


December 6, 2024, County Council Meeting

MAUI COUNTY COUNCIL
Amendment Summary Form

Legislation: BILL 136, CD1 (2024), entitled, "A BILL FOR AN ORDINANCE AMENDING TITLE 20, MAUI COUNTY CODE, ESTABLISHING A CLIMATE ACTION AND RESILIENCY PLAN FOR THE COUNTY OF MAUI."

Proposer: Councilmember Keani Rawlins-Fernandez 

Description: Substitute Bill 136, CD1 (2024) with the attached proposed FD1 version to:

1. Incorporate and attach the Climate Action and Resiliency Plan (CARP) as Exhibit "A" and a list of the CARP's climate action items as Exhibit "B;"
2. Update the section titles within the new chapter to recognize the addition of the action items list and online dashboard;
3. Create a definition for "Action items list;" and
4. Clarify in Section 20.44.050 that:
 - a. The director's designee may advise the agencies on strategy for implementation;
 - b. The online dashboard must be accessible from the County's website upon approval of the plan and must be updated monthly;
 - c. The plan and action item list must be posted on the County's website;
 - d. The action items list may be revised at any time by resolution; and
 - e. An updated plan must be submitted to the council every 10 years for approval by ordinance.

HOLD FOR MEETING

CR 24-115

December 6, 2024, County Council Meeting

Motions: Move to substitute Bill 136, CD1 (2024), attached to the Efficiency Solutions and Circular Systems Committee Report 24-115, with the attached proposed FD1 version.

Attachments: Proposed CD1, FD1 version of Bill 136 (2024).

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ORDINANCE NO. _____

BILL NO. 136, CD1, FD1 (2024)

A BILL FOR AN ORDINANCE AMENDING TITLE 20, MAUI COUNTY CODE,
ESTABLISHING A CLIMATE ACTION AND RESILIENCY PLAN
FOR THE COUNTY OF MAUI

BE IT ORDAINED BY THE PEOPLE OF THE COUNTY OF MAUI:

SECTION 1. Title 20, Maui County Code, is amended by adding a new chapter to be appropriately designated and to read as follows:

“Chapter 20.44

CLIMATE ACTION AND RESILIENCY PLAN

Sections:

- 20.44.010 Purpose.
- 20.44.020 Definitions.
- 20.44.030 Climate action and resiliency plan and action items list.
- 20.44.040 Plan components.
- 20.44.050 Plan implementation, updates, online dashboard, and reporting.

20.44.010 Purpose. This chapter’s purpose is to establish a climate action and resiliency plan to guide policy for and actions to be taken by the County to mitigate and adapt to climate-change effects, transition to 100 percent renewable energy, and achieve net-negative emissions.

20.44.020 Definitions. In this chapter, unless the context otherwise requires:

“Director” means the director of management.

“Plan” means the climate action and resiliency plan approved under section 20.44.030, including any amendments approved under section 20.44.050.

“Action items list” means the mitigation strategies and actions and the resiliency strategies and actions from the climate action and

resiliency plan, approved under section 20.44.030, including any amendments approved under section 20.44.050.

20.44.030 Climate action and resiliency plan and action items list. Exhibit “A,” the “Maui County Climate Action & Resiliency Plan,” and Exhibit “B,” the “Maui County Climate Action & Resiliency Plan Action Items List,” are adopted, incorporated by reference, on file with the office of the county clerk, and subject to updates approved under section 20.44.050.

20.44.040 Plan components. A. The plan must provide a clear and practical set of strategies and actions that have been developed with input from the community, agencies, and other public and private partners to reduce the County’s climate-change contributions and build local resilience to climate impacts. The plan must be based on traditional Native Hawaiian knowledge, culture, and practices; the best available science; internationally accepted best practices; and outline strategies and set goals to:

1. Protect, restore, and sustainably manage the natural environment for current and future generations.
2. Inventory and reduce local greenhouse-gas emissions to achieve net-negative emissions.
3. Optimize resiliency within local communities.
4. Cultivate local cultural practices rooted in ecological knowledge and values.
5. Advance social equity and community inclusion.
6. Facilitate a circular economy.
7. Sustainably address current and future infrastructure needs.
8. Commit to both institutional and individual action and local implementation of climate resiliency strategies and actions.

B. The plan must be consistent with and complementary to the goals, objectives, and policies in the countywide policy plan on minimizing climate change and working toward resilience.

20.44.050 Plan implementation, updates, online dashboard, and reporting. A. The director or designee, with all necessary agencies, must manage and assist with the plan’s implementation, update, and reporting.

B. The director or designee may advise each agency on strategies to implement the plan.

C. The County budget and capital improvement program must implement the plan.

D. An online dashboard must track the progress of the plan’s specific recommendations by December 31, 2025. The online

dashboard must be accessible from the County's website upon approval of the plan and must be updated on a monthly basis.

E. The plan and action items list must be posted on the County's website.

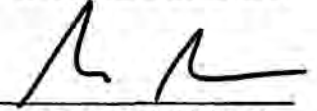
F. The action items list may be revised at any time by resolution and must incorporate action items from each 10-year updated plan.

G. An updated plan must be submitted to the council every 10 years for approval by ordinance."

SECTION 2. This Ordinance takes effect on approval.

escs:ltr:008abill03:mkm

INTRODUCED BY:

A handwritten signature in black ink, consisting of a stylized 'G' followed by a horizontal line and a small flourish.

GABE JOHNSON



MAUI COUNTY CLIMATE ACTION & RESILIENCY PLAN

2022 STATUS REPORT

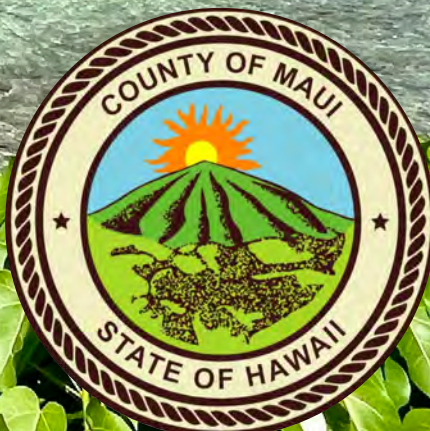


Exhibit B
Maui County Climate Action Resiliency Plan Action Items List

	Supportive Actions	Est. Cost	Timeframe	Priority
1	Officially establish CCRS as a County of Maui Department or as a Division within an existing County Department (such as Department of Management) by dedicating County of Maui funds annually to adequately staff the Office of CCRS and provide a meaningful operating budget to advance the County of Maui's climate action, resiliency, and sustainability goals. At a minimum, establish Chief Resiliency Officer and Deputy Resiliency Officer positions, while also maintaining the existing Energy Commissioner, Environmental Coordinator, Green Building and Resilient Housing Specialist, and Grants and Contracts Specialist positions. Ensure that the officially-established Office of CCRS coordinates and facilitates climate and resiliency actions across all County of Maui Departments and serves as a climate action and resiliency liaison between Office of the Mayor, County Council, and the community-at-large.	Medium	Short Term and Ongoing	High
2	Update the County of Maui's CARP at least once every 5 years and report regularly on progress of implementing CARP strategies and actions. Ensure that the CARP is a living document by reviewing, updating, and publicly reporting on progress to ensure that the County of Maui is meeting our carbon reduction and resiliency commitments and targets.	Low	Medium Term and Ongoing	High
3	Secure funding to hire a Mobility and Clean Transportation Specialist within the Office of CCRS to leverage opportunities to increase micromobility services and clean transportation adoption across Maui County.	Low	Short Term and Ongoing	High
4	Secure funding to hire an Equity Specialist within the Office of CCRS who will develop an equity decision-making framework for the County of Maui to improve how the implementation of climate and resiliency actions will benefit, engage, and empower communities, particularly underserved, difficult to reach, and vulnerable community members.	Low	Short Term and Ongoing	High
5	Pursue aggressive energy efficiency measures and maximize on-site renewable power generation and clean energy storage at County of Maui owned sites, including County of Maui owned rooftops, parking lots, and other previously developed lands.	High	Short Term and Ongoing	High
6	Continue to increase County of Maui participation in grid services programs for County of Maui operations, such as energy demand response programs. Identify flexible sources of energy demand, and leverage these to integrate intermittent sources of renewable energy. By engaging in meaningful demand response programs and encouraging pricing structures that incentivize such engagement, the County of Maui's energy usage can contribute to providing grid services that support overall decarbonization and stability of Maui County's electrical grid.	Medium	Short Term and Ongoing	High
7	Continue the CCRS Grants Program and Climate Adaptation/Mitigation CCRS budget line item to ensure funding for climate action and resiliency programs.	Medium	Short Term and Ongoing	High
8	Adopt policy for all new construction undertaken by the County of Maui to achieve a minimum of LEED silver certification or an equivalent green building certification.	Medium	Medium Term and Ongoing	Medium
9	Establish a tracking system for buildings owned and/or operated by the County of Maui. Collect the annual energy data of buildings. Track, benchmark, and report the data using tools such as ENERGY STAR Portfolio Manager, Arc Skoru, or a locally developed and recognized tool to help with data organization for ongoing performance reporting.	Low	Medium Term and Ongoing	Medium

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	Supportive Actions	Est. Cost	Timeframe	Priority
10	Pursue LEED for Cities and Communities Certification for County of Maui facilities.	Low	Medium term and ongoing	Medium
11	Continue to replace all existing internal combustion engine (ICE) vehicles in the County of Maui's mass transit fleet with Clean Fuel Vehicles, including EVs, biofuel vehicles, and hydrogen vehicles.	High	Short Term and Ongoing	High
12	Develop and adopt an electric bus purchasing policy for the County of Maui's bus fleet to reach 100% renewable-powered bus fleet by 2035.	High	Medium Term	High
13	Develop charging protocols for EVs and electric buses in the County of Maui fleet to facilitate integration of intermittent renewable energy, helping to smooth the intermittency of renewable energy sources like wind and solar PV. Utilize programs such as time of use, onsite DC PV-powered EV charging, battery energy storage, and vehicle-to-grid in order to achieve this.	Low	Medium Term	Low
14	Secure additional funding to support design, construct, and permitting of a state-of-the-art large-scale composting facility in Maui County.	High	Short Term and Ongoing	High
15	Capture and flare landfill gas at landfills where no capture or flaring is already occurring. Partner with each landfill that does not currently capture methane, with a priority towards capture and use whenever feasible. Support each landfill in acquiring the infrastructure to either install a methane-to-energy or gas-to-fuel collection system or flare methane (if that is the only viable alternative). Note that the County of Maui is currently working to create a Landfill Gas Utilization Project at the Central Maui Landfill.	Medium	Short Term	High
16	Pursue low carbon-emitting solid and liquid waste-to-energy (WTE) technologies. Support the Department of Environmental Management (DEM) in exploring and pursuing clean WTE technologies, such as Pyrolysis, Dendro Liquid Energy, and Hydrothermal Carbonisation as a solid and liquid WTE strategy.	High	Medium Term	Medium
17	Capture and track waste-related GHG emissions data for DEM programs. Establish a mandate that requires the collection, analysis, reporting, and monitoring of GHG emissions associated with solid waste operations across Maui County.	Low	Medium Term	Medium
18	Establish a Sustainable (Low GHG) Procurement Policy for the County of Maui. A sustainable procurement policy will reduce Maui County's waste as well as upstream GHG emissions associated with production of imported goods and materials. This will serve as a starting point for considering carbon pollution reduction as a factor in all County of Maui decision-making.	Low	Short Term	Medium
19	Expand the location of public drinking water fountains and retrofit existing public drinking fountains to include devices capable of refilling reusable water flasks, cups, and containers with clean filtered water. Require all new water fountains to be designed to enable easy bottle filling.	Medium	Short Term	Medium
20	Launch a Solarize Maui County program with community-based organizations and leaders to increase residential solar access by leveraging a strategy of community bulk purchasing to reduce costs and address outreach barriers.	Low	Short Term and Ongoing.	High
21	Improve the process and reduce the time it takes to permit distributed solar PV systems (including distributed battery technologies). Actively involve local communities in the renewable energy permitting process to ensure that the planning process is guided by shared community benefits and equity-enhancing measures.	Low	Short Term	High

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	Supportive Actions	Est. Cost	Timeframe	Priority
22	Promote the development of and participation of community-based renewable energy (CBRE) programs, especially in underserved communities. Actively participate in CBRE projects, including siting CBRE projects on County of Maui owned land, as appropriate.	Low	Short Term and Ongoing	High
23	Enact policy requiring PV readiness for all new construction residential or commercial, including roof space, equipment space, and conduit to the roof.	Medium	Medium Term	Medium
24	Enact policy requiring PV on all new construction of multi-family dwellings and single-family affordable housing projects.	Medium	Medium Term	High
25	Enact policy to allow all HOAs and AOAOs owners or groups of owners to pursue renewable energy projects that are allowable under existing County of Maui permitting rules.	Medium	Medium Term	Medium
26	Streamline permitting for utility-scale renewable energy projects and battery energy storage systems.	Low	Short Term	High
27	Support funding for new County of Maui positions in the Planning Department and in the Department of Public Works to streamline permitting for utility-scale renewable energy projects.	Low	Short Term	High
28	Increase funding and partner with community organizations to provide additional incentives for energy efficiency programs, with a focus on offering incentives and conducting outreach to LMI households. Provide incentives in addition to what is already provided by existing programs (e.g. Hawai'i Energy) for energy efficiency improvements.	Medium	Short Term and Ongoing	High
29	Incentivize building electrification and high-efficiency cooling technologies (e.g. air source heat pumps, solar hot water heaters, heat pump water heaters, and seawater air conditioning).	Medium	Short to Medium Term and Ongoing	Medium
30	Update building codes to the most recent code within one year of release. Ensure adequate funding is provided to implementing departments for staff training.	Low	Short Term and Ongoing	High
31	Actively enforce building codes to ensure compliance through educational materials, easy to follow procedures, and County of Maui staff support. Ensure adequate funding is provided to implementing departments for necessary staffing.	Low	Short Term and Ongoing	High
32	Adopt a commercial requirement to complement existing PV- and EV-Ready measures in the current code to reduce costs for future rooftop solar and EV adoption.	Low	Short Term	High
33	Adopt IECC strengthening amendments that require EV charging such as EV-capable, EV-ready, or EV-installed at residential and commercial buildings.	Low	Short Term	High
34	Adopt a voluntary energy stretch code that incentivizes increased commercial and multi-family building energy performance.	Low	Short Term	High
35	Increase energy efficient lighting requirements in the code for both interior and exterior lighting to keep us aligned with market advancement and rapid progress being made by lighting manufacturers. Ensure that lighting impacts to wildlife and human health and well-being are also prioritized.	Low	Short Term	Medium
36	Require energy benchmarking for commercial and multi-family buildings of 10,000 sq.ft. or more.	Low	Medium then ongoing	Medium

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	Supportive Actions	Est. Cost	Timeframe	Priority
37	Require new commercial and multi-family buildings to pursue energy star certification and to achieve a minimum Energy Star score of 70 as a part of new construction.	Low	Medium then ongoing	Medium
38	Provide incentives for construction of new and existing buildings pursuing LEED, Living Building Challenge, or another recognized and robust green building rating system (e.g. LEED Zero, LEED True, etc.). Incentives could include:	Low	Medium then ongoing	Medium
39	Providing expedited review or permitting processes to buildings achieving certification; Provide density or height bonus allowing for percentage increases in Floor Area Ratio or other measures of density contingent upon certification; Provide tax credits or tax exemptions for buildings achieving certification; Provide permitting fee reduction or waivers for buildings achieving certification.			
40	Provide additional incentives to local residents for clean fuel vehicle purchases, in addition to existing federal and state tax credits, with a focus on supporting LMI households.	Medium	Short to Medium Term	High
41	Implement EV policies for ridesharing (i.e., Uber and Lyft services), especially to and from popular destinations, such as airports. Encourage ridesharing hubs in frontline communities.	Low	Short to Medium Term	Medium
42	Ensure Equal Access to Sustainable Transportation Options and Cost Savings. Develop policy to create a “retire and replace” rebate program to support purchases of low- and zero-emission vehicles for LMI residents. Provide additional public transportation benefits to residents willing to retire high-emission vehicles.	Medium	Short to Medium Term	Medium
43	Secure funding to expand the County of Maui’s EV charging network. Install EV charging stations at easily accessible County of Maui facilities.	Medium	Short Term	High
44	Secure funding to support the development of biofuel and hydrogen refueling, distribution, and processing infrastructure.	High	Medium Term	Medium
45	Enact policy and secure funding to expand clean fuel refueling infrastructure in public, residential, multifamily, municipal, and commercial areas ensuring EV ready infrastructure in new constructions and retrofits.	Medium	Short	High
46	Identify locations and funding opportunities to build new bike lanes, pedestrian pathways, and access to micromobility services and devices to limit single-occupancy vehicle travel and encourage multimodal transportation options. Provide funding for micromobility incentives and/or shared micromobility devices, with additional support for LMI households. This action may be performed congruently with transportation hubs.	Medium	Short to Medium Term	Medium
47	Secure funding to upgrade equipment on all buses, such as bicycle racks and mobile fare technology (similar to O’ahu’s Holo Card).	Medium	Medium Term	Medium
48	Create transportation hubs designed to facilitate the transfer of one mode of transportation to another. Design connection services between different modes of transportation at central “hubs.” This could also include a universal trip planning and fare app to inform residents and visitors about multimodal transportation options.	High	Medium Term	Medium
49	Increase non-vehicular mode share in new multi-family housing and commercial developments through Transportation Management & Design (TMD) programs. Working through the permitting process, identify opportunities to implement ongoing TDM programs with the aim to reduce GHG emissions.	Medium	Medium Term	Medium
50	Secure funding to identify candidate projects and develop dedicated bus lanes along high-occupancy transit corridors and expand reliable mainline bus service.	Medium	Medium Term	Medium

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	Supportive Actions	Est. Cost	Timeframe	Priority
51	Launch bike and scooter share network in congested areas. Develop creative partnerships to deploy micromobility sharing services in select locations to help alleviate traffic and offer visitors an alternative to vehicles.	Low	ShortTerm	Medium
52	Reduce minimum vehicle parking requirements across Maui County and repurpose underutilized public parking into multimodal transportation infrastructure, urban greenery, and public-serving spaces. Continue to support alternative transportation modes and walkable live, work, and play communities to reduce residents' and visitors' dependence on single passenger vehicles. As alternative transportation options continue to be developed, reduce the number of parking stalls in existing and new parking areas.	Low	Medium Term	Medium
53	Implement "complete streets" design into existing and planned road projects and prioritize old degraded roads and development in high-density population areas. Ensure these projects are sited in less vulnerable geographic areas (i.e not in sea level rise zones or tsunami inundation zones). Work with the private sector to provide connectivity and streetscape infrastructure in new developments to support complete streets principles. Incorporate sidewalk widening, shade trees, space for bike/alternative transport parking, and contributions for bike lanes in new development.	Medium	Medium Term	High
54	Create increased opportunities to work closely to where you live through mixed-use zoning and affordable housing. Build affordable housing in urban areas with easy access to employment opportunities. Encourage transit networks that connect affordable housing neighborhoods with commercial business centers. Amend zoning codes to accommodate more residential density in urban commercial areas.	Medium	Medium to long term	High
55	Require vehicle emissions testing. In collaboration with the State of Hawai'i, identify funding to build and support vehicle GHG emissions testing infrastructure and enact a policy that would require vehicle GHG emissions testing, with provisions for LMI households.	Medium	Short to Medium Term	Medium
56	Encourage alternatives to vehicle idling. Eliminate the need for vehicle idling by creating shaded parking (e.g. solar canopies and tree cover) and develop education campaigns on the negative impacts of idling.	Medium	Medium Term	Medium
57	Increase the annual vehicle registration fee on new ICE vehicles and eliminate premiums applied to vehicle registration fees on new and used clean fuel vehicles. Disincentivize the purchase of new ICE vehicles by placing an additional fee on new ICE vehicle annual registrations. Provide rebates to LMI households to ensure no negative impact on LMI and underserved communities.	Low	Medium Term	Medium
58	Identify and pursue opportunities for enhanced curbside waste and recycling pick-up. This could include establishing curbside pick-up programs for green waste, compostable waste, recycling, e-waste, etc. This effort would be within the County of Maui's refuse collection system and also explore opportunities for collaboration with local waste haulers to identify how curbside waste and recycling pick-up services can be made available to all residents prioritizing areas that do not have easy access to waste and recycling centers. Consider how County-provided funding can support the establishment of such programs.	Medium	Immediate and Ongoing	High
59	Require owners and managers of multi-family dwellings and multi-tenant commercial buildings to provide recycling services.	Medium	Medium	Low

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	Supportive Actions	Est. Cost	Timeframe	Priority
60	Secure funding and continue public-private partnerships with organizations to develop reuse centers at existing waste and recycling outlets within Maui County.	Medium	Short Term	Medium
61	Secure funding to develop and implement a 'Stop Wasting Food' program that requires the diversion of commercial edible food waste to benefit programs such as local food banks. Also, partner with local organizations to minimize food waste through outreach and education, encouraging the community to divert edible food to local food banks and compost food waste both in backyard/residential settings.	Low	Medium Term	Medium
62	Require recycling in public areas and during public events.	Medium	Medium Term	Low
63	Secure funding to explore materials ban and reuse programs to maximize source reduction.	Medium	Medium Term	Medium
64	Enact policy that requires paper recycling in the commercial sector.	Medium	Medium Term	Medium
65	Develop a construction and demolition (C&D) diversion ordinance that requires C&D waste materials to be sorted for reusable or recyclable materials. Consider complementing the policy with funding mechanisms that either incentivize or disincentivize C&D waste disposal.	High	Long-term	Low
66	Create infrastructure for island-wide compost collection by setting up systems at transfer stations for communities to use green waste and compost-produced methane for biofuel production.	High	Medium Term	High
67	Develop end-of-life strategies for solar PV and other relevant renewable energy technologies, including battery storage.	High	Medium Term	Medium
68	Secure funding to develop and implement collection systems for non-recyclable plastic to be used for building materials or WTE/WTF.	Medium	Medium Term	Medium
69	Secure funding to pursue local options/technologies for reuse and recycling rather than shipping materials overseas to be recycled.	Medium	Medium Term	Medium
70	Actively participate in the state's carbon credit program and create opportunities for local involvement in this program. Focus on opportunities for agriculture, land use, and forestry sector involvement. Delineate how different sized entities could be involved (i.e., community scale, organizational/company scale, household scale, individual scale, etc.).	High	Long Term	Low
71	Foster collaboration and alignment of conservation efforts between local organizations and the County of Maui. This connectivity could be led by the County of Maui with the goal of unifying efforts and sharing information with local conservation organizations.	Low	Short Term and Ongoing	High
72	Support soil health, manure management, and composting by providing technical assistance and financial resources through microgrants.	Low	Short Term	High
73	Enact policies and secure funding for programs that encourage the reforestation of undeveloped or vacant deforested (fallow) lands. Prioritize xeriscaping and drought tolerant native plant species.	Medium	Short Term and ongoing	High
74	Secure funding to establish program and planning efforts to include planting native and endemic trees as part of roadway rehabilitation projects to provide shade and better air quality for residents.	Medium	Medium Term	Medium
75	Require residential and commercial landscape designs to include native and endemic species that serve as carbon sinks.	Low	Medium Term	Medium

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	Supportive Actions	Est. Cost	Timeframe	Priority
76	Enact policy and conduct research to better regulate the species of plants sold at local stores, ensuring that plants offered to the public add value to the landscape such as drought resistance and non-invasive species.	Low	Medium Term	Medium
77	Secure funding to partner with local organizations to launch a public education campaign promoting building efficiency and electrification options. Tailor education to frontline communities who are more likely to live in substandard housing.	Medium	Medium Term	Low
78	Secure funding to further support organizations who provide zero-waste education to youth and our community. Start reuse education, outreach, and public awareness campaigns to encourage public participation and use of the reuse centers. Host composting and recycling workshops.	Medium	Medium	Low
79	Secure funding to further support organizations that promote educational resources for EV purchasing and charging infrastructure, focusing on youth, commuters, and the elderly.	Medium	Medium	Medium
80	Secure funding to launch a public education campaign promoting transit services, tailoring them to target populations such as youth, commuters, and the elderly. This can be in conjunction with transportation hubs and updating technology for easy access.	Medium	Medium Term	Medium
81	Secure funding and collaborate with partners to develop a business waste audit and education program to foster source reduction within the local business community.	Low	Medium Term	Medium
82	Secure funding and collaborate with partners to develop a visitor industry waste reduction education program.	Low	Medium Term	Medium
83	Partner with local organizations, such as public institutions, universities, and airlines, to provide climate change related education to the community.	Low	Medium Term	Medium
84	Continue to engage youth in the community engagement process. Convening the Mayor's Youth Council to better foster collaboration between the County of Maui and youth.	Low	Medium Term	Medium
85	Partner with community organizations and secure funding to enhance countywide public outreach and education campaigns to engage the general public, businesses, and other stakeholders on local renewable energy opportunities and resource efficient behaviors (including energy storage and electrification of transportation/clean fuels), energy efficiency programs, water conservation/efficiency, and solid waste diversion. In particular, focus on bringing these services to underserved and difficult to reach communities.	Low	Short Term and Ongoing	Medium
86	Allocate County of Maui funding and secure additional funding to establish or support existing programs that cultivate leadership and environmental stewardship in Maui County's youth. Partner with local schools and universities, Native Hawaiian organizations, and other nonprofits with climate action and resiliency programs. Build climate and resiliency action and eco-literacy for youth through education, outreach materials, focused internships, and leadership development opportunities.	Low	Short Term and Ongoing	High
87	Secure funding to develop educational signage for visitors and community members on native plants used for landscaping on County of Maui property and create educational materials to share the differences between native, non-native, and invasive plants.	Low	Medium Term	Medium
88	Secure funding to establish microgrants that help increase the adoption of renewable energy, energy storage, and electrification of transportation, with particular emphasis on supporting LMI households.	Medium	Short Term and Ongoing	Medium

Exhibit B
Maui County Climate Action Resiliency Plan Action Items List

	Supportive Actions	Est. Cost	Timeframe	Priority
89	Secure funding to establish microgrants that support home and small business retrofits to make structures more resilient to natural hazards such as hurricanes, flooding, extreme heat, sea level rise, and wildfires, with particular emphasis on supporting LMI households.	Medium	Short Term and Ongoing	Medium
90	Allocate funding and partner with local community organizations to train workforce in relevant professions and trades needed across Maui County to increase local resilience to climate change impacts and disturbances (including preparedness, response, and recovery to observed and expected shocks and stressors).	Low	Medium Term and Ongoing	Medium
91	Secure funding to develop a disaster recovery program, this program should include a resilience plan framework and additional resources to better help local businesses and nonprofits develop a plan for climate change related disturbances. As part of the disaster recovery framework, identify which current resources are available to local businesses and nonprofits in the case of a disaster.	Medium	Short Term and ongoing	High
92	Expand funding for community organizations and County of Maui agencies to increase training opportunities on emergency preparedness, response, and recovery. Training workshops provide public education and resources for residents to learn how to prepare for and respond to events such as wildfires, flooding, and hurricanes.	Low	Short Term and Ongoing	High
93	Increase affordability and eligibility of disaster related insurance (e.g., flood and hurricane insurance) for Maui County residents by adopting FEMA's Building National Flood Insurance Program (NFIP) and Building Code Effectiveness Grading Schedule (BCEGS). Implement programs that help owners of properties that face chronic flooding understand and access FEMA buyout funds.	Low	Medium Term	Medium
94	Establish a permanent County of Maui Food Security and Regenerative Agriculture Council made up of farming leaders to guide and advise the County of Maui on best practices to foster a more robust local food and regenerative farming industry in Maui County.	Low	Medium Term	Medium
95	Establish a County of Maui Emergency Food and Essential Goods Supply and Storage Plan. Focus on providing sufficient emergency food and essential goods supplies in communities, regularly inventory critical assets, and ensure that adequate backup supplies are on hand for extended emergencies.	Low	Medium Term	High
96	Allocate County of Maui funds to expand community programs (e.g., Maui Food Hub and Common Ground Collective) focused on increasing access to healthy locally grown food, farmers markets, and other local food networks, and ensure affordability, particularly for LMI residents and families.	Medium	Medium Term and Ongoing	Medium
97	Expand funding support for microgrants that help to cover startup and scaling up costs for local regenerative agriculture practices and equipment, including efficient irrigation equipment, water catchment, and feral ungulate control measures for small-scale and local farmers. Provide support for permitting, best management practices, and implementation needs of applicants.	Medium	Medium Term	Medium
98	Secure funding to establish a community garden program to convert vacant lots, rooftops, or other available spaces into public community gardens. A public community garden program would support the conversion of private or County of Maui owned lots into community spaces.	Medium	Medium Term	Medium

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	Supportive Actions	Est. Cost	Timeframe	Priority
99	Allocate County of Maui funds and secure additional funding to support positions in the County of Maui and local nonprofit organizations that can develop and implement programs that support the mental and physical health of residents affected by climate change impacts. This could consist of strengthening existing healthcare systems, addressing the healthcare workforce recruitment gap, and assisting vulnerable and historically underserved residents in accessing healthcare services.	Medium	Medium Term	Medium
100	Create a County of Maui monitoring plan and program to anticipate new vector-borne diseases due to climate change impacts (e.g. warming and flooding) and partner with local nonprofits and state agencies (e.g. DOH, DOE, and the University of Hawai'i) to educate the community on potential vector-borne diseases.	Medium	Medium Term and Ongoing	Medium
101	Secure funds to develop a countywide mapping system to help identify at-risk culturally sensitive areas, including burial sites, and partner with community organizations and government agencies with existing cultural mapping and data. Engage with families and relevant communities to discuss their preference on protecting or relocating at-risk burial and other cultural sites. Based on these evaluations, develop a plan to support community driven management practices to best address at-risk cultural sites and continue to support mapping efforts from County of Maui Archeologists (cultural site overlays), Parks Department (beach park vulnerability study), and evaluate current plans (e.g. Mana'e GIS Mapping Project).	Medium	Medium Term	Medium
102	Secure funding to develop a cultural plan and support community driven management measures that connect arts and culture with the County of Maui's sustainability and resiliency goals. The countywide cultural plan would support sustainability and resiliency objectives and further art and cultural infrastructure as an element of community engagement and awareness.	Low	Medium Term	Medium
103	Support the charter amendment passage and creation of the Department of 'Ōiwi Resources. Establish and encourage cultural training for staff and community members.	Medium	Short Term	High
104	Secure funding to further incorporate cultural and traditional practices of the ahupua'a management system to help implement an integrated ridge to reef framework for greater ecological and wildlife protection.	Medium	Medium Term	Medium
105	Secure funding to conduct a comprehensive assessment of climate change impacts on Maui's Native Hawaiian cultural resources and practices.	Low	Short Term	High
106	In coordination with private utilities such as Hawaiian Telcom, Spectrum, and Verizon, as well as with community stakeholder groups such as the Statewide Broadband Hui, secure funding and pursue projects to strengthen and expand communications infrastructure, including high-speed Internet connectivity, particularly in more rural and isolated areas of Maui County. Deploy projects to remote parts of Maui County that increase access to high speed internet (e.g. Maui Wifi Bus).	Medium	Medium Term	Medium
107	Secure funding to support education on emergency telecommunications systems, such as ham radio, radio stations, and satellite phones. Fund ongoing trainings for ham radio operators, provide detailed information and access to community members on radio stations to tune into in case of an emergency (stations that can be accessed through car radios), and ensure resilience hubs in every community across Maui County are equipped with emergency satellite phones, ham radios, and proper connectivity.	Medium	Medium Term	High

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	Supportive Actions	Est. Cost	Timeframe	Priority
108	Secure funding to further identify Maui County's critical loads at emergency facilities and essential services that require backup power during widespread outages or disasters. Determine minimum daily runtime requirements for the identified emergency facilities and essential services. Demonstrate that the County of Maui, utility, or service provider can supply power to identified emergency facilities and essential services in meeting their minimum daily runtime.	Medium	Short Term	High
109	Ensure functional generators in all emergency facilities.			
110	In coordination with Hawaiian Electric Company, pursue Performance Excellence in Electricity Renewal (PEER) certification to address aging energy infrastructure, identify cost savings opportunities, build for resiliency, enhance tracking to identify deficiencies and prevent failures, and share best practices. PEER certification (https://peer.gbci.org/) enables power system owners and operators to: Reduce climate risk with resilient design; improve energy system performance; and demonstrate value to investors.	Medium	Medium Term	Medium
111	Secure funding and partner with the State of Hawai'i to develop a study assessing the resiliency of Maui County commercial harbors, shipping ports, and other boating facilities. The study needs to identify strategies to ensure resilience to sea level rise, larger storms, tsunamis, storm surge, king tides, coastal erosion, and other climate change impacts.*	Low	Medium Term	Medium
112	Reduce taxpayer expense and increase renewable energy, energy efficiency, energy storage, and electrification of transportation for County of Maui owned facilities and vehicle fleets by pursuing a countywide Energy Savings Performance Contract (ESPC).	Low	Short Term and Ongoing	High
113	Invest in resilient water supply infrastructure, including resilient water storage, treatment, and distribution infrastructure. Ensure that critical water supply systems have sufficient redundancy and resiliency to address climate change impacts such as water shortages resulting from drought, potential water infrastructure damage resulting from sea level rise/coastal erosion/king tides/flooding, and sustained power outages resulting from electric grid failures.	Medium	Medium Term and Ongoing	Medium
114	Secure funding to develop and improve infrastructure that reduces the use of potable water and utilizes the use of non-potable R-1 water for landscaping and agricultural irrigation. For example, complete the Upcountry agricultural waterline project to deliver non-potable irrigation water to Upcountry farmers and explore the increased use of brackish irrigation wells for landscape irrigation.	Medium	Medium Term and Ongoing	Medium
115	Establish a Stormwater Enterprise Fund to better finance water management and expand the existing MS4 program managed by the County of Maui Public Works Department. Additional funding will help to regularly repair and maintain facilities, as well as meet increasing federal and state management requirements.	Medium	Medium	Medium
116	Promote stormwater as a resource by funding and implementing stormwater capture, infiltration, and reuse technologies wherever feasible. Apply these stormwater management design concepts (e.g., LID) to County of Maui facilities, increase LID concepts in building code standards, and work with appropriate large landowners to partner in the deployment of stormwater as a resource.	Medium	Medium Term	High

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	Supportive Actions	Est. Cost	Timeframe	Priority
117	Secure funding to continue building out wastewater reuse infrastructure (enhancing existing wastewater facilities) and updating the wastewater management plan to include relocation of coastal facilities with exposure to climate change impacts such as sea level rise and coastal erosion (e.g., Moloka'i).	Medium	Medium Term	High
118	Secure County of Maui, State, and Federal funding to continue to support residents in cesspool conversions across Maui County.	Medium	Medium Term	Medium
119	Develop a comprehensive countywide stormwater master plan evaluating expanding municipal separate storm sewer system (MS4) program to reduce pollutant transfer to nearshore and reef ecosystems.	Low	Medium Term	Medium
120	Secure funding to continually update County of Maui's Disaster Recovery Plan, identifying what will be prioritized in the recovery and rebuild process and how community systems will be strengthened to better withstand the impacts of natural disasters. Align disaster recovery plan with the County of Maui's Hazard Mitigation Plan.	Low	Medium Term	Medium
121	Form a task force to decide where to set resiliency thresholds, define those thresholds, and set management strategies for when Maui County reaches tipping points. Require the task force to create a publicly available document on defined thresholds and their importance to resiliency.	Low	Medium Term	Medium
122	Develop a network of resilience hubs, emergency shelters, and community-based emergency management organizations that actively collaborate in their efforts and increase community-wide education on resiliency hubs to amplify their role in the community.	Medium	Medium Term and Ongoing	Medium
123	Develop a road maintenance plan that includes thresholds and triggers for upgrades and improvements and a relocation plan incorporating LID and Complete Streets for coastal roads with exposure to climate change impacts such as sea level rise and coastal erosion.	Low	Medium Term	Medium
124	Strengthen evacuation routes and planning, with particular emphasis in areas with single points of access that are vulnerable to being cut off from climate change impacts such as sea level rise, coastal erosion, flooding, wildfires, and landslides.	Low	Medium Term	Medium
125	Secure funding for additional planning to implement nature-based solutions into the design of resilience hubs and incorporate resilience hubs into existing land use regulation.	Low	Short Term and Ongoing	Medium
126	Develop resilient building design guidelines and modify zoning, permitting processes, and standards to support best practices for smart, sustainable, resilient development and reduce exposure to climate change hazards. Design guidelines should include consideration of future precipitation, sea level rise, wildfire, and heat projections. During the design phase, plan for climate change projections for lifespan of development and any beneficial resilience retrofits. Resilient design guidelines should protect public health and safety and prioritize inclusion of nature-based solutions. Regularly update the Title 19 and County of Maui Building Codes to align with modified zoning ordinances and County of Maui planning efforts.	Low	Short Term	High
127	Enact policy to require LID for new development to minimize runoff, maximize recharge, and reduce demands on infrastructure. Ensure reduction of the heat island effect by reducing hardscapes (e.g. concrete and asphalt surfaces) and increasing natural land cover and high solar reflectance index (SRI) surfaces (e.g. cool roofs) where hardscapes are necessary.	Low	Medium Term	Medium

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	Supportive Actions	Est. Cost	Timeframe	Priority
128	Secure funding to develop thresholds and standards for current and new development to support and incentivize the implementation of high-efficiency solutions to reduce the use of water resources.	Medium	Medium Term	Medium
129	Develop a threshold-based system based on the degree of climate change vulnerability and risk exposure for managed retreat of coastal infrastructure so that the risk to physical structures and infrastructure across Maui County can be addressed with the least possible disruptions to residents and the economy over time.	Medium	Medium Term	High
130	Continue to update coastal parks adaptation and relocation plans with exposure to climate change impacts such as sea level rise and coastal erosion by performing vulnerability assessments and adopting updated adaptation plans.	Low	Medium Term	Medium
131	Secure funding to establish a revolving fund for managed retreat and an interest bearing account to support targeted projects.	Medium	Medium Term	Medium
132	Secure funding and create programs that increase housing affordability for local residents and encourage sustainable construction by creating denser (smaller lot sizes) and creative housing developments, increasing types of housing that are in the County of Maui's zoning code, developing pre-approved green housing design standards that could be fast-tracked, and alleviating permitting requirements by reducing non-essential infrastructure requirements such as reducing parking requirements.	Medium	Short Term	High
133	Enact legislation prohibiting new construction in high risk areas and continue to adopt updated shoreline setback rules for shoreline development based on the latest data available for rising sea levels, coastal erosion, storm surge, and king tides. Collaborate with the County of Maui Planning Commission and County of Maui Agencies.	Low	Medium Term	High
134	Launch residential and small business hurricane retrofit programs to strengthen properties vulnerable to hurricanes, with particular emphasis on financially supporting LMI households to implement these improvements.	Medium	Medium Term	Medium
135	Enact policy to ensure climate resilient affordable housing is available for existing residents, focusing on LMI households affected by rising prices, by ensuring all new affordable housing developments are not built in areas of high environmental risk or hazards and are built beyond code standards for resistance to hurricanes and other natural disasters.	Medium	Medium Term	High
136	Secure funding to conduct a housing needs assessment addressing housing supply affordability, diversity of housing stock by unit and ownership type, community demographics, and displacement risk assessment for new projects as applicable.	Low	Medium Term	Medium
137	Provide electricity grid resilience services through grid-integrated vehicle programs. Pilot and expand a variety of grid resilience services, such as demand response, emergency back-up, and demand charge reduction, through three modes of EV integration: Grid-to-Vehicle, Vehicle-to-Building, and Vehicle-to-Grid.	Medium	Medium Term	Medium
138	Support expansion and management of active transportation networks, with an emphasis on equitable access to multi-modal transportation for all community members and prioritizing historically underserved communities. Decisions will be made with community input that leads to transportation networks that will support health and well-being, environmental sustainability, and equitable access to resources and opportunities.	Medium	Medium Term	High

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	Supportive Actions	Est. Cost	Timeframe	Priority
139	Secure additional funding to actively manage invasive ungulate populations by supporting private/public partnerships and deploying population management solutions to reduce erosion, protect native ecosystems, and ensure the protection of our natural systems.	Medium	Medium Term and Ongoing	High
140	Expand County of Maui funding to support ungulate management for small farmers. For example, continue to support and expand the County of Maui's Feral Animal Relief and Recovery Grant Program for Farmers and Ranchers.	Medium	Medium Term and Ongoing	High
141	Actively control invasive plant populations by supporting private/public partnerships, employing effective control strategies, combining mapping data, and expanding the early detection program. Expand County of Maui funding and secure additional funding from other sources to support the management of invasive species.	Medium	Short Term and Ongoing	High
142	Partner with State and Federal agencies such as the State Department of Agriculture and the United States Department of Agriculture (USDA) to expand biosecurity protocols and capacity across Maui County. This could include funding additional agricultural inspectors.	Medium	Medium Term	Medium
143	Update open space and community park plans as needed, including master plans, general development plans, and natural resource management plans to ensure habitat continuity and to protect open space and parkland against climate change impacts.	Low	Medium Term	Medium
144	Secure funding to purchase more open spaces and SLRA-XA setbacks in Maui County to further preserve our diverse ecosystems.	High	Medium Term	Medium
145	Enact policies to ensure that current greenspaces used as parks or open space are not converted to housing or commercial development.	Low	Short Term	High
146	Create community forests in urban areas to provide greenspaces, natural connectivity, and valued recreational areas. Prioritize the use of drought tolerant native plant species that minimize the need for supplemental irrigation whenever possible.	Medium	Medium Term	Medium
147	Reduce potable water demand by supporting water conservation efforts and efficiency policies and programs to ensure an adequate supply of fresh water for people, businesses, and agriculture. Replace potable water use with non-potable water whenever possible.	Medium	Medium Term	High
148	Increase funding for continued watershed management through community partners. Continue implementing land management practices that support ecosystem function and healthy watersheds.	Medium	Short Term and Ongoing	Medium
149	Secure funding to develop an ecosystem management plan for priority watersheds, aquifers, and stream segments with key partners. Implement land management practices that support healthy ecosystems by determining the carrying capacity and ecological flow standards of aquifers and watersheds.	Medium	Short Term	High
150	Continue to work with the Commission on Water Resource Management (CWRM) and other community stakeholder groups to reduce stream diversions that negatively affect traditional agriculture, cultural practices, natural freshwater flora and fauna, and healthy stream ecosystem function.	Medium	Medium Term	Medium
151	Promote sustainable, regenerative, and nature-based solutions to address nutrient loading and sedimentation of freshwater and marine environments by adopting a whole systems approach, such as a beach cell system management approach to mitigate coastal erosion.	Low	Medium Term	Medium

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	Supportive Actions	Est. Cost	Timeframe	Priority
152	Secure funds to develop a countywide mapping system to help identify at-risk environmentally sensitive areas, including sand dunes and wetlands, and engage the community in this process. Develop a plan to support community and County driven management measures to best address environmentally sensitive areas. Continue to support current mapping efforts from the County of Maui Planning Department, University of Hawai'i Sea Grant, DLNR, and other partners.	Medium	Medium Term	High
153	Protect beaches and coastal safety by updating shoreline management rules and adopting shoreline development setbacks based on sea level rise/erosion maps. Provide incentives to reconfigure and retreat from high-hazard areas.	Low	Short Term	High
154	Secure funding to continue to protect and restore wetlands to address sedimentation and flooding by establishing a wetland and stream evaluation system. This will inform prioritization of actions, increase coastal resilience, and protect shoreline ecosystems by increasing capacity for dune restoration and shoreline habitat management.	Medium	Medium Term	Medium
155	Increase coastal resilience and coral reef health by promoting community-led marine resource management, sustainable fishing practices, proper sunscreen use, use of reef-friendly landscaping applications particularly on the coast, and cross-referencing existing Coral Reef Ecosystem Studies (CREST).	Medium	Short Term	Medium
156	CCRS to continue administering the Resiliency Hui requiring each department to identify one person to act as the Resiliency Point Person to help implement climate actions and resiliency strategies identified in the CARP that fall under County of Maui's jurisdiction. In addition, the Resiliency Hui will work to strengthen collaboration and coordination of County of Maui departments to better implement the CARP's elements.	Low	Short Term and Ongoing	High
157	Develop a plan and structure to track and measure progress for implementation of the CARP.	Low	Short Term	High
158	Establish a Place Based Resilience Training Program for new elected leaders and local government staff to ensure understanding of the climate change and resiliency goals and actions identified and currently underway across Maui County. This program will offer an understanding of departmental efforts to reduce duplication of work and promote departmental collaboration.	Low	Short Term	Medium
159	Improve County of Maui community relationships through volunteerism in order to foster awareness and connectivity among County of Maui staff and the Maui nonprofit community, advance positive community work, and ultimately create stronger collaboration between the County of Maui and nonprofits. For example, the County of Maui could create a Volunteer Time Match Program for employees that wish to volunteer time for charitable community work.	Low	Medium Term	Medium
160	Enhance engagement with communities across Maui County to foster stronger County of Maui community relationships, encourage participation in County of Maui decision-making, and further enhance community understanding of County of Maui climate initiatives.	Medium	Medium Term and Ongoing	Medium
161	Develop guidance for capital planning, including resilient design standards for County of Maui infrastructure upgrades that consider climate change projections, and develop a resiliency standard certificate to highlight individuals that have exceeded expectations and chosen to go above and beyond.	Low	Medium Term	Medium

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	Supportive Actions	Est. Cost	Timeframe	Priority
162	Streamline permitting processes and incentivize activities that build climate resilience by improving project applications through the provision of scoping tools and publications of standard best management practices and allowing permitting processes to incorporate environmental data. Create a checklist for resiliency standards and permitting.	Medium	Short Term	High
163	Pursue and achieve LEED for Cities and Communities certification for County of Maui facilities. (https://www.usgbc.org/leed/rating-systems/leed-for-cities-communities).	Medium	Medium Term	Medium
164	Identify sustainable tourism targets and collaborate with partners to create a County of Maui Sustainable Destination Management Action Plan that manages Maui County tourism in a responsible and regenerative manner.	Low	Short Term	High
165	Develop programs and resource materials that encourage visitors to support and engage in conservation efforts to help Maui County meet our climate resilience goals through volunteerism and educational opportunities.	Low	Medium Term	Medium
166	Increase coastal resilience and coral reef health by educating the visitor industry through specialized outreach materials and marketing efforts.	Medium	Medium Term	Medium
167	Secure funding to explore and establish a green fee or fee based program for all visitors to Maui County, with the fee being used to support climate action and resiliency activities on the islands where they visit.	Medium	Medium Term	Medium
168	In alignment with Resolution No. 22-232, Urging the County of Maui and its Tourism Industry to Adopt Sustainable Tourism Practices and Certification, pursue a sustainable destination management certification for Maui County, such as those endorsed by the Global Sustainability Tourism Council.	Medium	Short Term	Medium
169	Secure funding for a new position in the Office of Climate Change, Resiliency, and Sustainability to help explore proven financing tools and emerging grant opportunities to fund resilience focused projects. Coordinate resiliency planning to best position the County of Maui to be competitive for State and Federal funding opportunities. Explore other financing tools, such as energy savings performance contracts.	Low	Short Term	High