The Revision and Update of the Hawai‘i 2050 Sustainability Plan

Presentation to the State Greenhouse Gas Sequestration Task Force
August 18, 2021

Danielle M. M. Bass
State Sustainability Coordinator
Statewide Sustainability Program
State of Hawai‘i Office of Planning and Sustainable Development
Hawaiʻi 2050 Sustainability Plan Overview
Overview:

1. History of Hawai‘i 2050 Sustainability Plan

2. The Process to Revise and Update of the Hawai‘i 2050 Sustainability Plan

3. Stakeholder Coordination & Public Outreach Findings

4. Summary of Hawai‘i 2050 Sustainability Plan Recommendations
   in relation to greenhouse gas sequestration, promoting sustainable agriculture, improving soil health, and increasing urban tree canopy.
The History: Hawaiʻi 2050 Sustainability Plan

2005
Act 8, Special Session Laws of Hawaiʻi 2005:
- Guide for the future long-term development of the State
- Required 10-Year update

2008 - 2018
Published in 2008:
- By State Auditor
- Long-term plan for Hawaiʻi's sustainable future

2018
Published in 2018:
- 10-Year Measurement of progress
- Published by State Auditor with assistance of Office of Planning

2019
Act 146, Session Laws of Hawaiʻi 2019:
- Revised law's scope: "plan shall serve as state's climate and sustainability strategic action plan"
- Codified as HRS §226-65

2020 - 2030
Update in Progress:
- State Office of Planning updated 10-Year Strategic Action Plan
The Process: Revision and Update

- **Review Hawai‘i’s laws & plans**
  - Review sustainability mandates, state agency plans, and county plans.

- **Public Outreach**
  - Host public informational sessions throughout Hawaiian Islands.

- **Coordinate with stakeholders**
  - Coordinate with stakeholder groups to focus on and facilitate challenges.

- **Determine future actions**
  - Identify gaps and recommend future actions to achieve by 2030.

**150+ Laws, Plans, Policies, and Strategies Reviewed**

- 2 Public Surveys
- 9 Public Sessions
- 20 Advertisements
- 230 Participating organizations and agencies
- 800+ Public Participants

- 2 Distributed Drafts
- 2 Week Review per Draft
- 5 Public Presentations
- 1,550+ Stakeholder Emails
- 65 State & County Reviewing Agencies

**8 Focus Areas**
- 17 Case Studies
- 38 Strategies
- 250 Recommended Actions
- 117 Pages
The Goals: Planning for the 2020-2030 Decade of Action

- Office of Planning updated and revised the Hawai‘i 2050 Sustainability Plan for the 2020-2030 decade, and will continue to utilize and update this plan as a living document.
- Hawai‘i State Planning Act goals and Hawai‘i Climate Mitigation and Adaptation Initiative goals to direct the plan.
- Hawai‘i 2050 Sustainability Plan shall serve as the State’s Climate and Sustainability Strategic Action Plan.
- 17 U.N. Sustainable Development Goals (SDGs) were adopted by ALL U.N. member states:
  - U.N. plan of action for people, planet, and prosperity
  - Framework to take bold and transformative steps urgently needed to shift the world onto a sustainable and resilient path.
The Product: U.N. SDGs as a framework to match the 2020-2030 planning timeline.
Hawai‘i 2050 Sustainability Plan

Public Outreach
Stakeholder Coordination: Collaborative Public Outreach

- 350 Hawai‘i
- AECOM
- AES Hawai‘i
- AHL
- Aloha Harvest
- Aloha United Way
- Arizona State University
- Bank of Hawai‘i
- Blue Zones Project Hawai‘i
- Building Industry Association of Hawai‘i
- Building Owners and Managers Association of Hawai‘i
- Chamber of Commerce Hawai‘i
- Chaminade University of Honolulu
- Conservation Council for Hawai‘i
- Conservation International Hawai‘i
- Earth Justice Mid-Pacific Regional Office
- East West Center
- Elemental Excelerator
- Environmental Caucus of Hawai‘i
- Faith Action Environmental Justice Task Force
- First Hawaiian Bank
- Hawai‘i Alliance for Community Based Economic Development
- Hawai‘i Alliance of Nonprofit Organizations
- Hawai‘i Bicycling League
- Hawai‘i Cattlemen’s Council
- Hawai‘i Children’s Action Network
- Hawai‘i Community Foundation
- Hawai‘i Conservation Alliance
- Hawai‘i Electric Vehicle Association
- Hawai‘i Energy
- Hawai‘i Farm Bureau
- Hawai‘i Food Industry Association
- Hawai‘i Gas
- Hawai‘i Green Growth
- Hawai‘i Institute for Human Rights
- Hawai‘i Medical Services Association
- Hawai‘i Pacific Health
- Hawai‘i Pacific University
- Hawai‘i Philanthropy Forum
- Hawai‘i Primary Care Association
- Hawai‘i Public Health Institute
- Hawai‘i Sea Grant
- Hawai‘i Youth Climate Coalition
- Hawai‘i Appleseed Center for Law and Economic Justice
- Hawaiian Airlines
- Hawaiian Electric Company
- Hawaiian Telcom, Inc.
- HHF
- Historic Hawai‘i Foundation
- ILWU Hawai‘i
- Integrated Group
- Interstate Restoration
- Island Signal
- Kamehameha Schools
- Kanu Hawai‘i
- Kaua‘i Island Utility Cooperative
- Kauaiui Farm
- Kohala Institute
- Koku Hawai‘i Foundation
- Kualoa Ranch
- Kupu Hawai‘i
- LGBT Caucus of Hawai‘i
- Mari’s Gardens
- Marriott International
- Maui Economic Development Council
- Maui Economic Research Organization
- Maui Electric
- Mauri‘a Gardens
- Marriott International
- Maui Economic Opportunity, Inc.
- New York University
- Office of Hawaiian Affairs
- Ola Hawai‘i
- One World One Water
- Parents and Children Together
- PBR Hawai‘i
- Pōlana Lāna‘i
- Retail Merchants of Hawai‘i
- Roth Ecological Design
- Sierra Club of Hawai‘i
- SSF Hawai‘i
- Surfrider Foundation-Hawai‘i Region
- Sustainable Coastlines of Hawai‘i
- Sustainable Moloka‘i
- Tetratech Hawai‘i
- The Healy Foundation
- The Nature Conservancy of Hawai‘i
- The Queen’s Health Systems
- Trust for Public Land Hawai‘i
-Zero Waste Oahu
- U.S. Green Building Council – Hawai‘i Chapter
- U.S. Department of Agriculture – Hawai‘i and Pacific Basin State Office
- U.S. Environmental Protection Agency – Region 9
- U.S. Federal Aviation Administration – Western Pacific Region
- U.S. Federal Emergency Management Agency – Region 9
- U.S. Federal Highways Division
- U.S. Federal Highways Management Agency – Pacific Region
- U.S. Federal Highways Administration – Hawai‘i Division
- U.S. Fish and Wildlife Service – Pacific Region
- U.S. Geological Survey – Pacific Region
- U.S. Green Building Council – Hawai‘i Chapter
- U.S. National Oceanic and Atmospheric Association – Pacific Islands Region
- Ulupono Initiative
- University of Hawai‘i – Hilo
- University of Hawai‘i – Mānoa
- University of Hawai‘i – West O‘ahu Sustainable Community Food Systems
- University of Hawai‘i Economic Research Organization
- Urban Fabrick
- Vulcan
- Wastewater Alternatives and Innovations
- WATG
- William S. Richardson School of Law
- Zero Waste Oahu

...and many more communities and individuals!
Stakeholder Coordination:
Collaborative Work with 65 State & County Agencies

- State of Hawai‘i Office of the Governor
- Office of the Lieutenant Governor
- Members of the Hawai‘i State Legislature
- Department of Accounting and General Services
- State Procurement Office
- Department of Agriculture
- Agribusiness Development Corporation
- Department of Business, Economic Development and Tourism (DBEDT)
- DBEDT – Business Development and Support Division
- DBEDT – Creative Industries Division
- DBEDT – Hawai‘i Broadband Initiative
- DBEDT – Research and Economic Analysis Division
- Hawai‘i Community Development Authority
- Hawai‘i Housing Finance and Development Corporation
- Hawai‘i State Energy Office
- Hawai‘i Technology Development Corporation
- Hawai‘i Tourism Authority
- Land Use Commission
- Natural Energy Laboratory of Hawai‘i Authority
- State of Hawai‘i Office of Planning – Coastal Zone Management Program
- State of Hawai‘i Office of Planning – Land Use Division
- Public Utilities Commission
- Hawai‘i Emergency Management Agency
- State Disaster Recovery Coordinator
- State of Hawai‘i Office of Homeland Security
- Department of Education
- Department of Hawaiian Home Lands
- Department of Health (DOH)
- DOH – Chronic Disease Prevention and Health Promotion Division
- DOH – Clean Air Branch
- DOH – Clean Water Branch
- DOH – Hazard Evaluation and Emergency Response Office
- DOH – Primary Prevention Branch
- DOH – Safe Drinking Water Branch
- DOH – Solid and Hazardous Waste Branch
- Department of Human Services
- Hawai‘i Public Housing Authority
- State Homelessness Coordinator
- State Commission on the Status of Women
- Department of Labor and Industrial Relations
- Department of Land and Natural Resources (DLNR)
- Commission on Water Resource Management
- DLNR – Division of Aquatic Resources
- DLNR – Engineering Division
- DLNR – Division of Forestry and Wildlife
- DLNR – Land Division
- DLNR – Division of State Parks
- Hawai‘i Climate Change Mitigation and Adaptation Commission
- Hawai‘i Invasive Species Council
- Kaho‘olawe Island Reserve Commission
- DLNR – Office of Conservation and Coastal Lands
- Department of Transportation
- O‘ahu Metropolitan Planning Organization
- University of Hawai‘i
- UH – School of Ocean and Earth Science and Technology
- City and County of Honolulu Office of the Mayor
- Members of the Honolulu City Council
- City and County of Honolulu – Board of Water Supply
- DOH – Division of General Services
- DOH – Hazard Evaluation and Emergency Response Office
- DLNR – Division of Aquatic Resources
- DLNR – Division of Forestry and Wildlife
- DLNR – Land Division
- DLNR – Division of State Parks
- Hawai‘i Climate Change Mitigation and Adaptation Commission
- Hawai‘i Invasive Species Council
- Kaho‘olawe Island Reserve Commission
- DLNR – Office of Conservation and Coastal Lands
- Department of Transportation
- O‘ahu Metropolitan Planning Organization
- University of Hawai‘i
- UH – School of Ocean and Earth Science and Technology
- City and County of Honolulu Office of the Mayor
- Members of the Honolulu City Council
- City and County of Honolulu – Board of Water Supply
Key Themes: Vision for Sustainable Hawaiʻi

- Look to the past (cultural practices) for lessons for the future
- Pursue goals that either increase equity or explicitly address equity issues in their implementation
- The pandemic offers a critical opportunity to reset and rethink the “new normal” to be more sustainable and equitable (e.g., investing in green space and affordable housing, boost support for women whose jobs and family roles may have been especially hurt by COVID-19)
- Rebuild the workforce by empowering youth, investing in green and energy workforce development, and upscaling the labor force to compete in the global market
- Pursue innovative opportunities in the energy and agricultural sector to enhance economic growth and food security
- Become more self-sufficient, rely less on imports and utilize existing resources, and build the economy to serve and be driven by local populations (for example, through local food production)
Public Outreach Findings

Vision for a Sustainable Economic Recovery

- Diversified economy that relies less on tourism
- Rebuild sustainably, not returning to business as usual
- Increased self-sufficiency and local food production for local consumption
- Green job opportunities
- Investment in communities, education, people
- Investment in local infrastructure
- Grounded in Hawaiian values and guided by traditional knowledge
Public Outreach Findings

Actions to Take

**Government:**
- Coordinate across state/county/federal entities to implement shared sustainability targets
- Develop plans to implement sustainability targets
- Fund sustainability initiatives and programs
- Incentivize innovation and sustainable practices in the private sector
- Incentivize renewable energy and public transportation
- Measure and report progress toward State’s sustainability targets
- Focus on policies that improve self-sufficiency (e.g., local food production)
- Implement the long-term planning for State’s sustainability targets

**Private sector:**
- Operate sustainably
- Partner with other entities
- Pay fair wages
- Be socially responsible, set an example

**Non-profit organizations:**
- Partner with other entities
- Conduct more outreach and education
- Advocate for communities

**People:**
- Take on individual actions to live more sustainably
- Educate oneself, organize into community, and get involved
Hawai‘i 2050 Sustainability Plan

Recommendations
8 Focus Areas Recommended for 2020-2030:

1. **Promote a Sustainable Economic Recovery**
   Through strategies that support local agriculture, green workforce development and education, and regenerative and sustainable tourism.

2. **Reduce Greenhouse Gas Emissions**
   By continuing to monitor the state’s emissions and reduce greenhouse gas emissions through strategies in the energy, transportation, and waste sectors.

3. **Improve Climate Resilience**
   By continuing to monitor and adapt to climate impacts and take actions to increase the resilience of the natural and built environments and their occupants.

4. **Advance Sustainable Communities**
   Through strategies that improve land use and access to green space, advance sustainable practices in schools, and encourage sustainable buildings and infrastructure.

5. **Advance Equity**
   By ensuring equitable access to resources, addressing affordable housing and homelessness crises, and improving gender equity.

6. **Institutionalize Sustainability Throughout Government**
   By increasing the government’s capacity through institutionalized collaboration to address sustainability and greening government operations.

7. **Preserve the Natural Environment**
   By including a focus on clean water, marine resources and ecosystems, and natural resource protection.

8. **Perpetuate Traditional Ecological Knowledge and Values**
   Throughout Hawaii as the state tackles sustainability and climate challenges.
Focus Area: Promote a Sustainable Economic Recovery

• **Strategy 1:** Support farmer livelihoods

• **Strategy 2:** Support local markets for locally grown food

• **Strategy 3:** Promote sustainable & resilient farmland, practices, and infrastructure

• **Strategy 4:** Invest in green workforce development, beginning with youth

• **Strategy 6:** Support diversification of the economy

• **Strategy 7:** Reduce the environmental footprint of the tourism industry

• **Including 11 recommendations pertaining to greenhouse gas sequestration & reduction, improving soil health, and encouraging sustainable agriculture!**
Focus Area: Reduce Greenhouse Gas Emissions

- **Strategy 9:** Measure, manage, and plan for GHG emission reduction
- **Strategy 10:** Incorporate climate change planning into decision-making processes
- **Strategy 11:** Promote energy conservation and efficiency through outreach, communication, and community and public engagement
- **Strategy 12:** Continue to invest in the deployment of clean energy technologies to reduce reliance on fossil fuels
- **Strategy 13:** Expand the adoption of Zero Emission Vehicles
- **Strategy 14:** Promote alternative modes of transportation
- **Strategy 15:** Reduce the generation of waste, including plastic waste
- **Strategy 16:** Increase diversion of waste through recycling, reuse, and composting

- Including 53 recommended actions to reduce greenhouse gases!
Focus Area: Advance Sustainable Communities

- **Strategy 21**: Advance smart growth initiatives and multimodal transportation systems
- **Strategy 22**: Advance sustainability in school and university operations
- **Strategy 23**: Integrate sustainable design principles into new and existing buildings
- **Including 7 recommended actions to:**
  - increase urban tree canopy,
  - reduce heat island effects,
  - increase composting, and
  - incorporate greenhouse gas emission reduction strategies in urban design, new construction, through eco blocks and building reuse.
Focus Area: Preserve the Natural Environment

- **Strategy 31**: Improve water quality through reduced pollution and dumping
- **Strategy 35**: Protect and manage watersheds
- **Strategy 36**: Continue to adopt strategies that protect land-based natural resources.
- **Strategy 37**: Conserve working forest landscapes, protect forests from harm, and enhance public benefits from trees and forests
- Including 24 recommended actions!
Summary of Recommendations

- Develop a Climate Action Plan to meet the State’s Zero Emissions Clean Economy Target by 2045, using Science Based Targets and the IPCC reports.
- Require emission reductions by setting a more stringent post-2020 sector-wide cap.
- Identify types of agricultural and aquacultural practices, public land and marine use policies, and on-farm managing practices that would provide greenhouse gas benefits and result in tangible economic benefits to agricultural and aquacultural operations.
- Investigate the possibility of establishing a fund to support and incentivize voluntary greenhouse gas reduction measures and set funding criteria that will make the most economic sense for the state.
- Expand outreach and grants to farmers, incentivizing the pivot to sustainable and regenerative, and greenhouse gas sequestration agricultural business strategies. (Carbon Positive Incentive Program like the Greenhouse Gas Sequestration Task Force’s Healthy Soils Hawai‘i Pilot Project)
- Encourage sustainable crop management practices (e.g.: organic farming, no till, improved manure management, and sustainable irrigation practices) that may provide environmental services and co-benefits, such as protecting against soil degradation, providing GHG sequestration, increasing biodiversity and soil fertility, and maintaining or increasing economic production of crops and animal protein in order to meet the state’s doubling of food production target.
- Increase urban tree canopy to reduce urban heat island effects.
- Increase the public availability of outdoor spaces and provide areas where people can interact with nature and each other and reduce urban heat island effects.
- Explore establishing net-zero GHG goals for all projects, including construction and infrastructure projects, to meet Hawai‘i’s Zero Emissions Clean Economy Target by 2045.
- Emphasize existing building reuse and adaptation of Hawai‘i’s extensive existing building stock to limit the embodied carbon impact of new construction.
- Expand opportunities for methane capture and reuse at landfills, waste-to-energy facilities, wastewater treatment facilities, and anaerobic digesters.
- Accelerate regional composting statewide.
- Reduce waste through encouraging source reduction and increased use of repairing, reuse, recycling, and composting services in schools and universities statewide.
Mahalo!