County of Hawai‘i: Climate Change and Resilience Actions

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Climate Change Impacts

According to tide gauges at Hilo Harbor and Kawaihae Harbor, local, relative sea-level has risen at about 3.27 mm/yr (1.4 in/decade) over the past century due to a combination of island subsidence and regional SLR.
Climate Change Impacts

Hawaii County will lose $430 million in infrastructure and land loss (not including public facilities), in part because 20% of the areas forecasted to be inundated are urban.

Source: Hawaiʻi Sea Level Rise Vulnerability & Adaptation Report, 2017
Where We stand on GHG

County of Hawai‘i 2015 GHG Inventory
Work thru Existing Systems

Pathways to Carbon Neutrality
Electrification & Renewable Energy as Key Drivers

Example CAAP Strategies

- SW. Zero waste
- T3. Increase electric vehicles
- T2. Increase public transit
- T1. Increase active transportation
- E3. Increase renewable energy
- E2. Energy use electrification
- E1. Reduce energy use
Work thru Existing Systems

- Hawai‘i County Code Chapter 27 Flood
- Hawai‘i County Code Chapter 10 Erosion
- Hawai‘i County Code Chapter 25 Zoning
- Hawai‘i County Code Chapter 5 Building
- Hawai‘i County General Plan Update
Current Initiatives

- Public Works: Energy Code
- Water Supply: Energy Program
- Mass Transit: pilot Zero Emission Buses (ZEBs)
- Research & Development
  - Greenhouse gas (GHG) inventory, targets, & monitoring
  - Climate Action Plan (to mitigate GHG emissions)
  - Energy Efficiency & Production Projects: LED, WHCC
  - Hawai‘i Energy: Continuous Efficiency Improvement (CEI)
  - Public Utilities Commission (PUC): Integrated Grid Planning, Electrification of Transportation, and Performance-Based Ratemaking
- State Greenhouse Gas Sequestration Task Force
Current Initiatives

• General Plan Comprehensive Update
  • Identified high risk hazard areas & minimize develop
  • Address CC in all planning programs and capital projects.

• Kilauea Recovery Efforts
  • Create a model to address future response to recovery events

• Shoreline Setback Policy Amendments
  • Science-based analysis, including SLR

• Community Planning & Regional Development Plans

• Hazard Mitigation Plan Update – 2020
  • Include CC impacts with pre-disaster and post-disaster planning
Resources

Energy Building Codes:
https://energy.hawaii.gov/hawaii-energy-building-code

Water Supply 2015 Energy Evaluation:

Transit CityLab article:

Climate Action Plan using ClearPath:
http://icleiusa.org/clearpath/