

DEPT. COMM. NO. 305

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GOVERNOR | KE KIA'ĀINA

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STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII' DEPARTMENT OF LAND AND NATURAL RESOURCES

Office of Conservation and Coastal Lands

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DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES
ENFORCEMENT

ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 30, 2022

The Honorable Ronald D. Kouchi, President
and Members of the Senate
Thirty-Second State Legislature
State Capitol, Room 409
Honolulu, Hawaii 96813

The Honorable Scott K. Saiki, Speaker
and Members of the House of Representatives
Thirty- Second State Legislature
State Capitol, Room 431
Honolulu, Hawaii 96813

Dear President Kouchi, Speaker Saiki, and Members of the Legislature:

For your information and consideration, I am transmitting a copy of the Hawai'i Climate Change Annual and Five Year Report 2022, as required by Section 225P-3(m), Hawaii Revised Statutes (HRS). In accordance with Section 93-16, HRS, a copy of this report has been transmitted to the Legislative Reference Bureau and the report may be viewed electronically at

<https://files.hawaii.gov/dlnr/reports-to-the-legislature/2023/OCCL23-Hawaii-Climate-Change-Report-FY22.pdf>

Sincerely,

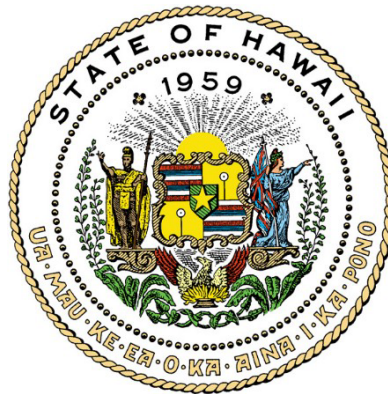
A handwritten signature in black ink that reads "Suzanne D. Case".

SUZANNE D. CASE
Chairperson

Enclosure: Sea Level Rise Vulnerability and Adaptation Report

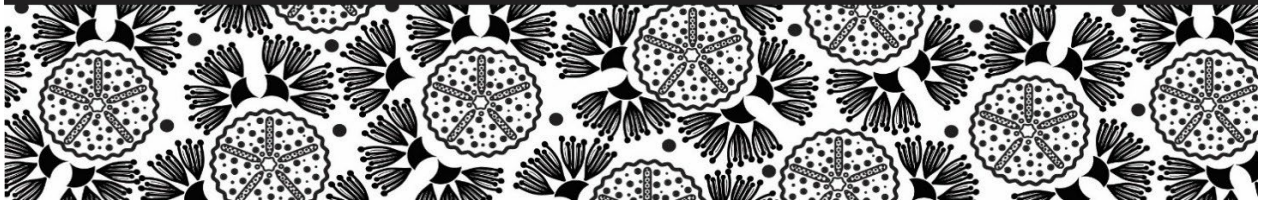
REPORT TO THE THIRTY-THIRD LEGISLATURE STATE OF HAWAII
REGULAR SESSION OF 2023

HAWAII CLIMATE CHANGE MITIGATION AND ADAPTATION COMMISSION



Prepared by
Department of Land and Natural Resources State of Hawaii
In response to Section 225P-3(k), Hawaii Revised Statutes

December 2022



Hawai'i Climate Change Annual and Five Year Report 2022

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1. Hawai'i Climate Change Mitigation and Adaptation Commission Members and Staff

COMMISSION CO-CHAIRS

SUZANNE CASE - Chairperson of the Board of Land and Natural Resources

MARY ALICE EVANS - Director of the Office of Planning and Sustainable Development

COMMISSION MEMBERS

MIKE MCCARTNEY - Director of the Department of Business, Economic Development, & Tourism

GEORGE KAM- Chairperson of the Board of Directors of the Hawai'i Tourism Authority

PHYLLIS SHIMABUKURO-GEISER - Chairperson of the Board of Agriculture

SYLVIA HUSSEY - Chief Executive Officer of the Office of Hawaii an Affairs

WILLIAM AILĀ, JR - Chairperson of the Hawaiian Homes Commission

JADE BUTAY - Director of the Department of Transportation

ELIZABETH CHAR - Director of the Department of Health

BRUCE VOSS - Chairperson of the Board of Education

DAWN TAKEUCHI APUNA – Acting Director of the City and County of Honolulu, Department of Planning & Permitting

MICHELE CHOUTEAU MCLEAN - Director of the County of Maui, Department of Planning

ZENDO KERN- Director of the County of Hawai'i, Department of Planning

KA'ĀINA S. HULL - Director of the County of Kaua'i, Department of Planning

MIKE GABBARD - Chair of the Senate Committee on Agriculture & Environment

LORRAINE R. INOUE, Chair Senate Committee On Water & Land

NICOLE E. LOWEN - Chair of the House Committee on Energy & Environmental Protection

DAVID A. TARNAS, Chair House Committee on Water & Land

MAJOR GENERAL KENNETH S. HARA - The Adjutant General

JUSTINE NIHIPALI - Manager of the coastal zone management program

COMMISSION STAFF

Leah Laramée – Coordinator

Website: Climate.Hawaii.gov

Facebook: @Hi Climate

Instagram: @HI_Climate



2. Mission and priority statements

Mission Statement. Hawai'i's Climate Commission recognizes the urgency of climate threats and the need to act quickly. It promotes ambitious, climate-neutral, culturally responsive strategies for climate change adaptation and mitigation in a manner that is clean, equitable and resilient.

Priority Statement: Mitigation¹ The Commission recognizes that ground transportation contributes significantly to Hawai'i's share of greenhouse gas emissions. It supports a price on carbon, and mechanisms to reduce overall vehicle miles traveled, as well as converting all remaining vehicle-based ground transportation to renewable, zero-emission fuels and technologies.

Priority Statement: Adaptation² The Commission recognizes the serious impacts of sea level rise on Hawai'i. It supports legislation to address development along beaches, as well as funding programs that assist in planning and implementation; urges the incorporation of the sea level rise exposure area into counties' general and development plans; and recommends that agencies identify and prioritize their assets that lie within this area.

Priority Statement: Guidance for Investment in Resilient Infrastructure³ The Commission emphasizes that nature-based solutions, green infrastructure, and carbon-smart practices must be implemented now and prioritized in all planning and future actions as part of a climate ready Hawai'i. By doing so, it supports State sustainability and climate resiliency which provide a multitude of economic, environmental, and social co-benefits.

High Impact Actions As part of the 25-governor U.S. Climate Alliance, Hawai'i has committed to specific and new High Impact Actions that will accelerate greenhouse gas emission reductions and drive the real, impactful implementation and results needed to make the U.S. climate targets a reality. These priority areas include: Power, Buildings, Industry, Transportation, Just Transition and Equity, Resilience, Natural and Working Lands, and the Social Cost of Greenhouse Gases. Commission members' HI Impact Actions – over seventy in all, and continually increasing - are listed on the Commission's website⁴ under the categories of equity, mitigation, adaptation, sequestration and resilience, mirroring the Commission's statement on resilient infrastructure. As climate change continues to pose an existential threat, Hawai'i helped ratchet up ambition abroad at the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP), and buckled down to work on adaptation actions at home. Hawai'i's Climate Commission also aims to continue coordinating actions being undertaken to limit warming to under 1.5°C.

High Impact Actions include:

- 100% net-zero operating emissions government buildings by 2030.
- 100% zero emission vehicles (ZEV) new light-duty sales by 2035.
- 100% zero-emission light-duty public fleets by 2035.

- 100% zero-emission public/government-owned transit bus fleets by 2030.
- 100% zero-emission medium & heavy-duty public fleets by 2040, where technically feasible.
- Promote sustainable communities that provide a range of affordable housing and transportation options that increase access to opportunity and reduce vehicle miles travelled (VMT).
- Empower disadvantaged communities and foster leadership to develop climate/clean energy solutions and policies through training, facilitation, and funding.
- Commit to a just transition that provides for sustainable livelihoods for those reliant on the fossil fuel economy in the shift to more sustainable systems and practices.
- Integrate racial and gender diversity in developing environmental solutions to the climate crisis.
- Conserve at least 30% of land and coastal waters by 2030.
- Commit to large scale restoration of forests and other locally indigenous ecosystems. Increase tree canopy in disadvantaged and/or heat vulnerable communities by at least 40% by 2030 to mitigate urban heat island effects.
- Increase consumption of food produced within the jurisdiction to at least 20-30% of food consumed by 2030.



3. 2022 Highlights: Co-Chairs' Message

Aloha kākou,

As we leave our roles as Co-Chairs of the Hawai'i Climate Change Mitigation and Adaptation Commission, we celebrate the accomplishments of the Commission and its staff and the progress its members have made toward becoming climate ready throughout our state. We reflect on the progress made and on challenges and look forward to the work being carried on by the incoming Co-Chairs.

Setting goals. Since its establishment under Act 32 in 2017, the Commission has been mandated to support actions to meet the Paris Agreement to limit global warming to well below 2 degrees Celsius compared to pre-industrial levels. In 2018 Hawai'i adopted a landmark law pledging to be net carbon negative by 2045 - still one of the only net negative goals in the world. In 2021 Hawai'i was the first state to declare a climate emergency. To meet these goals, fundamental societal shifts need to take place, and are taking place, thanks to your work.

Increasing local clean energy. Hawai'i closed its last coal plant this year, ending the burning of the highest carbon-emission fossil fuel. Supply chain and permitting issues have slowed progress on completing solar and storage projects to help bridge the energy gap, but we continue to work to resolve these. The spike in oil prices this spring due to global politics underscored our need to shift to locally produced clean renewable energy.

Carbon-free transportation. In the transportation sector electrification of vehicles is underway, but transportation choices are still limited in parts of the state. Only 8.4% of federal transportation funding is invested in bike and pedestrian projects.

Sea level rise. The Commission has supported innovative adaptations to meet the threat of sea level rise, such as funding the Commission's feasibility study for nature-based solutions to protect both beaches and roadways from sea level rise, as well as funding the DLNR Division of Aquatic Resources' coral reef restoration projects for shoreline resilience.

Support for local farmers. Hawai'i's agriculture sector has the challenge of increasing food production to feed the people of Hawai'i while also reducing emissions. Climate smart agriculture for healthy soil and fresh water, including traditional cultural agricultural practices, needs support to thrive and scale up. Local producers need more investment in technical and outreach capacity.

Trees. We know that our natural lands will play a key role in reaching our net negative goal. Forests and urban trees are the State's only carbon sink and provide us with fresh drinking water and clean air, keep hot areas cooler, and are home to important cultural and biological resources. We are on a solid pathway through the 30x30 Watershed Initiative, with consistent annual legislative funding support, and the 100,000,000 tree pledge.

Health. Health issues due to climate change are already apparent in the state. With hotter temperatures we see increasing threats to our keiki, kupuna, coral reefs and forest birds. Heat stress has killed over 600 people annually in the United States; without intervention that number is expected to grow. We also see threats to our keiki's ability to learn as temperatures soar: Schools without shade trees and cooling architecture become hotboxes. Increasing temperatures expanded the range of disease-carrying mosquitoes, leaving no safe refuge for highly endangered forest birds and elevating the potential for human disease outbreaks.

We are thankful for the passion of the people working on these issues, and for the next generation stepping up to lead the charge. We are hopeful for our future. We have some difficult years ahead of us, but as long as we continue to work together, we can make our home, Hawai'i, better prepared to mitigate and adapt to our global and local existential threat of climate change. The race to 1.5 starts today.

With aloha,

Suzanne D. Case

Co-Chair, Hawai'i Climate Change Mitigation and Adaptation Commission

Chair, Board of Land and Natural Resources

Mary Alice Evans

Co-Chair, Hawai'i Climate Change Mitigation and Adaptation Commission

Director, Office of Planning and Sustainable Development, Department of Business, Economic Development and Tourism



4. Support and coordination for key offices to address resilience in vulnerable communities

As climate change exacerbates weather patterns and extreme weather events, it is important to equip those who do not have the resources to recover and thrive as a result of even relatively "minor" disasters and impacts, particularly vulnerable low-income communities and those who are considered homeless or are at risk of becoming homeless. The Commission has begun working on creating coordinated statewide efforts to identify and address the impacts of climate change and related policies on vulnerable populations and communities.

Climate Ready Hawai'i Cohort Through grants from the Corporation of National and Community Service (CNCS) the Commission was able to install twenty-five AmeriCorps members in eight key state and county offices over three years (six in year one, nine in year two and ten in year three). This Climate Ready Cohort works to address climate readiness and equity issues statewide to help our most vulnerable communities thrive and be resilient in the face of climate change induced events and impacts. The Climate Ready Cohort have served in the following offices: The Hawai'i Climate Change Mitigation and Adaptation Commission (Commission) based at the Department of Land and Natural Resources (DLNR), the Hawai'i State Energy Office (HSEO), the Hawai'i Office of Planning and Sustainable Development (OPSD), and the Hawai'i Department of Health (DOH), The Department of Transpiration, Hawai'i Emergency Management Agency (HIEMA), Hawai'i Green Infrastructure Authority (HGIA), County of Kaua'i Long Range Planning Division, and County of Hawai'i Long Range Planning Division. The program has integrated the climate change work of these offices through data collection, outreach, education, and information dissemination.

The broad partnership network assists in capacity building through VISTAs working with staff and the community to create, expand, and strengthen systems and processes that help carry out equity and climate work. Activities include the transfer of knowledge through development of various outreach tools providing capacity building services to 280 organizations including Hawai'i Tourism Authority, Kaua'i High School, Mālama Kaua'i, Hanalei School, Island School, Kaua'i Climate Action Coalition, Zero Waste Kauai, Nourish Kaua'i, Honolulu Community College, Kapi'olani Community College, Maui Community College, University of Hawai'i at Mānoa, Broadband Hui, Hawai'i Sea Grant, Safe Routes to Schools, PATH Hawai'i , Hawai'i Public Health Institute, US Climate Alliance, Kōkua Kalihi Valley, Kalihi Valley Instructional Bike Exchange (KVIBE), and the Energy Equity Hui.

The VISTAs assisted in developing a training curriculum for the newly established Wayfinder program at the Hawai'i State Energy Office (HSEO). The Clean Energy Wayfinders is a new program intended to advance Hawai'i's clean energy goals through addressing inequities in vulnerable communities by creating jobs that launch a new generation of clean energy leaders. The curriculum developed by the VISTAs and HSEO staff include briefings from experts in various fields, cultural sensitivity training, and

climate change mitigation and adaptation efforts in the State of Hawai'i. With support from the VISTAs and in collaboration with the UH Mānoa Team at the UH Institute for Sustainability and Resilience, the Commission produced a *Social Vulnerability to Climate Change in Hawai'i Data, Indicators, and "Gap" Assessment* which identifies quantitative indicator-based approaches to assessing social vulnerability to climate change, as an initial means of understanding the uneven distribution of climate-related impacts.

Grant Support The Grants-to-Projects Bridge supports the Commission's statement to in helping direct funds to priority climate-smart infrastructure in Hawai'i.⁵ State and County active transportation projects and resilience projects for natural and working lands were assembled into a searchable online format, through the help of the Climate Ready VISTA cohort and many colleagues. Grants information was also compiled. It is hoped that this resource will help make grant and project information more accessible to community members and government agencies, and coordinate funding to ensure these projects are completed in support of a Climate Ready Hawai'i.

The historic passage of the bipartisan Infrastructure Investment and Jobs Act (IIJA) (H.R. 3684, 2021 also known as the Bipartisan Infrastructure Law) and the Inflation Reduction Act (H.R. 5376, 2022) includes funding for programs that can help alleviate the impacts communities face from extreme weather, flooding, storms, droughts, heat waves, and wildfires. The funding from these two bills are the largest investments by the federal government to address climate change. These bills provide opportunities for states, tribes, and local governments to invest in equitable, climate-smart actions, programs and infrastructure in the energy and transportation sectors, natural and working lands. The programs supported by these bills are expected to reduce carbon emissions by roughly 40% by 2030 (compared to 2005 levels).⁶ Through assistance from the US Climate Alliance and Hua Nani Partners, the Commission has facilitated grant writing assistance for climate-smart projects in each of the counties. This assistance will provide the selected county offices with support to take advantage of the unprecedented opportunity for local governments to secure critical federal funding to invest in infrastructure and to mitigate the impacts of climate change. The Commission has also facilitated support for the Green Infrastructure Authority to access IRA Greenhouse Gas Reduction Funds which will be critical in building the capacity of Hawai'i's Green Bank to provide funding for climate smart infrastructure such as solar power, electric vehicle charging, and energy storage for communities across Hawai'i. The Commission has identified it's role as a coordinating body as key in ensuring that as much funding as possible can be brought to the state to support climate smart actions.

The Justice40 initiative is a federal goal that 40 percent of the overall benefits of certain Federal investments flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution, including IIJA and IRA opportunities.⁷ This mandate increases opportunities to lift communities that have previously borne the brunt of climate change, promoting not only a climate smart but an equitable future.

To support agencies in applying for IIJA and IRA funds, the Commission's VISTA cohort, in collaboration with the University of Hawai'i, developed a quick guide so that agencies could consider appropriate data,

indices, and screening tools to determine whether a specific community is disadvantaged based on a combination of variables including low income, racial and ethnic residential segregation, linguistic isolation, high housing and transportation cost burden and disproportionate environmental stressor burden and high cumulative impacts.⁸



Operationalizing Mitigation and Adaptation: Demonstration Projects and Guidance

Sea level rise In partnership with the UH Sea Grant College and with input from counties, the Commission has produced a draft "how to" manual and accompanying online tool providing guidance for incorporating the Commission's sea level rise report's recommendations into parcel permitting. The VISTAs developed fliers for the Hawai'i Association of Realtors and others to better understand new requirements for disclosure for landowners that will be impacted by sea level rise, and how to find information needed for implementation, in collaboration with the Office of Conservation and Coastal Lands (OCCL), the Coastal Management Zone Program (CZM) and Hawai'i Sea Grant. This will ultimately help homeowners understand how sea level rise may impact their homes in the future.

Nature-based solutions Nature-based Resilience and Adaptation to Climate Change in Hawai'i (2021), a Climate Ready Hawai'i Working Paper, highlighted actions in Hawai'i that rely on nature-based "green-blue" strategies to adapt to and mitigate climate change. This collaboratively produced paper identified ongoing efforts in the state, and key action areas for next steps that enhance climate readiness. Emphasizing the role that Hawai'i's mauka-makai lands and waters play in resilience, the paper highlighted the role of soils and food security in resilience and adaptation. This is something the Commission has not addressed thus far, and the working paper offers up a starting point for this discussion. It is hoped that this document that involved a team of 25 partners and Commission staff will be used by decision makers, planners, communities, businesses, and scientists as a guide for climate change resiliency work in Hawai'i.

The Commission, in coordination with DLNR OCCL, UH SeaGrant, HDOT, and the City and County of Honolulu, is coordinating a study/demonstration project to explore nature-based alternatives for the protection of coastal roads, while restoring public beach access. Through the use of green infrastructure, the project seeks address climate change impacts to Kamehameha Highway, the only road access to communities along northeast O'ahu. The objective is to protect the highway from flooding and erosion, improve community resiliency to sea level rise and coastal storms, provide recreational resources, and improve native habitat by restoring the beach at Punalu'u, O'ahu. Sea Engineering, Inc., has been selected as the consultant and has begun initial work on the project. The Climate Ready Hawai'i VISTA team has also worked to engage with the community, presented the project to the Neighborhood Board and hosted three community outreach days at Punalu'u Beach Park on O'ahu to ask the community what is important to them. The VISTAs also developed a survey⁹ and storymap¹⁰ for additional information and feedback.

Multi-modal mobility hub Climate Ready Hawai'i also supports mitigation efforts to reduce Hawai'i's dependence on imported fossil fuels. Active transportation and multi-modal mobility, which includes the full gamut of strategies from telework, transit, bicycling, pedestrian and other modes to

reduce miles traveled, thereby averting emissions, is another project managed by the Commission and supported through a cost-share grant from the O'ahu Metropolitan Planning Organization. The project, focusing on multi-modal transportation, fits into the Commission's priorities to curb emissions from ground transportation by proposing to develop a plan for assessment of State parking facilities on O'ahu that will allow for multi-modal use. It proposes to identify and describe State parking facilities, including their utilization rates; evaluate and price various ways to make better use of these State assets in ways that encourage the use of alternative transportation and mobility options; and overall, help optimize State and County goals for clean transportation while maximizing the public benefit.

Transportation Choices Toolkit Experts agree that electrification of transportation alone will not be sufficient for Hawai'i to achieve its climate change and clean energy goals.^{11 12} Strategies are needed to get people out of cars, and into use of public transit, biking and walking—that is, to reduce vehicle miles traveled (VMT). The Commission's priority to reduce emissions from ground transportation was presented in the VMT Reduction Strategies Toolkit project, funded by the EPA.¹³ The toolkit contains: nation- and statewide best practices, includes specific examples that are helpful for Hawai'i, recommendations for how to implement VMT reduction, how to measure and track progress, and messaging and communication of multimodal VMT as a metric.

Sequestration work The Commission sponsored the resurrection of the Greenhouse Gas Sequestration Taskforce, which has been understaffed since 2019. The assigned Climate Ready Hawai'i VISTA member provided logistical support to the Taskforce. The Commission also worked with the US Climate Alliance's Natural and Working Lands Team (NWL Team) to bring together key departments to coordinate priorities for resilience and sequestration action. The NWL Team was funded by the US Climate Alliance to work with stakeholders and resource managers to develop a land-use classification map optimized for climate mitigation within the State of Hawai'i. To maximize landscape-scale sequestration rates, the map analyzes options that identify and prioritize: 1) high-quality lands for climate-smart agriculture and ranching; 2) marginal lands for climate-smart reforestation, forestry, and agroforestry practices, 3) recently abandoned lands for rehabilitating soil health for agriculture, 4) managed forest, and 5) engages and honors the diverse conditions that shape land-use decision making in Hawai'i. Outcomes include a land classification map and a first-order resource assessment evaluating drawdown practices such as the impacts of policy and programs, in support of the Hawai'i's Greenhouse Gas Sequestration Task Force (GHGSTF). As part of the map development the outreach process included an assessment from land managers, specialists, and leaders (which individually represent groups from 20 to 120 land managers) in the sectors of cropland, ranches, agroforestry, and forests. Act 185¹⁴ establishing the Hawai'i Carbon Smart Land Management Assistance Pilot Program was modeled after the results of this outreach.

Equity Equity is a central component in the Commission's work. To further the equity aspect included in its mission statement, the Commission established a Permitted Interaction Group (PIG) to investigate how to recognize and address the inequitable distribution of benefits, burdens, and processes caused by climate change impacts and policy. As a result of the PIG's investigation, the Commission initiated work

to help conceptualize social and economic dimensions of vulnerability to climate change through the gathering relevant data on key climate change threats in Hawai'i.¹⁵ In partnership with the University of Hawai'i's Institute for Sustainability and Resilience this work will provide research on the operationalization and application of data/index approaches as well as other spatially-explicit data tools. Such research will help to understand the social and physical factors that are important in shaping dimensions of vulnerability to different climate shocks and stressors to communities , especially Native Hawaiian comminties, including the spatial distribution of such vulnerability. It aims to help bridge the gap between vulnerability and resilience by distinguishing between the drivers of chronic and transitory vulnerability, identifying the opportunities and constraints in capacity to adapt, as well as social and physical limitations at different scales.

Act 32 Mandates The Commission is guided by the mandates outlined in Act 32 (2017) listed below in table 1. A summary crosswalk of the work the commission has accomplished and the correlating mandates they address can be seen in table 2.

Table 1: Act 32 Mandates
1. Provide policy direction, facilitation, coordination, and planning among state and county agencies, federal agencies, and other partners as appropriate.
2. Establish climate change mitigation and adaptation strategies and goals to help guide planning and implementation statewide using the latest scientific analysis and risk assessment to monitor and forecast climate change related impacts at the regional, state and local level, including any additional information deemed necessary.
3. Identify vulnerable people, communities, industries, ecosystems and potential economic ramifications for climate change related impacts.
4. Identify existing climate mitigation and adaptation efforts at the federal state and local levels and make recommendations for how to meet or exceed Hawai'i 's state mitigation goals and shall adopt a liberal approach in preparation, so as to minimize future risk to the people and environment of Hawai'i .
5. The Commission shall identify the information necessary to track progress in implementing climate change mitigation and adaptation efforts and shall submit an annual report to the governor and legislature no later than 20 days prior to the convening of each regular session of the legislature.
6. The Commission shall maintain a website that includes a mission statement as well as access to climate change related actions, plans, policies and results
7. The Commission shall assess the capacity and availability of existing resources & identify new sources of revenue necessary to address climate change and advise the governor, legislature, & counties on the economic and budgetary ramifications of climate change impacts, mitigation and adaptation.
8. The Commission shall conduct a comprehensive review of the implementation as required by this section and submit a report to the governor, legislature and the counties no later than 20 days prior to the convening of the regular session of 2023 and every five years thereafter.
9. The Commission shall, as a first step, focus on and develop sea level rise vulnerability and adaptation reports, which shall be made publicly available no later than December 31, 2017, and the commission shall reevaluate and update the sea level rise vulnerability and adaptation report every five years.

TABLE 2: ACT 32 MANDATES: SUMMARY OF PROJECTS AND ACTIVITIES

MITIGATION		
PROJECTS	DESCRIPTION	MANDATES 1-9
ACTIVE TRANSPORTATION	Develop recommendations for a suite of policies to address telework, commute trip reduction, and active transportation goals	<input type="checkbox"/> 2 <input type="checkbox"/> 4 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
MULTI-MODAL MOBILITY HUB O'AHU	Identify, describe and recommend use of state parking lots and spaces to encourage the use of alternative transportation and multi-modal mobility options to achieve state goals	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4 <input type="checkbox"/> <input type="checkbox"/> 7 <input type="checkbox"/> <input type="checkbox"/>
ACTIVE TRANSPORTATION PROJECT STATEWIDE	Develop supporting framework for sustainable transportation statewide	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4 <input type="checkbox"/> <input type="checkbox"/> 7 <input type="checkbox"/> <input type="checkbox"/>
FLEET TOOLS	Development of webinars, cost and emissions tools, resources and services for public fleet managers	<input type="checkbox"/> 2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 6 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
NATURAL AND WORKING LANDS	Identify barriers and solutions for implementing carbon smart practices	<input type="checkbox"/> 2 3 4 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
NATURE BASED SOLUTIONS	Highlighted actions in Hawai'i that rely on nature-based strategies to adapt to and mitigate climate change	1 2 3 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 7 <input type="checkbox"/> <input type="checkbox"/>
OAHU REFORESTATION	Funding for reforestation activities for carbon sequestration	1 2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 7 <input type="checkbox"/> <input type="checkbox"/>
KAUAI QUICK BUILD	Support valued community green spaces in Līhu'e and vision for future green infrastructure	1 2 3 4 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
100,000,000 TREES	Coordinate Statewide effort to plant, preserve and protect 100,000,000 trees by 2030	1 2 3 4 <input type="checkbox"/> <input type="checkbox"/> 7 <input type="checkbox"/> <input type="checkbox"/>

TABLE 2: ACT 32 MANDATES: SUMMARY OF PROJECTS AND ACTIVITIES CONTINUED

ADAPTATION		
PROJECTS	DESCRIPTION	MANDATES 1-9*
CLIMATE READY HAWAI'I INITIATIVE	Framework for resilience and adaptation to climate change	1 2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 6 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
RISK ROAD MAP	Operationalizing climate change induced risk Road Map for State of Hawai'i departments	1 2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 7 <input type="checkbox"/> <input type="checkbox"/>
SOCIAL COST OF CARBON	Inter-departmental conversation to assess, incorporate and measure the carbon footprint of projects and programs in all state departments	1 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
INFORMATION PORTAL	Develop an information hub/portal to maintain understanding and applicability of the latest and best available information on climate and sea level rise risks	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 6 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
RESILIENCE GUIDANCE	Community planning guidance	<input type="checkbox"/> 2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
PLANNER'S TOOL	Create sea level rise guidance and tools for State and county agencies for planning and permitting	<input type="checkbox"/> 2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
SEA LEVEL RISE REPORT AND UPDATE	Completed in 2018 and 2022	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 9
PUNALU'U PILOT	Using green infrastructure and nature-based solutions to protect parks and community connectivity	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 7 <input type="checkbox"/> <input type="checkbox"/>
SUPPORTING FRAMEWORKS		
PROJECTS	DESCRIPTION	MANDATES 1-9*
VISTA CLIMATE READY CORPS	Further climate change and equity goals through a VISTA cohort in 8 offices	1 <input type="checkbox"/> 3 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 7 <input type="checkbox"/> <input type="checkbox"/>
COMMUNICATIONS STRATEGY	Development of a Communications Hui supported by a strategy to further climate change communication in Hawai'i includes maintaining a website, social media accounts and providing information to media, and partners	1 2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 6 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
STATEWIDE CONFERENCES	Program development, planning, and building partnerships for a focus on climate change and economic recovery	1 2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 6 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
US CLIMATE ALLIANCE	Accelerating climate action and policies, building resilience to climate change, and promoting clean energy deployment at the state and federal level	1 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
UNDER 2 COALITION	International activities: Finance leaders global forum development; annual carbon disclosure report	1 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
ANNUAL AND FIVE-YEAR REPORT	Report to the Legislature describing progress towards the mandates of Act 32	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 5 6 <input type="checkbox"/> 8 <input type="checkbox"/>



5. Engagement at international, national, sub-national, and state level amplifies Hawai‘i’s work.

Hawai‘i’s geographic isolation makes it critical to connect to the rest of the world in dealing with this global challenge. For this reason, the Commission and its staff are involved at all levels of climate change response—from the global to the state and county levels to local communities. Such involvement provides venues to highlight the work being done in Hawai‘i, forms channels of knowledge sharing and cooperation across jurisdictions, and helps align Hawai‘i’s efforts with sub-national, national, and international mitigation and adaptation efforts. Here are some of the efforts that Hawai‘i has been involved in through the Commission and its staff:

International Commission staff has represented the State of Hawai‘i at the United Nations Convention on Climate Change’s Conference of the Parties, COP25, COP26 and COP27. Through various sub-national delegations comprised of state and county officials, Hawai‘i supports a regular and strong presence at these global negotiations. Hawai‘i works with various thematic and regional entities such as:

- The International Alliance to combat Ocean Acidification. Hawai‘i, along with six US states, put forward a bi-coastal alliance to combat ocean acidification and bring state-level ocean action planning to the global stage;
- The USCA-European Union Climate Risk and Resilience Cooperation. Hawai‘i contributed to developing key areas of cooperation: knowledge sharing, technical dialog and communication.
- The Under 2 Coalition which brings together more than 220 regional, local and national governments that represent 43% of the global economy. Through the Under 2 Coalition, Hawai‘i is helping to incorporate climate change impacts into financial policies and form a global Finance Leaders Forum.
- The US Climate Alliance is a coalition of U.S. states are committed to taking real, impactful, on-the-ground action that urgently addresses the climate challenge. As an Alliance member, Hawai‘i commits to achieve the Paris Agreement’s goal of keeping temperature increases below 1.5 degrees Celsius.
- The Climate Registry is a non-profit organization that empowers North American organizations to do more in the fight against climate change. Hawai‘i works with the registry to reduce emissions.
- American Forests develops new tools and does scientific research, creates place-based partnerships from cities to large forest landscapes in order to develop and implement restoration and reforestation plans and build movements that inspire and empower action at a large scale. Hawai‘i has pledged to conserve, plant and protect 100,000,000 trees to help to combat climate change through their 1t.org platform.
- ICLEI- Local Governments for Sustainability is a global network of more than 2500 local and regional governments committed to sustainable urban development. Hawai‘i works with ICLEI to create sustainability policy and drive local action for low emission, nature-based, equitable, resilient and circular development.

National Commission co-Chairs and staff provide updates and respond to information requests to Hawai‘i’s Congressional delegation. The Commission is engaged in the many national efforts of the US

Climate Alliance (USCA), the 25-governor effort that pledged to uphold the US's commitments to the Paris Climate Agreement. USCA supports Hawai'i in its climate actions such as cutting emissions, accelerating climate action and policies, building resilience to the impacts of climate change, and promoting clean energy deployment at the state and federal level. USCA supports deploying bipartisan climate actions at scale centered around equity, environmental justice and a just economic transition, to safeguard public health, grow the U.S. economy, and secure a net-zero future. Commission staff serves as a Governor's Representative to coordinate, collate and organize responses to the Governor's Office and participates in the Resilience, Transportation, Natural and Working Lands and Just Transition working groups. The Alliance is a valuable resource for Hawai'i's efforts, as it provides knowledge, guidance, funding, and amplification of climate change efforts at the state level.

State The Commission reached out beyond its immediate membership to include relevant departments in its work, in particular: Employees' Retirement System, Public Utilities Commission, State Procurement Office, and the Department of Accounting and General Services. The Commission provides information and analysis in many ways, particularly through the legislative session and the annual statewide conference.

- i. **Legislative Action.** The Commission regularly engages with the legislature through submitting legislative testimony on measures relevant to climate change. Bills include the establishment of climate smart programs, setting carbon emissions goals, addressing sea level rise and supporting partner agencies in their climate work. Commission staff testified in person, coordinated testimony with departments and partners, flagged issues for legislators, and responded to requests for information.
- ii. **Annual Conference.** The statewide climate change conference is a flagship event for the Commission. It highlights research, practice and engagement on the state's climate change response. It is the culmination of year-long work, cutting edge knowledge, and valuable partnerships. The Conference was put on hold in 2021 and 2022 due to COVID-19. In January 2023 the Commission will co-host Hawaii Climate Week in partnership with the Pacific Islands Climate Adaptation Science Center, Pacific Regional Integrated Sciences and Assessments, the East-West Center, UH SeaGrant, US Forest Service, and others.



6. Information to Hawai'i's communities

The Commission provides climate change information through its annual conference, its web portal and social media accounts, presentations, webinars, briefings, and articles. Highlights of communications activities include:

Communications strategy Taking the message from its 2020 conference to heart, the Commission, with its many partners, co-created a communications strategy to outline main components that address climate change priorities and to collaborate on events and campaigns of mutual interest. The conference highlighted communication as the bottleneck to climate action.

Climate.Hawaii.gov The web portal provides resources and tools for communities and professionals working in Climate Change including:

- A list of climate change related reports on adaptation¹⁶ and mitigation.¹⁷
- Fact sheets for climate change issues (HI Facts).¹⁸
- A Clean Fleets Toolbox¹⁹ and web discussion series "Green Car Talk"²⁰ for fleet managers
- A Transportation Choices Toolkit for equitable affordable transportation.
- Climate Ready Hawai'i guidance and tool on sea level rise.

Social media, presentations, and articles The Commission's social media accounts (Facebook and Instagram) are very active and provide windows into the Commission's work between its regular public meetings. Commission staff also provides information upon request through regular briefings, presentations, webinars, and media articles.

The Commission entered into a partnership with University of Hawai'i's Better Tomorrow Speaker Series to organize a series of informational events on climate action. The collection of events, titled "Hā O Ke Kai," meaning "Breath of the Sea," is paired with the Commission's statewide conference series of the same name. Hā O Ke Kai has brought high level inspirational speakers from around the world to share their insights on climate change impacts and actions.



7. Climate legislation: 5-Year Report on Climate Legislation

Below listed are past bills from 2017-2022 related to climate change adaptation, invasive species removal, protection of native wildlife, native wildlife conservation, wildlife restoration, sea level rise, and carbon mitigation. By passing stricter legislation on climate change adaptation requirements, Hawai'i can more effectively work toward its 2030 climate goals.

2022

SB2295 Requires the Department of Transportation to plan for sea level rise in all future or amended transportation projects. Specifically requires all Department of Transportation highway, harbor and airport projects to conform to certain carbon concrete standards except in certain circumstances.

https://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=SB&billnumber=2295&year=2022

SB3158 Establishes the Hawai'i Electric Bike and Moped Rebate Program and subaccount to encourage the purchase and use of electric bicycles and electric mopeds. Appropriates funds for the electric bicycle and electric moped subaccount.

https://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=SB&billnumber=3158&year=2022

SB3325 Establishes the Hawai'i Carbon Smart Land Management Assistance Pilot Program to incentivize carbon sequestration activities through incentive contracts that provide compensation for eligible practices by program participants. Repeals the Carbon Offset Program.

https://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=SB&billnumber=3325&year=2022

HB1800 Establishes a goal for statewide greenhouse gas emissions to be at least fifty per cent below 2005 levels by 2030. Requires the State of Hawai'i Energy Office to conduct a study to determine Hawai'i's pathway to decarbonization and identify challenges, opportunities, and actions that will be needed to achieve those goals. Appropriates funds out of the energy security special fund for the study.

https://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=HB&billnumber=1800&year=2022

SR94 Urging the State and each county to adopt the global pact for the environment to achieve the United Nation's Paris Agreement, the 2030 Agenda for Sustainable Development, and Sustainable Development Goals 13 through 17.

https://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=SR&billnumber=94&year=2022

SR192 Requesting the Office of Planning and Sustainable Development, in consultation with the Department of Land and Natural Resources Division of Forestry and Wildlife, Commission on Water Resource Management, and the City and County of Honolulu, to conduct a study of Waiāhole Stream on O'ahu, identify jurisdictional obstacles to stream maintenance, and offer recommendations to improve stream maintenance and flood hazard mitigation policies.

https://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=SR&billnumber=192&year=2022

SB573 Requires all habitat conservation plans to include an agreement for plan participants to enter into and maintain an annual service contract with a stand-by and response facility available to provide emergency medical and rehabilitation services to native wildlife affected by activities undertaken within

the plan area.

https://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=SB&billnumber=573&year=2022

SB2768 Authorizes the Governor to designate the Department of Land and Natural Resources to administer or enter into an agreement for the administration of a green jobs youth corps to provide temporary work and training opportunities in the fields of natural resource management, agriculture, or other sustainability-related professions for young adults ages thirty-eight and younger. Requires the Department to partner with an organization that has received accreditation from the Corps Center of Excellence Accreditation program or has at least ten years of experience providing similar programming statewide in the state, or both.

https://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=SB&billnumber=2768&year=2022

HR134 Requesting the Department of Education to ensure that career and technical education standards focus on place-based responsiveness to climate change and preparing students to engage in a growing green economy.

https://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=HR&billnumber=134&year=2022

HCR17 Requesting the Department of Land and Natural Resources convene a task force to develop a feral ungulate management plan for West Hawai'i.

https://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=HCR&billnumber=17&year=2022

HB1179 Establishes a pilot program within the 'Āina Mauna Legacy Program of the Department of Hawaiian Home Lands to remove and harvest invasive gorse from Mauna Kea and develop it as a marketable product to expand economic opportunities for Native Hawaiians. Requires reports to the Legislature.

https://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=HB&billnumber=1179&year=2022

HB1586 Requires federal disaster relief reimbursement moneys, except those for the Department of Education, to be deposited into a trust account of the Hawai'i Emergency Management Agency and reimbursed to the originating fund of the expending agency, with funds to be returned to the General Fund upon lapse of the original appropriation. Requires annual reports to the Legislature on federal reimbursement moneys, and disaster response spending by each state department and agency.

https://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=HB&billnumber=1586&year=2022

HB1872 Requires the Department of Land and Natural Resources to recognize that game mammals and game birds provide a food source, that striking an appropriate balance between the management of game mammal and game bird populations and sustainability of the animals' natural habitats to reduce negative impacts to important watershed areas is a priority, and that the state's unique relationship with the ocean requires careful consideration and management of land and ocean activities that prioritize the public trust responsibilities of the State. Requires each department, office, or agency of the State to update the department, office, or agency's rules and policies to integrate the local hunting and fishing industries into any food security or sustainability strategies that department, office, or agency employs.

https://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=HB&billnumber=1872&year=2022

HB2024 Establishes the Mauna Kea Stewardship and Oversight Authority as the sole authority for the management of Mauna Kea lands. Requires the Authority to manage land uses; human activities, other uses, and access; stewardship; education; research; disposition; and overall operations on its respective lands. Authorizes the Authority to develop a framework to allow astronomy development on Mauna Kea.

Declares astronomy as a state policy. Requires the Authority to establish advisory groups. Allows the Authority to limit certain commercial use and activities on Mauna Kea on its respective jurisdictional lands. Provides certain restrictions on leases and a moratorium on new leases. Requires the timely decommissioning of certain telescopes. Allows the Authority to require an application and fee for all recreational users of Mauna Kea. Establishes the Mauna Kea Management Special Fund. Transfers rights, duties, and positions from the University of Hawai'i to the Authority. Exempts positions under the authority from civil service requirements. Requires an audit of the Authority. Appropriates funds.
https://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=HB&billnumber=2024&year=2022

2021

SB474 Requires that mandatory seller disclosures in real estate transactions include identification of residential real properties lying within the sea level rise exposure area.
https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SB&billnumber=474&year=2021

SB1402 Requires the Department of Transportation to create motor vehicle, bicycle, and pedestrian highway and pathway networks. Requires annual reporting.
https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SB&billnumber=1402&year=2021

HB243 Requires the Office of Planning, in cooperation with each state agency having operational responsibilities over state facilities, to identify existing and planned facilities that are vulnerable to sea level rise, flooding impacts, and natural hazards; assess a range of options to mitigate the impacts of sea level rise to those facilities; and submit annual reports to the Governor, Legislature, and Hawai'i Climate Change Commission regarding the vulnerability and adaptation assessments for state facilities, as well as the progress made in implementing sea level rise adaptation in future plans, programs, and capital improvement needs and decisions. Amends the Hawai'i State Planning Act to include sustainable development, climate change adaptation, and sea level rise adaptation as objectives for facility systems.
https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HB&billnumber=243&year=2021

HB552 Establishes clean ground transportation goals for state agencies to achieve a one hundred per cent light-duty motor vehicles zero-emission fleet by December 31, 2035. Authorizes the Department of Accounting and General Services to approve state fleet acquisitions, including zero emission vehicle requirements for light-duty motor vehicles that are passenger cars and light-duty motor vehicles that are multipurpose passenger vehicles and trucks, with allowance for exemptions.
https://www.capitol.hawaii.gov/session/archives/measure_indiv_Archives.aspx?billtype=hb&billnumber=552&year=2021

SR34 Requests the Hawai'i Climate Change Commission and the County of Hawai'i to collaboratively identify sea level rise at Kaha'u Bay, and jointly pursue a master plan to relocate the pavilion at Kaha'u Bay, Hawai'i.
https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=34&year=2021

SR37 Urges the Department of Land and Natural Resources to adopt administrative rules to streamline the process for allowing traditional Hawaiian farming systems on conservation lands.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=37&year=2021

SR127 Requests that the Office of Planning, in coordination with each executive department, identify departmental facilities and infrastructure that may be vulnerable to flooding and other impacts of sea level rise and assess options for mitigating the effects of sea level rise on those facilities and infrastructure.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=127&year=2021

SB367 Waives the requirement for section 401 water quality certification for certain small-scale beach restoration projects authorized by the Department of Land and Natural Resources.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SB&billnumber=367&year=2021

SB772 Authorizes the issuance of special number license plates to support environmental conservation, with proceeds from the program to be used to fund conservation efforts. adjusts the initial application and renewal fees for special number license plates beginning 1/1/22.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SB&billnumber=772&year=2021

HR85 Requesting the Office of Planning, in collaboration with various agencies, to develop a plan to establish a state geological survey in Hawai'i.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HR&billnumber=85&year=2021

SR43 Reaffirming the State of Hawai'i's commitment to combat climate change and prioritize climate change legislation.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=43&year=2021

SR151 Designating April as Tree Awareness Month in the State of Hawai'i.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=151&year=2021

SR218 Urging the Hawai'i Tourism Authority to explore and implement a visitor pledge of aloha to educate and explain the importance of Hawai'i's environment and culture, and to encourage increased respect and appreciation of the Hawaiian Islands.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=218&year=2021

SCR189 Affirming support for the purchase, preservation, and restoration of agricultural and conservation lands and to protect the important ancient and historic sites, trails, and waters in Maunawili Valley, O'ahu.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SCR&billnumber=189&year=2021

SB1162 Clarifies conditions that must be met by applicants to receive funds under the Forest Stewardship Program administered by the Board of Land and Natural Resources.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SB&billnumber=1162&year=2021

2020

SB2060 Amends coastal zone management laws to further protect against impacts of sea level rise and coastal erosion.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SB&billnumber=2060&year=2020

HB2486 Establishes a Statewide Sustainability Branch within the Office of Planning. Updates and reaffirms the role of the Office to coordinate among state agencies regarding climate change adaptation and sustainability.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HB&billnumber=2486&year=2020

HB2590 Establishes within the Department of Transportation an autonomous vehicles testing pilot program. Requires report to the Legislature.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HB&billnumber=2590&year=2020

SB2386 Prohibits any waste or disposal facility from being located in a Conservation District except in emergency circumstances to mitigate significant risks to public safety and health. Requires no less than a one-half mile buffer zone around residences, schools, and hospitals for the construction, modification, or expansion of a waste or disposal facility. Specifies that "waste or disposal facility" excludes individual, state certified, non-industrial redemption centers.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SB&billnumber=2386&year=2020

SR18 Urges the State of Hawai'i to ban single-use plastic goods and plastic bags and to set a sustainability example by eliminating the use of single-use plastic tableware at state department meetings and functions.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=18&year=2020

SR69 Urges the Department of Hawaiian Home Lands to convene a task force with the Department of Land and Natural Resources, Department of Agriculture, Invasive Species Council, and other interested parties to develop a comprehensive mitigation plan with short- and long-term solutions to address the spread of and eradicate gorse on Hawai'i island.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=69&year=2020

SB2188 Provides that all animal parts, products, or items containing prohibited animal parts or products involved in the commission of wildlife trafficking or certain hunting offenses shall be considered contraband to be forfeited to and disposed of by the State.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SB&billnumber=2188&year=2020

SB262 Prohibits, after 6/30/2020, the approval of a new or renewed power purchase agreement for electricity generated from coal. Prohibits, after 6/30/2020, the modification of a coal power purchase agreement that proposes to extend the term or increase the amount of generation that is allowed to be produced under the existing agreement. Prohibits, after 12/31/2022, the issuance or renewal of covered source air permits for coal-burning electricity generation facilities.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SB&billnumber=2629&year=2020

HB1846 Requires and establishes deadlines for all state facilities with an area of 10,000 square feet and over, except facilities at Aloha Stadium, to implement all cost-effective energy efficiency measures. Provides that certain agencies that perform energy efficiency retrofitting may continue to receive appropriations for energy expenditures at an amount that accounts for any costs or debt service for the implementation and management of energy efficiency measures. Beginning 7/1/2020, requires, where feasible and cost-effective, the design of all new state building construction to maximize energy and water efficiency, maximize energy generation potential, and use building materials that reduce the carbon footprint of the project. Directs the Hawai'i State Energy Office to collect utility bill and energy usage data for state-owned buildings and to make the data publicly available.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HB&billnumber=1846&year=2020

2019

SR85 Requesting the Governor to prioritize the planting of four million trees along streets and roadways within the next four years to help address climate change and make complete streets statewide

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=85&year=2019

HCR55 Requesting the Governor to convene a working group to make recommendations on the consolidation of State environmental functions and the establishment of a Department of the Environment and Consolidation of State Environmental Functions Working Group, both of which would cease to exist after June 30, 2019.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HCR&billnumber=55&year=2019

HB555 Requires state agencies to participate in a carbon offset program to offset carbon emissions caused by their employees' air travel. Requires Department of Land and Natural Resources to establish and administer a carbon offset program.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HB&billnumber=555&year=2019

HB1558L Requires the Office of Planning to update the Hawai'i 2050 Sustainability Plan and submit the updated plan to the Legislature prior to the Regular session of 2021 and every tenth session thereafter, using the goals and priority guidelines of the Hawai'i State Planning Act and the Hawai'i

Climate Change Mitigation and Adaptation Initiative as guiding principles.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HB&billnumber=1558&year=2019

SR20 Urges the Department of Land and Natural Resources to manage the Wai'anae Kai Forest and restore water flow in Wai'anae streams for native Hawaiian traditional and customary practices and implementation of the Wai'anae Kai Wildfire Preparedness Plan.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=20&year=2019

SD1 Urges the Governor, in coordination with the Department of Land and Natural Resources, to establish and implement a tree planting program

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=93&year=2019

SR98 Engages, endorses, accepts, and adopts the New York Declaration on Forests to achieve the United Nation's Paris Agreement and the 2030 Agenda for Sustainable Development, specifically Sustainable Development Goal 15: Life on Land.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=98&year=2019

SR112 Encourages the Department of Land and Natural Resources Division of Forestry and Wildlife in the County of Hawai'i to prioritize the control of high-threat invasive species.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=112&year=2019

SR121 Urges all applicable state agencies to work together with interested stakeholders, including the Honolulu Harbor Users Group, in assessing the risk of aquatic invasive species to Hawai'i, vectors, and possible mitigations, in preparation for the establishment of new federal standards in 2022.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=121&year=2019

SR148 Requests the US Army Corps of Engineers, State of Hawai'i, and the City and County of Honolulu to establish a working group to explore matters related to the Ala Wai Watershed.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=148&year=2019

HB1068 Makes an appropriation for a He'eia State Park Community-Based Long-Range Plan for the He'eia National Estuarine Research Reserve System. Requires the Hawai'i Community Development Authority to consult with various entities in developing the plan.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HB&billnumber=1068&year=2019

HB1548 Appropriates funds to the Department of Land and Natural Resources to study and combat Rapid 'Ōhi'a Death.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HB&billnumber=1548&year=2019

2018

SR11 Endorses, adopts, and urges the several counties to endorse and use the United Nation's 17 Sustainable Development Goals as components of a framework for addressing and assessing Hawai'i's efforts toward social justice and sustainability.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=11&year=2018

HB2106 Requires the Environmental Council to adopt and maintain rules requiring all environmental assessments and environmental impact statements prepared pursuant to chapter 343, HRS, to include consideration of sea level rise based upon the best available scientific data regarding sea level rise.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HB&billnumber=2106&year=2018

HB2182 Renames the Carbon Farming Task Force established by Act 33, Session Laws of Hawai'i 2017, as the Greenhouse Gas Sequestration Task Force and makes the Task Force and Hawai'i Climate Change Mitigation and Adaptation Initiative permanent. Aligns the State's clean energy and carbon sequestration efforts with climate initiative goals. Amends membership and duties of the task force. Establishes a zero emissions clean economy target for the state. makes an appropriation.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HB&billnumber=2182&year=2018

SR55 Supports the purchase, preservation, and restoration of agricultural and conservation lands in Maunawili Valley, O'ahu, and urges various federal, state, and county entities to acquire and protect important ancient and historic sites and trails and waters in Maunawili Valley.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SR&billnumber=55&year=2018

SCR95 Supports the purchase, preservation, and restoration of agricultural and conservation lands in Maunawili Valley, O'ahu, and urging various federal, state, and county entities to acquire and protect important ancient and historic sites and trails and waters in Maunawili Valley.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SCR&billnumber=95&year=2018

HR60 Requests the Department of Agriculture to establish a Kaua'i Invasive Species Task Force to study the issues of invasive animals on Kaua'i.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HR&billnumber=60&year=2018

HCR75 Urges state agencies to collaborate with farmers, other landowners, and private organizations to mitigate the impacts of invasive animals on Kaua'i.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HR&billnumber=60&year=2018

HB1986 Requires the Office of Planning, in partnership with the Greenhouse Gas Sequestration Task Force, to establish a framework for a carbon offset program and report to the legislature. Appropriates funds.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HB&billnumber=1986&year=2018

[ear=2018](#)

HB2613 Appropriates funds for Fiscal Year 2018-2019 to maintain the initial staff position and operations necessary to develop and manage He'eia National Estuarine Research Reserve and its programs.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HB&billnumber=2613&year=2018

2017

HB1578 Establishes the Carbon Farming Task Force within the Office of Planning to identify agricultural and aquacultural practices to improve soil health and promote carbon sequestration in the State's agricultural and aquacultural sectors. Appropriates funds.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HB&billnumber=1578&year=2017

HR67 Calls on the Federal Government and states to lower costs for consumers, create more jobs, and reduce the impacts of climate change on the economy by replacing fossil fuels with renewable energy.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HR&billnumber=67&year=2017

HR131 Urges the Office of Environmental Quality Control, in cooperation with the Department of the Attorney General and the Legislative Reference Bureau, to prepare environmental and legal opinions of future state regulations and legislation that might be deemed necessary to combat climate change and prevent the regression of environmental protection.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HR&billnumber=131&year=2017

HR137 Urges support for the goal of effectively managing thirty percent of nearshore waters by 2030.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HR&billnumber=137&year=2017

HR134 Establishes the Papahānaumokuākea Marine National Monument program.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HR&billnumber=134&year=2017

HR30 Urges the Board of Education to create guidelines for incorporation of climate change education into the curriculum of Hawai'i's public schools.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HR&billnumber=30&year=2017

SB559 Requires the State to expand strategies and mechanisms to reduce greenhouse gas emissions statewide in alignment with the principles and goals adopted in the Paris Agreement. Renames the Interagency Climate Adaptation Committee as the Hawai'i Climate Change Mitigation and Adaptation Commission. Clarifies the duties of the Commission. Repeals the Commission effective 7/1/2022. Makes appropriations for purposes of this Act and a Climate Change Mitigation and Adaptation Coordinator position.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SB&billnumber=559&year=2017

HR7 Designating January 24, 2017 as "Bioenergy Day" to raise awareness of the significant environmental and economic benefits of bioenergy and its many applications.

https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=HR&billnumber=7&year=2017



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- ¹ <http://climate.hawaii.gov/wp-content/uploads/2018/11/NR-Climate-Commission-Recommends-Urgent-Action-to-Combat-Emissions-Nov.-28-2018.pdf> On adaptation:
 - ² <http://climate.hawaii.gov/wp-content/uploads/2018/09/NR-State-Climate-Commission-Adopts-Recommendations-Mission-Statement-Sept.-5-2018.pdf>
 - ³ <https://climate.hawaii.gov/wp-content/uploads/2021/07/FINAL-statement-on-decision-making-and-investment-guidance-Jul-19-2021.pdf>
 - ⁴ <https://climate.hawaii.gov/wp-content/uploads/2021/11/Hi%CA%BBs-High-Impact-Actions-To-Address-the-Climate-Emergency.pdf>
 - ⁵ <https://climate.hawaii.gov/wp-content/uploads/2021/07/FINAL-statement-on-decision-making-and-investment-guidance-Jul-19-2021.pdf>
 - ⁶ https://www.energy.gov/sites/default/files/2022-08/8.18%20InflationReductionAct_Factsheet_Final.pdf
 - ⁷ <https://www.whitehouse.gov/environmentaljustice/justice40/>
 - ⁸ [Climate Change Portal | Social and Climate Vulnerability Framework Project \(hawaii.gov\)](#)
 - ⁹ https://docs.google.com/forms/d/e/1FAIpQLSe_xRKTL3KxmWYXXPGhYghbiDI5g4jReL76AJUfgAG4RpxRw/viewform?usp=send_form
 - ¹⁰ <https://storymaps.arcgis.com/stories/baac8153be7b48ce847d0b0d545f4736>
 - ¹¹ <https://energy.hawaii.gov/wp-content/uploads/2011/09/2015HCEITransAnalysisHandout.pdf>
 - ¹² https://www.hawaiianelectric.com/documents/clean_energy_hawaii/electrification_of_transportation/201803_eot_roadmap.pdf
 - ¹³ <https://climate.hawaii.gov/wp-content/uploads/2018/11/NR-Climate-Commission-Recommends-Urgent-Action-to-Combat-Emissions-Nov.-28-2018.pdf>
 - ¹⁴ https://www.capitol.hawaii.gov/session/archives/measure_indiv_Archives.aspx?billtype=SB&billnumber=3325&year=2022
 - ¹⁵ <https://climate.hawaii.gov/wp-content/uploads/2021/02/Commission-Statement-on-Climate-Equity-FINAL.pdf>
 - ¹⁶ <http://climate.hawaii.gov/climate-change-reports/>
 - ¹⁷ <http://climate.hawaii.gov/mitigation-reports/>
 - ¹⁸ <http://climate.hawaii.gov/hi-facts/>
 - ¹⁹ <http://climate.hawaii.gov/hi-clean-cars-faq/>
 - ²⁰ <http://climate.hawaii.gov/wp-content/uploads/2020/06/Green-Fleet-Discussion-Series-Final.pdf>