline permitting

Participants indicated high levels of support (poll rating= 0.61) to streamline the permitting process for solar, battery, and EV charging installations. No additional comments were provided on this strategy.

Methane capture and reuse at wastewater treatment facilities

Participants were somewhat supportive (poll rating= 0.41) of seeking partnerships and opportunities to explore methane capture and reuse at county solid waste, landfill, and anaerobic digestion at wastewater treatment facilities. One participant commented on their support in exploring methane reuse especially at county solid waste. Another participant commented that they want to prioritize strategies that focus on preventing methane creation and was concerned that such an action could further incentivize practices that release methane.

New Buildings

Green building guide

Participants were somewhat supportive (poll rating= 0.31) of developing a comprehensive green building guide and outreach materials to provide to project applicants, developers, architects, and builders. One participant encouraged building materials to be those that can be reused. Another participant did not support a green building guide because they wished to focus efforts on discouraging inappropriate development, particularly development serving the visitor industry.

Adopt low embodied carbon material use code

Participants were somewhat supportive (poll rating= 0.23) of adopting a policy that phases in requirements for usage of low embodied carbon materials in the structural, exterior elements of a building. One participant was concerned about cement/concrete being included as a low-embodied carbon material because they view this to be a pollutant and wanted to consider other materials, such as hempcrete.

Adopt power-source code requirements

Participants were neither supportive nor non-supportive (poll rating= -0.01) of adopting a phased-in reach code requiring new construction and alterations or additions at least 50% the size of the original building be designed to be initially at least 50% powered using carbon-free energy source, with increasing percentage by an agreed upon increment and timeline. One participant was concerned about this action driving up the cost of construction.

Existing Buildings

KIUC efficiency Incentives and programs

Participants indicated high levels of support (poll rating= 0.60) to work with KIUC to promote and implement efficiency incentives and programs. There were no comments on this proposed action.

Decarbonization plan for existing buildings

Participants were somewhat supportive (poll rating= 0.31) of adopting a phased in decarbonization plan for existing buildings that promotes, and as-needed, requires the retrofit of existing buildings to be powered using carbon-free energy. One participant agreed with this action, pointing out how much energy is used for AC, in which the temperature is set to be uncomfortable cold for many, in existing County buildings.

Decarbonization plan for County facilities

Participants were somewhat supportive (poll rating= 0.40) of developing a decarbonization plan for County facilities that aligns with the CIP process. No additional comments were provided on this action.

Energy and water benchmarking ordinance

Participants were somewhat supportive (poll rating= 0.28) of adopting energy and water benchmarking ordinance for commercial buildings over a specified square footage. One participant wanted such an ordinance to also pertain to the visitor industry as well as golf courses.

Energy Savings Performance Contract

Participants were somewhat supportive (poll rating= 0.27) of the action to explore entering an Energy Savings Performance Contract for County facilities including scope for energy efficiency, renewable energy, fleet conversion, large facilities upgrades. One participant encouraged this action, commenting that it is good for the County to lead by example.

Natural Resource Management

An average of 17 opinions were provided for each mitigation strategy related to natural resource management, in which there was a total of 124 opinions. Results for each specific strategy regarding natural resource management is summarized below.

Water Conservation

Strategies to Increase greywater

Participants indicated high levels of support (poll rating= 0.61) for promoting dual plumbing and laundry-to-landscape in residential buildings to increase the use of greywater. One participant wanted DOW to provide incentives to install grey water and catchment systems for irrigation. Another participant pointed out their concern that implementing a strategy such as this should consider a monitoring program.

Promote State water efficiency Incentives and programs

Participants were somewhat supportive (0.41) of this action and no additional comments were provided.

Explore strategies to encourage water neutral new development

Participants were somewhat supportive (0.41) of this action. One participant wanted to put greater burden of water conservation efforts on tourism developments and lodgings due to the amount of water is required to make these developments function.

Model Water Efficient Landscape Ordinance (MWEL0)

Participants were somewhat supportive (0.39) of the action to adopt a MWEL0 which will require all new landscape projects and renovations to obtain a landscape permit and establish prescriptive irrigation, plant lists, or water budget requirements. Participants commented their support for this action, emphasizing how such an action is important for water conservation as well as reducing wildfire risk.

Green plumbing building code

Participants were somewhat supportive (0.28) of updating the building code to the more efficient UPC green plumbing code for new construction and alternations or additions of 50% the size of the original building. No additional comments were provided for this action.

Ecosystem and Working Lands

Local Ag/Working Lands strategy

Participants indicated high levels of support (poll rating= 0.68) for developing a local agricultural/working lands strategy to protect agricultural lands and work with property owners to support healthy soils, carbon sequestration, and other regenerative practices. Participants commented on the importance of this strategy in diversifying the economy and reducing wildfire risks. One participant stressed that it would be important to engage the large landowners in this process.

Urban Forest Management Plan

Participants were somewhat supportive (poll rating= 0.48) of adopting and implementing an urban forest management plan to improve the health, resilience, and ecosystem services of the urban forest. One participant noted that Kauai should work from the state's forest action plan and partner with the state on this effort. Another participant commented on wanting to see more

parks and trees in parks.

Transportation + Land Use

An average of 10 opinions were provided for each mitigation strategy related to transportation and land use, in which there was a total of 176 opinions. Results for each specific strategy regarding transportation and land use is summarized below.

Clean Vehicle Miles Traveled

Provide visitors with clean transportation options

Participants indicated high levels of support (poll rating= 0.68) to partner with the hospitality industry and rental car companies to provide visitors with clean transportation options. One participant stressed that they also want to see improvements in the Kaua'i bus system.

Support EV ready/EVSE

Participants indicated that they were somewhat supportive (0.38) of encouraging and funding EV ready/EVSE-Installed for commercial and multi-family dwellings and explore long-term progressive policy modifications applying to existing ordinances.

E-Mobility Adoption

Participants were somewhat supportive (0.44) of supporting the adoption of e-mobility options by residents, businesses, and visitors.

KIUC partnership to support ZEV

Participants were somewhat supportive (0.34) of partnering with KIUC to create programs that support ZEV adoption. One participant commented about the high price of energy and wanting lower costs for residents.

Clean Fuel Transportation Plan

Participants were somewhat supportive (0.29) of developing a Clean Fuel Transportation Plan that identifies areas of the county to prioritize clean fuel infrastructure installation and outlines how to transition county fleet to ZEVs. One participant was concerned about the capacity of Kauai's energy grid and the cost of electric vehicles.

Transition County equipment to alternative fuels

Participants were somewhat supportive (0.39) of transitioning County grounds maintenance, small engine, and garden and construction equipment to alternative fuels.

Pilot ZEV carshare

Participants were somewhat supportive (0.23) of partnering with a shared mobility company to pilot a ZEV carshare program.

Lobby state for ZEV support

Participants were neither supportive nor non-supportive (0.13) of lobbying that the state create programs and adopt policies that support ZEV adoption. One participant commented that they do not support this strategy if a program means that subsidies would be paid for via public taxes.

Public ZEV Education Campaign

Participants were neither supportive nor non-supportive (0.18) of developing a ZEV public education campaign in partnership with local organizations. No additional comments were provided on this action.

ZEV Training Programs

Participants were neither supportive nor non-supportive (-0.12) of partnering with KCC and other workforce training partners to create ZEV-specific training programs and pathways.

Reduce Vehicle Miles Traveled

Smart Growth Development from Kauai General Plan

Participants were somewhat supportive (poll rating= 0.58) of supporting the implementation of smart growth development as outline in the Kauai General Plan. One participant commented on their dissatisfaction with ensuring that County actions adhere to the General Plan.

Implement Complete Street principles

Participants indicated high levels of support (poll rating= 0.82) for prioritizing, funding, and implementing improvements that adhere to Complete Streets principles. One participant commented their support for this action and the multi-benefits this action provides, such as health.

Multimodal transportation networks

Participants were somewhat supportive (poll rating= 0.50) of planning and building seamless multimodal transportation networks in Kauai's jobs/housing centers of Līhu'e, Kapa'a-Wailua Corridor, Koloa-Poipu to facilitate the shift to active transportation modes for all users. Two comments focused on the need to a safe bike path system, using protected bike lanes, to encourage residents and tourists to ride bikes as an alternative to driving a car. Another participant commented that they think that bike lanes may not be highly utilized by residents for they infrequently see the existing bike lanes being utilized.

Mandatory TDM program

Participants were somewhat supportive (poll rating= 0.55) to explore adopting a mandatory TDM program for employers, housing developments, and hotels and resorts. One participant emphasized that they there should be greater burden on hotels and resorts to take responsibility for their transportation impacts.

Parking Standards Reform

Participants were somewhat supportive (poll rating= 0.32) of reforming parking standards for new development to prioritize parking for bicycles, carshare, and to remove parking minimums focusing on town centers/commercial areas. One participant commented on not seeing this as a priority and wanting to prioritize green parking.

Transportation Demand Management

Participants were somewhat supportive (poll rating= 0.27) of establishing a TDM program for County employees. No additional comments were provided on this action.

Kauai Bus Short-Range Transit Plan

Participants were somewhat supportive (poll rating= 0.26) of partnering with Kauai Bus to support and implement the 2018 Kauai Short-Range Transit Plan. No additional comments were provided on this action.

Waste Reduction

An average of 17 opinions were provided for each mitigation strategy related to the waste reduction, in which there was a total of 120 opinions. Results for each specific strategy regarding waste reduction is summarized below.

Diverslon

Curbside Collection for Recycling

Participants expressed high support (poll rating= 0.62) to evaluate implementation of a new curbside collection for recycling with a potential future addition of green waste and food waste or enhance drop-off recycling. One participant noted the difficulty in recycling on island and another participant wanted to focus efforts on reducing the amount of trash that goes into the landfill in the first place. Another participant expressed concern about composting efforts resulting in more rats.

Ban food waste from landfill

Participants indicated high levels of support (poll rating= 0.60) to implement a tiered approach to ban food waste from landfill. One participant wanted to explore how to encourage food waste to be composted or used for animal feed.

Robust solid waste public engagement program

Participants were somewhat supportive (poll rating= 0.55) of partnering with local organizations and agencies to develop and implement a robust solid waste public engagement. A couple of participants provided comments less in support for this action, in which they did not think additional outreach would be worthwhile the time and money that would be spent.

Ban disposal of select C&D Materials

Participants were somewhat supportive (poll rating= 0.36) of expanding disposal bans to include select C&D Materials. One participant expressed worry about where these materials would go and whether it would be dumped in inappropriate areas.

Source Reduction

Expand plastic reduction policies

Participants indicated high levels of support (poll rating= 0.60) for building off and expanding policies for plastic and polystyrene reduction and compostable use to include single use plastic packaging materials and food ware. One participant commented on the need to hold big box stores accountable under a policy such as this. Another participant recommended promotion or a campaign to encourage the usage of reusable containers or consider developing a compost facility.

Expand County Recycled Product Purchasing Policy

Participants were somewhat supportive (poll rating= 0.57) to advance the County Recycled Product Purchasing Policy to increase the emphasis on source reduction and reuse. No additional comments were provided for this action.

Source reduction laws

Participants were somewhat supportive (poll rating= 0.50) to work with other municipalities and the State Legislature to create laws related to source reduction Statewide. One participant commented that there are things to consider for those who are ICLEI (International Council for Local Environmental Initiatives) members.

Other Strategy Ideas

Members of the public added the following mitigation strategies for the County to consider:

- Weed abatement and management on large landowners acreage that are in high wildfire risk areas

Participants indicated high levels of support (poll rating= 0.66) for this suggested strategy idea, which includes requiring Grove Farm to decrease wildfire risk on their lands by managing the dry grass and invasive trees. Participants commented on the need to also include a buffer zone and native tree planting.

- Make all town core centers walkable, bikeable, and reduce car travel in town core centers. And increase mass transit connectedness between town core centers

Participants indicated high levels of support (0.72) for this suggested strategy. No additional comments were provided.

- Decrease/eliminate tax on things we want to encourage, increase tax on things we want to discourage

Participants indicated high levels of support (0.61) for this suggested strategy. No additional comments were provided.

- Continue to work on the bicycle path around the island and major inland routes, such as along Kuamoo Rd.

Participants were somewhat supportive (0.46) for continuing the bicycle path around the island and major inland routes. One participant highlighted wanting to see the multi-use path from Kekaha to Waimea and its benefits for keiki, kūpuna, and workers in the area.

- Town core center composting

Participants indicated high levels of support (0.65) for town core center composting. One participant encouraged the County to expand this strategy to include composting programs islandwide.

- Encourage emotional health/healing. Teach emotional intelligence, processing, critical thinking, child emotional development, self-awareness, etc. in school.

Participants were neither supportive nor non-supportive (0.17) of this suggested strategy to encourage emotional health and healing. No additional comments were provided for this strategy.

Appendix A: Online Poll Opinions

			Level of Support (Low Support= -1- -0.6; Somewhat Unsupportive= -0.59- -0.2; Neither supportive nor non-supportive= -0.19- 0.19; Somewhat Supportive= 0.2-0.59; High Support= 0.6-1)
Clean Energy	# of Opinions	Raw Average	
<i>Renewable Energy</i>			
Expand County renewable energy projects	27	0.67	High Support
Streamline permitting	23	0.61	High Support
Methane capture and reuse at wastewater treatment facilities	25	0.41	Somewhat Supportive
<i>New Buildings</i>			
Green building guide	20	0.31	Somewhat Supportive
Adopt low embodied carbon material use code	14	0.23	Somewhat Supportive
Adopt power-source code requirements	11	-0.01	Neither Supportive nor Non-supportive
<i>Existing Buildings</i>			
KIUC efficiency incentives and programs	15	0.6	High Support
Decarbonization plan for existing buildings	16	0.31	Somewhat Supportive
Decarbonization plan for County facilities	12	0.4	Somewhat Supportive
Energy and water benchmarking ordinance	13	0.28	Somewhat Supportive
Energy Savings Performance Contract	12	0.27	Somewhat Supportive
Transportation + Land Use			
	# of Opinions	Raw Average	Level of Support
<i>Clean Vehicle Miles Traveled</i>			
Provide visitors with clean transportation options	18	0.68	High Support
Support EV ready/EVSE	18	0.38	Somewhat Supportive
E-Mobility Adoption	14	0.44	Somewhat Supportive
KIUC partnership to support ZEV	15	0.34	Somewhat Supportive
Clean Fuel Transportation Plan	16	0.29	Somewhat Supportive
Transition County equipment to alternative fuels	8	0.39	Somewhat Supportive
Pilot ZEV carshare	8	0.23	Somewhat Supportive
Lobby state for ZEV support	12	0.13	Neither Supportive nor Non-supportive
Public ZEV Education Campaign	5	0.18	Neither Supportive nor Non-supportive

ZEV Training Programs	7	-0.12	Neither Supportive nor Non-supportive
<i>Reduce Vehicle Miles Traveled</i>			
Smart Growth Development from Kauai General Plan	13	0.58	Somewhat Supportive
Implement Complete Street principles	8	0.82	High Support
Multimodal transportation networks	11	0.5	Somewhat Supportive
Mandatory TDM program	5	0.55	Somewhat Supportive
Parking Standards Reform	8	0.32	Somewhat Supportive
Transportation Demand Management	5	0.27	Somewhat Supportive
Kauai Bus Short-Range Transit Plan	5	0.26	Somewhat Supportive
Waste Reduction			
	# of Opinions	Raw Average	Level of Support
<i>Diversion</i>			
Curbside Collection for Recycling	19	0.75	High Support
Ban food waste from landfill	18	0.6	High Support
Robust solid waste public engagement program	19	0.55	Somewhat Supportive
Ban disposal of select C&D Materials	15	0.36	Somewhat Supportive
<i>Source Reduction</i>			
Expand plastic reduction policies	18	0.6	High Support
Expand County Recycled Product Purchasing Policy	15	0.57	Somewhat Supportive
Source reduction laws	16	0.5	Somewhat Supportive
Natural Resource Management			
	# of Opinions	Raw Average	Level of Support
<i>Water Conservation</i>			
Strategies to increase greywater	21	0.61	High Support
Promote State water efficiency incentives and programs	18	0.41	Somewhat Supportive
Explore strategies to encourage water neutral new development	16	0.41	Somewhat Supportive
Model Water Efficient Landscape Ordinance (MWELO)	16	0.39	Somewhat Supportive
Green plumbing building code	16	0.28	Somewhat Supportive
<i>Ecosystem and Working Lands</i>			
Local Ag/Working Lands strategy	19	0.68	High Support
Urban Forest Management Plan	18	0.48	Somewhat Supportive

Public Suggested Strategies	# of Opinions	Raw Average	Level of Support
Weed abatement and management on large landowners acreage that are in high wildfire risk areas	16	0.66	High Support
Make all town core centers walkable, bikeable, and reduce car travel in town core centers. And increase mass transit connectedness between town core centers	12	0.72	High Support
Decrease/eliminate tax on things we want to encourage, increase tax on things we want to discourage.	15	0.61	High Support
Continue to work on the bicycle path around the island and major inland routes, such as along Kuamoo Rd.	17	0.46	Somewhat Supportive
Town core center composting	8	0.65	High Support
Encourage emotional health/healing. Teach emotional intelligence, processing, critical thinking, child emotional development, self-awareness, etc. in school.	9	0.17	Neither Supportive nor Non-supportive