



MAUI COUNTY

ENERGYALLIANCE

Working Group 5:

Reduction In Greenhouse Gases & Carbon Emissions





Working Group Participants

- Stuart Funke-d'Egnuff (Chair) Executive Director Tri Isle RC&D Inc.
- Milton Arakawa (Vice Chair) Director CoM Department of Public Works
- Leona Duarte Maui Manager Hawaiian Airlines
- Rebecca Kikumoto Member Cost of Government Commission
- Gregg Kresge Deputy Director CoM Dept. of Environ. Management
- Brian Marumoto Vice President Roberts Hawaii
- Kuhea Paracuelles Environmental Coordinator County of Maui Office of the Mayor
- Rob Parsons Vice President Maui Tomorrow Foundation, Inc.
- Carol Reimann Executive Director Maui Hotel and Lodging Association
- Mike Ribao Power Supply Manager Maui Electric Company (MECO)
- Nancy Sulenta General Manager Dollar Rent-a-Car
- David Tamanaha Vice Chancellor, Administrative Affairs Maui Community College



Scope of Working Group

- The goal of Working Group 5 is to review possible alternatives which may derive value from measured reductions in greenhouse gas emissions for the benefit of Maui County.
- Quantification targets and timelines were discussed and debated.

Activity Overview

- Net effect of accumulated greenhouse gases such as carbon dioxide and methane is the trapping of absorbed radiation and the tendency to warm the planet's surface.
- Elevated levels of carbon dioxide and methane due, at least in part, to human activities such as burning of fossil fuels and deforestation of tropical forests.



Activity Overview

- In Hawaii, the largest sources of carbon dioxide emissions are transportation (54%) and electric power generation (35%).
- By 2007, Maui Nui has overtaken the Big Island as the second largest geographic source of emissions after Oahu.
- From 1990 to 2007, emissions have increased the most in Maui County.



Activity Overview

- Hawaii's Greenhouse Gas Emissions Law (Act 234) became effective in July 2007. Goal is to reduce greenhouse gas emissions to 1990 levels by the year 2020.
- Based on emissions data, the largest potential reductions can be made in the transportation and electric power sectors.
- Working Group 5 believes that efforts within Maui Nui should focus on these sectors.



Opportunities for Action

- Encourage institutional efforts to increase utilization of large-scale renewable non-emitting sources of energy (such as wind, solar, and wave energy).
- Minimize demand for electricity use by offering incentives, easing zoning requirements, and setting up small-scale production support programs.
- Further reduce electricity demand by advocating switching from traditional incandescent to energy efficient bulbs and setting up an energy audit program.
- Reduce transportation greenhouse gas emissions.



Priority Recommendations

1. Ensure educational efforts express urgency of reducing GHG emissions
2. Support transportation/energy generation systems that produce zero emissions and require no imported fuel
3. Promote energy efficiency efforts as most effective method of reducing GHG
4. Consider carbon caps or tax on imports into Hawaii, which may include imported fuel, food and building materials
5. Legislation to make energy goals mandatory



Immediate Actions (2010)

- Create incentive programs, financing options, and rebates for energy conservation activities (switching to energy efficient lighting, solar water and PV panel installation, residential and commercial wind turbine installation)
- Continue to encourage institutional efforts to utilize non-emitting renewable sources of energy (wind, solar, wave energy)
- Enact policies to encourage carpooling and ride sharing
- Encourage electric car initiatives



Immediate Actions (2010)

- Acknowledge/support airlines with fuel-efficient planes
- Expand Maui Bus system as funding allows
- Request MECO avoid using imported biofuel to replace fossil fuel for electricity generation
- Support conservation and reforestation projects
- Revised Energy Code for increased energy efficiency (Updated Energy Code is currently being considered at Council).



Near-Term Actions (2011-2012)

- Revise building codes and/or support incentive system to mandate stricter environmental standards
- Energy audit program for residential/commercial owners
- Promote low-emission fuel-efficient autos and EVs and replace County of Maui vehicles with same



Near Term Actions (2011-2012)

- Incorporate transportation emission issues into future planning of developments and communities. (Concentrate development in existing urban areas; master planned communities which incorporate live,work,play)
- Facilitate local agricultural production to minimize transportation emissions
- Support local building material production to minimize emissions



Medium & Long-Term Actions (2013 and beyond)

- Encourage MECO to set goals and benchmarks to achieve energy independence by phasing out fossil fuel generators and replacing with alternative clean energy technologies
- Support introduction of mandatory building codes requiring installation of PV systems for new residential and commercial projects (similar to current solar water heating programs)



Conclusions and Next Steps

- Tracking of Progress of Implementation
- Continued Support and Advocacy Toward Achievement of Energy Goals