

LIFE OF THE LAND

Ua Mau Ke Ea o Ka 'Aina i Ka 'Ike
The Life of the Land is Perpetuated in Righteousness
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COMMITTEE ON ENERGY AND ENVIRONMENT

Senator Ron Menor, Chair
Senator Gary L. Hooser, Vice Chair

Date: Tuesday, March 20, 2007

Time: 2:45 p.m.

Room: 414

Copies: 30

Bill: HB 1912 BlueEarth Special Purpose Revenue Bonds

OPPOSE

Aloha Chair Menor, Vice Chair Hooser, and Members of the Committee

My name is Henry Curtis and I am Executive Director of Life of the Land, Hawai'i's own environmental and community action group advocating for the people and the 'aina since 1970. Our mission is to preserve and protect the life of the land through sustainable land use and energy policies and by promoting open government through research, education, advocacy, and litigation.

Richard Alley, chairman of the Committee on Abrupt Climate Change for the National Research Council, is one of the authors of the fourth report of the Intergovernmental Panel on Climate Change. ...

Earlier climate change projections about the rise in atmospheric carbon dioxide and temperature are on target; however, sea level rise has been faster than expected, he said.

Scientists said in their latest report that they cannot put an upper limit on sea level rise because they have no scientific basis for assessing it, Alley said. It could rise inches, feet or tens of feet beyond the next century, he said. "Uncertainty is at that order of magnitude. We've got to do better." (Honolulu Star Bulletin, Sunday, March 18, 2007)

Climate Change may affect Hawai'i in numerous ways: increased intensity of storms; periods of drought and intense rain; flooding; salt-water intrusion of aquifers; invasion of alien species; loss of native ecosystems and coral reefs; rising sea levels; and/or economic impacts due to decreased tourism.

The Intergovernmental Panel on Climate Change (IPCC) has been established by WMO and UNEP to assess scientific, technical and socio- economic information relevant for the understanding of climate change, its potential impacts and options for adaptation and mitigation. It is currently finalizing its Fourth Assessment Report (AR4) "Climate Change 2007". The first Volume was released on February 2, 2007.

The 2007 Hawaii State Legislature is the first post IPCC Fourth Assessment Report.

No one individual country, state, city, company or person is responsible for very much of the problem, but we all have the problem. Just as we vote for President when each vote means little, but collectively they mean a lot, we must each do our share to reduce greenhouse gas emissions.

We need to ask ourselves of each bill being considered by the Legislature this year, will it help or hurt our climate crisis? What is the relative impact? Will it encourage or discourage other activities which may increase or decrease climate change?

At every step of the way, the agricultural industry consumes fossil fuel: planting, irrigating, weeding, harvesting, and transforming the product into biofuels (ethanol, biodiesel). By shifting fossil fuels from transportation / electricity to agriculture we are merely shifting the problem.

George Monbiot, columnist for in **The Guardian** noted (December 6, 2005) notes: "By promoting biodiesel as a substitute, we have missed the fact that it is worse than the fossil-fuel burning it replaces. ... Palm oil production is driving deforestation and cultural destruction in Africa, the Amazon, Central America, Indonesia, New Guinea, Malaysia, Borneo, Southeast Asia, and islands in other Asia Pacific regions."

Wall Street Journal, December 5, 2006, Page A1 noted: "Among the world's most fabled islands, Borneo -- which is divided between Indonesia and Malaysia -- is considered by environmentalists to be one of the last great tropical wildernesses. It's home to rare and unusual species, including the wild orangutan, the clouded leopard and the Sumatran rhinoceros. ... Now, the palm-oil boom threatens what's left. ... Palm oil plantations using slash-and-burn and wetland-draining methods are the third-largest CO2 producer in the world."

In a 2006 **Friends of the Earth** report: The Use of Palm Oil for Biofuel and as Biomass for Energy stated: "The development of oil palm plantations has also often benefited large companies at the expense of local communities who can lose their land and access to important forest resources and ecosystem services. In Indonesia over 100 million people depend upon access to rainforest resources for their survival. The rapid expansion of the oil palm industry in Indonesia has all too often been associated with community exploitation and corporate greed rather than sustainable development."

Just because biodiesel begins with "bio" does not make it green, environmentally-friendly, or good for the climate. Making biodiesel from waste product is generally good, making it by destroying ecosystems is very bad.

BlueEarth Biofuels LLC incorporated in March 2007, reserved the name BlueEarth Maui Biodiesel LLC in late January, and the week before that they are mentioned in House and Senate bills requesting that they be given \$59M in SPRBs.

BlueEarth Biofuels LLC proposes to build a 120 million gallon / year bio-refinery. This is larger than the 106 United States biodiesel plants that Biodiesel Magazine (Feb. 16, 2007) states are built or are being built. These 106 plants have a total capacity of 933.0 Million Gallons per year.

Plant Name	City State	Feedstock	Capacity	Start Date
Fuel:Bio One LLC	Elizabeth NJ	multi-feedstock	50	Feb 2007
Independence Renewable Energy Corp.	Claiborne AL	soy oil	40	Mar 2007
Cargill Inc.	Iowa Falls IA	soy oil	37	N/A
Memphis Biofuels LLC	Memphis TN	multi-feedstock	36	N/A
Incobrasa Industries Ltd.	Gilman IL	soy oil	30	Jan 2007
Ag Processing Inc.	Sergeant Bluff IA	soy oil	30	N/A
Mid-America Biofuels LLC	Mexico MO	soy oil	30	N/A
Minnesota Soybean Processors	Brewster MN	soy oil	30	N/A
Organic Fuels LLC	Houston TX	multi-feedstock	30	Apr 2006
Peter Cremer	Cincinnati OH	soy oil	30	N/A
SoyMor	Glenville MN	soy oil	30	Aug 2005
Western Iowa Energy	Wall Lake IA	soy oil-animal fats	30	N/A

www.biodieselmagazine.com/plant-list.jsp

But in Hawai'i we will add a new twist. We propose to become the first power plant in the world to run on biodiesel.

A German company proposed an electric generator to run on biodiesel. However, they could not be guaranteed that the biofuel would be grown sustainably. They withdrew. The European Economic Community is rethinking palm oil. We aren't. MECO's Ma`alaea Power Plant is being proposed as the first electric generator in the world the run on biodiesel.

The Second Law of Thermodynamics states that all engines are imperfect. Converting biomass to biofuel wastes energy, burning biofuel in generators waste energy, obviously you can't use biomass in your vehicle, but you can in your generator. So from purely a physics perspective, if you want to use biomass in an electric generator you should directly burn it. But Hawai'i's super generous tax breaks distorts common scientific sense, and replaces it with maximizing profits. These profits are subsidized by taxpayers and have environmental and climate impacts.

We need to use our farmland for crops, and our wind, sun and oceans to produce energy. Lets work together making Hawai'i self-reliant instead of pitting food against energy.



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Climate guru warns of 'trouble coming'

By Helen Altonn
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Scientists have a pretty good picture of global climate changes, but the snapshot for Hawaii is not clear, says one of the world's leading climate researchers.

Richard Alley, chairman of the Committee on Abrupt Climate Change for the National Research Council, is one of the authors of the fourth report of the Intergovernmental Panel on Climate Change. "The IPCC's output is probably not good enough about what Hawaii is going to do," he said in an interview here last week, suggesting serious work is needed on numerical models to forecast the impact of climate changes in Hawaii.

Many isle scientists are concerned about how global climate changes will affect Hawaii, said UH geologist Gregory Ravizza, accompanying Alley. They are studying climate history in corals and looking for other types of records, Ravizza said. But Hawaii does not have accumulated sediments or strong seasons for tree rings, he said. "Corals have a wonderful record but they don't live 100,000 years," said Alley, who has studied more than 100,000 years of climate history in an ice core from Greenland.

A popular speaker on climate in the media, Alley said the IPCC scientists concluded that warming of the climate is "unequivocal."

"Scientifically, if we keep going (burning fossil fuels), 100 years from now you won't need to be a scientist to see this. It will become evident to people in most things they do." But the climate and economy are like cruise ships that cannot be turned around instantly, he said. "If you see problems coming years ahead, the sooner you start addressing them, the easier they will be to fix."

Alley, the Pennsylvania State University Evan Pugh Professor of Geosciences, gave a public talk Tuesday night as part of the University of Hawaii at Manoa Distinguished Lecture Series. While there are still skeptics about climate change, Alley said, scientific findings leave little room for argument. As a climate historian and ice sheet researcher, he said he looks at the best estimates for the future and that "there is trouble coming."

Earlier climate change projections about the rise in atmospheric carbon dioxide and temperature are on target; however, sea level rise has been faster than expected, he said.

Scientists said in their latest report that they cannot put an upper limit on sea level rise because they have no scientific basis for assessing it, Alley said. It could rise inches, feet or tens of feet beyond the next century, he said. "Uncertainty is at that order of magnitude. We've got to do better."

Climate change is part of the bigger issue of energy and increased atmospheric concentrations of greenhouse gases, Alley said. Demands for oil and coal are increasing while supplies are being depleted, he said. "The real challenge here is to help ourselves and help other people while dealing with the climate issue." Solving one problem should help solve the other, he said
<http://starbulletin.com/2007/03/19/news/story04.html>