



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

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Statement of
THEODORE E. LIU

Director

Department of Business, Economic Development, and Tourism
before the

**HOUSE COMMITTEE ON ECONOMIC REVITALIZATION, BUSINESS &
MILITARY AFFAIRS**

and the

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Thursday, February 19, 2009

11:30 A.M.

State Capitol, Conference Room 312

in consideration of

HB 1704, HD1

RELATING TO ECONOMIC DEVELOPMENT

Good morning, Chair McKelvey, Chair Morita, Vice-Chair Choy, Vice-Chair Coffman, and members of the Committees.

The Department of Business, Economic Development, and Tourism understands the concept and merits of HB 1704 HD1; however, we cannot support the bill to the extent that its implementation will adversely impact or replace the priorities set forth in the Executive Biennium Budget for Fiscal Years 2009-2011. In light of current and projected State budget deficits, we are concerned that the amount of State funding proposed through this legislation exceeds that which is prudent at this point in time, and recommend that a more modest appropriation be considered that can support the

implementation and sustainable maturation of the concepts and programs set forth therein.

We also wish to express a different point of view than that contained in the Preamble, page 1, lines 11 to 14. The Hawaii Clean Energy Initiative (HCEI) has conducted an analysis and concluded that, based on existing renewable energy technologies (that is, without factoring-in any expected breakthroughs in, for example, wave energy, OTEC or cellulosic ethanol), Hawaii can achieve the 70% clean energy goal by 2030. These studies, conducted by Booz Allen and supported by the National Renewable Energy Laboratory and other national labs, can be found on www.hawaii.gov/dbedt/energy.

HB 1704 HD1 directs the Energy Resources Coordinator (ERC) to establish a government-industry consortium – the “Sustainable Energy Innovation LLC” – to support the funding, research, and development of new, innovative renewable energy technologies. This bill creates an impetus to make Hawaii a world-class leader in the incubation and commercialization of transformational renewable energy technologies including “space solar power prototypes, integrated solar energy systems, and green fuel generation.” If successful and proven to be cost effective and commercially viable, these technologies could provide sustainable and affordable energy alternatives that would support Hawaii’s transformation to a clean energy economy, with its attendant benefits to the environment and energy security.

The U.S. must establish new sustainable and affordable energy resource technologies, and nowhere is this need more pressing than in Hawai’i. Although green

energy technologies such as conventional photovoltaic arrays and traditional biomass fuels are already commercially available, these alone are not adequate to meet our growing energy demands.

This bill would complement the Hawaii Clean Energy Initiative by establishing a government-industry consortium that would seek federal and private industry R&D funds and other resources for renewable energy technology; develop and demonstrate advanced energy technology projects and testing in Hawaii; provide funding for qualified small business ventures to work on projects in partnership with the University of Hawaii and other universities, corporations and the international community; and assist the University of Hawaii in developing new curricula relating to advanced sustainable energy economics and systems.

This bill will encourage the inflow of new capital investments to Hawaii, help create a highly skilled technology-based future workforce, and provide more opportunities for energy and advanced technology companies that are already established in Hawaii to become more profitable. Creating a sustainable energy technology industry in our State presents an opportunity for Hawaii to become a world-class leader in a critical technology sector that will become increasingly important and ultimately essential to achieving Hawaii's energy independence and security.

To this end, DBEDT collaborated with the U.S. Department of Energy to convene a meeting on January 20, 2009 of local and Mainland investors in renewable energy projects to acquaint them with the potential developments that are being discussed for

Hawaii. We will continue to pursue these and other partnerships to maximize investment in Hawaii.

Thank you for the opportunity to provide these comments.

George R. Ariyoshi
999 Bishop Street, 23rd Floor
Honolulu, HI 96813

TESTIMONY

February 18, 2009

Re: HB 1704 HD1 relating to economic development

Dear Members of the Twenty-Fifth Legislature:

I am writing this testimonial in strong support of HB 1704 HD1, which proposes the establishment of a government-industry consortium that will leverage Hawaii's natural resources and extramural expertise and funding to develop, demonstrate, commercialize and deploy advanced energy technologies and projects in Hawaii.

It is well known that Hawaii is the most energy-challenged state in the nation. We import over 90% of the energy we require to operate in the form of fossil fuels, yet also hold stewardship over tremendous natural energy resources that stem from our volcanic origins, mid-oceanic location, prevailing trade winds, and abundant sunshine.

The United States, and indeed the world, must establish sustainable and affordable new energy sources. Nowhere is this need more pressing than in Hawaii and throughout the Pacific Basin. Indeed, the future health of our State economy depends upon finding sustainable and affordable alternatives to our current dependence on fossil fuels.

Currently existing "green energy" technologies, such as conventional photovoltaic arrays and traditional biomass fuels, can contribute toward establishing a renewable energy economy in Hawaii, but the current technological state-of-the-art is incapable of meeting the broader challenge of energy independence in a timely and sustainable manner.

This legislation would establish a government-industry consortium that would seek federal, private industry and other funding resources for the research and development of renewable energy technologies; develop and demonstrate advanced energy technology projects in Hawaii; provide funding for qualified small business ventures to work on projects in partnership with the University of Hawaii as well as other universities and institutions throughout the Asia-Pacific community; and assist the University of Hawaii in developing new curricula in advanced sustainable energy economics and systems.

HB 1704 HD1
February 18, 2009
Page two

By creating the proposed government-industry consortium, we also will help lead the development and demonstration of "transformational" energy technologies, including both space and terrestrial-based solar energy solutions; implement a diverse portfolio of visionary short- and long-term energy solutions; create profitable, high-quality new business opportunities for innovative start-up firms statewide; establish Hawaii as a world-class leader in sustainable energy education, research and development, manufacturing, operations, and field demonstrations; and help move Hawaii toward energy self-sufficiency within a generation – establishing a global standard for renewable energy development.

Finally, by accomplishing these objectives, we will be encouraging new investment in Hawaii, creating more jobs with better pay for our residents, and providing expanded opportunities for energy-related and other advanced technology companies already established in Hawaii to help train a highly-skilled workforce of local residents that can lead us to the future.

The time has come to make this bold move toward energy independence, and I therefore urge you to pass this legislation.

Thank you for the opportunity to provide these comments.

Sincerely,


George R. Ariyoshi

GRA:khy

Statement of
JOHN C. MANKINS
CO-FOUNDER AND CHIEF OPERATING OFFICER
Managed Energy Technologies LLC

**HOUSE COMMITTEE ON ECONOMIC REVITALIZATION, BUSINESS & MILITARY
AFFAIRS**

and the

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Thursday, February 19, 2009
11:30 A.M.
State Capitol, Conference Room 312

in consideration of
HB 1704, HD1
RELATING TO ECONOMIC DEVELOPMENT

Good morning, Chair McKelvey, Chair Morita, Vice-Chair Choy, Vice-Chair Coffman, and members of the Committees.

The sustainable energy goals that the State of Hawaii has established are both visionary and challenging. Achieving 70% renewable energy by 2030 will require an enduring commitment over more than two decades: including not only the aggressive application of today's green energy systems but also the thoughtful and timely infusion of new technologies into the existing mix of options over the course of years. The already existing Hawaiian Clean Energy Initiative (HCEI) provides a robust and comprehensive framework for efforts by the State, the US Department of Energy and various Industry players—particularly the Hawaiian Electric Company—including the formation of working committees, the establishment of partnership projects, and the creation of appropriate investment incentives. However, the cost of energy delivered by commercially available green energy systems is still too high and the systems themselves have been developed and optimized with markets in mind other than Hawaii and those of the rest of the Pacific region.

Moreover, new sustainable energy technologies are crucial to the long-term policy interests of the US and its allies across the Pacific region. The importance sustainable energy

R&D is reflected not only in the ongoing planning of the US Department of Energy and other Agencies, but also in recent developments within the US Department of Defense and planning for substantial new US government investments in green energy technology R&D in the coming months and years.

The purpose of HB 1704 is to establish an additional, highly flexible and accountable implementation approach to achieving Hawaii's sustainable energy goals in general, and the HCEI in particular, and to establish Hawaii as a leader in renewable energy R&D for the benefit of the US and its allies. HB 1704 would result in the creation of a government-industry consortium in the form of a limited liability company that would focus on integrating, validating and demonstrating a range of exciting new technology options that are chosen and tailored for application in Hawaii and across the Pacific region—and which have the potential to achieve lower cost per unit energy while involving less impact on the quality of the local environment. Moreover, a central tenet of HB 1704 is that achieving successfully the goal of energy self-sufficiency will depend not only on the acquisition of specific new energy technologies, but also on the creation of local companies and jobs for the manufacture, integration, operation and maintenance of these new energy options as they emerge. And finally, HB 1704 recognizes that success cannot be achieved without taking full advantage of the existing capabilities the University of Hawaii, and also that future success will require building a still-broader and deeper foundation of subject matter expertise and curricula at the University in all relevant areas of sustainable energy technology.

The implementation approach embodied in HB 1704 is novel, but not unprecedented. Government-industry consortia (rather than a new government office or university department) have been used before with a high degree of success. This has been particularly true in the case of government-industry R&D partnerships where progress must be made quickly and private sector resources are crucial. A good example is that of NASA's Aerospace Industry Technology Program (AITP) of the early 1990s. In the case of the AITP, industry and university partners more than doubled approximately \$20M in NASA funding to implement consortia pursuing multiple R&D projects—all of which were completed within 3 years.

And leveraging of talent and resources is certainly required here: HB 1704 can only succeed if the initial seed funding provided by the State of Hawaii is doubled and re-doubled through resources attracted from major firms, government agencies and various universities—not only in the US but also internationally. Already, a number of organizations have expressed their interest in the proposed effort and would participate if it were established. And, as outlined in HB 1704, the new LLC would work closely with all relevant State efforts, various existing green energy firms and organizations, and the University of Hawaii.

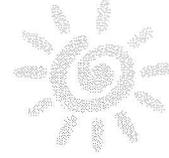
The objectives of HB 1704 are aggressive but achievable. If established and funded, the new LLC would promise several important accomplishments within 12 months. First, not less than three high-profile and novel sustainable energy demonstrations will be accomplished, each involving local firms, the University of Hawaii, and high-leverage partners from across the US and Japan (and perhaps other countries). These projects will involve a significant degree of leveraged resources from extramural partners, including the US government (e.g., DOE, DOD, NASA, NSF and other agencies), for-profit firms, non-profits, and international organizations. Together, these projects will tangibly establish Hawaii as not only a consumer of green energy, but also as one of the leaders of its future.

Second, from 1 to 3 commercialization pilot projects will be identified and established that will begin by not later than the end of the first year of the effort, involving local firms as well as extramural partners. These commercialization projects will transition novel sustainable energy solutions into specific market opportunities within Hawaii. And finally, researchers and students from across the University of Hawaii and affiliated campuses will be directly engaged in both R&D demonstrations and commercialization pilot projects, while the various partnering organizations are brought into a new community of interest with the University in general and the Natural Energy Research Institute in particular to achieve the educational goals of the Bill.

The new government-industry partnership that would be created as a result of HB 1704 is by no means a substitute for the important steps forward that Hawaii has already taken to achieve State renewable energy objectives. However, it would bring important new capabilities and

resources into play that would make a real difference in the longer term – and establish Hawaii as a global leader in sustainable energy innovation, technology, education and business.

Thank you for the opportunity to provide these comments.



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COMMITTEE ON ECONOMIC REVITALIZATION, BUSINESS, & MILITARY AFFAIRS

Rep. Angus L.K. McKelvey, Chair

Rep. Isaac W. Choy, Vice Chair

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Hermina M. Morita, Chair

Rep. Denny Coffman, Vice Chair

Thursday, February 19, 2009

11:30AM

Conference Room 312

HB 1704, HD1 RELATING TO ECONOMIC DEVELOPMENT.

OPPOSE

Aloha Chairs McKelvey, Morita, Vice Chairs Choy, Coffman and Members of the Committees

My name is Henry Curtis and I am the Executive Director of Life of the Land, Hawai'i's own energy, environmental and community action group advocating for the people and `aina for almost four decades. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

HB 1704, HD1 Directs the energy resources coordinator [DBEDT Director] to establish a government-industry consortium for funding, research, and development of renewable energy resources.

Support for pie-in-the-sky projects that need extensive research serves to protect the fossil fuel industry and delay the critical and immediate need to shift to low climate impact renewable energy resources.

Climate Change is very serious. The sea level will rise 1-5 meters by the end of the century. One meter means most of Waikiki is below sea level during high tide. Two meters puts Downtown and the Airport under water during high tide. Three meters puts virtually all power plants, waste water treatment plants, shipping ports and

airports under water.

Global CO₂ emissions exceed IPCC worst case scenario

By John Bruno • Sep 27th, 2008

A comprehensive report released today by the Global Carbon Project contains the grim news that global CO₂ emissions are exceeding the most pessimistic IPCC emissions scenario. The annual mean growth of atmospheric CO₂ increased from 2.0 ppm (parts per million) during the first half of the decade and from 1.8 ppm in 2006, to 2.2 ppm in 2007. This increase in the growth of emissions makes IPCC stabilization scenarios of 450 ppm - 650 ppm doubtful.

1970 – 1979: 1.3 ppm y ⁻¹
1980 – 1989: 1.6 ppm y ⁻¹
1990 – 1999: 1.5 ppm y ⁻¹
2000 - 2007: 2.0 ppm y ⁻¹
2007: 2.2 ppm y ⁻¹

Annual mean growth rates of atmospheric CO₂ concentration.

The report "Carbon budget and trends 2007" is a sobering synthetic analysis of the world's carbon budget, including the sources and sinks of CO₂ parsed by nation, continent, human activity and ecosystem.

Despite the increasing international sense of urgency, the growth rate of emissions continued to speed up, bringing the atmospheric CO₂ concentration to 383 parts per million (ppm) in 2007. Anthropogenic CO₂ emissions have been growing about four times faster since 2000 than during the previous decade, despite efforts to curb emissions in a number of Kyoto Protocol signatory countries.

(<http://www.climateshifts.org/?p=492>)

HB 1704 focuses on military applications, satellites, and future technologies at a time when we need action, not more paperwork.

Unfortunately, the contents of the bill is less than credible, and its proposed solution would be a step in the wrong direction.

HB 1704, HD1: "The legislature finds that in the coming years, it will be crucial for the United States and its allies to establish sustainable and affordable new energy sources. Nowhere is this need more pressing than in Hawaii and throughout the Pacific Basin."

Climate change requires that the world, not just the U.S. and Hawaii switch, not to renewable energy, but to low-climate-impact renewable energy. Indonesia, due to its "renewable" palm oil and wood industries, ranks third in the world in Greenhouse Gas Emissions.

It takes huge amounts of energy to build satellites and rockets, and to power the satellites into orbit. The life cycle greenhouse gas emissions of all of that boggles the mind. To use such a system to cut fossil fuel use is difficult to justify.

HB 1704, HD1: "Although there exist green energy technologies, such as conventional photovoltaic arrays and traditional biomass fuels, these technologies alone are incapable of meeting Hawaii's energy challenges."

Except for air transport, Hawai`i could be 100% energy self sufficient with just (a) wind/batteries; OR (b) solar/batteries; OR (c) wave/batteries; OR (d) ocean thermal energy conversion. Using a portfolio of the above, we have 10-100 times the renewable energy available that we need to be 120% energy self-sufficient today.

In 1992 an analysis showed that each island could supply all of its energy needs via wave energy, with the exception of O`ahu, which could supply 2/3 of its needs. This was updated in 2004 to show that even Oahu could provide all of its energy needs via wave energy conversion devices.

DBEDT: A Superior Location for Wave Energy

The State of Hawaii has one of the world's best and most consistent wave regimes. Combined with the islands' high electricity prices, heavy reliance on imported oil, and government policies promoting renewable energy, this makes Hawaii a natural location for wave energy research, development and demonstration. According to a study completed in 1992, the annual wave energy resource off the northern shores of the Hawaiian Islands far exceeds the electricity demand of all but one of the major islands. The exception is Oahu, which has a large population and high electricity demand which is comparable to two-thirds of the available wave energy resource. See a pdf at: <http://www.hawaii.gov/dbedt/info/energy/renewable/wave>.
<http://hawaii.gov/dbedt/info/energy/publications/wave2006.pdf>

The Electric Power Research Institute (EPRI) is an independent, nonprofit organization funded by the electric utility industry, which conducts research on issues of interest to the electric power industry in the USA. Electricity Innovation Institute (E2I), an affiliate of EPRI, has been established as a non-profit, public-benefit organization to conduct strategic, breakthrough R&D in energy-related science and technology.

Electricity Innovation Institute (E2I) and the Electric Power Research Institute (EPRI) E2I EPRI is leading a U.S. nationwide, government/industry, public/private collaborative program to assess and demonstrate the feasibility of offshore wave power to provide efficient, reliable, cost-effective, and environmentally friendly electrical energy. E2I EPRI strives to initiate momentum towards the development of a sustainable commercial market for this technology in the U.S. and thus provide economic benefits and job creation

E2I EPRI: Survey and Characterization of Potential Offshore Wave Energy Sites in Hawaii (2004).¹ Summary of the Hawaii Energy Wave Resource

"[T]he available annual wave energy resource off the northern shores of the Hawaiian Islands far exceeds the electricity demand on each of the islands, with the exception of Oahu that has a large population and electric demand and an available wave resource that is approximately equal to the electric demand." (page 4)

HB 1704, HD1: "The legislature finds that new technologies have emerged during the past decade that may be used to make Hawaii energy independent within a generation. These technologies include new solutions in space, such as space solar power and solar energy system management satellites, and ground-based systems, such as integrated solar energy systems, solar-augmented synthetic fuels, and "brilliant grids" for power distribution."

One source of space solar energy is the sun, located 100x further away from the Earth than Earth-based satellites, and delivering far more power than any combination of satellites could irregardless of how many satellites the World could deploy in the next 100 years.

HB 1704, HD1: "Hawaii has already established a leadership position in the development and demonstration of key new technologies, for example, through the success of a recent international demonstration of wireless solar power transmission technologies between the islands of Maui and Hawaii."

A 100 mile by 100 mile portion of Nevada covered with solar panels could power the United States. Hawaii Island has sufficient incoming solar energy that if photovoltaic panels covered the island we could power California. It is unclear, except as "look what we can do", why the Big Island would need solar energy from Maui.

HB 1704, HD1: "Accordingly, the legislature finds that a focused new initiative is needed to establish Hawaii as one of the principal leaders in research, commercialization, and application of new ground-based and space-based energy technologies."

The Sea Water Air Conditioning systems build by Cornell University and the City of Toronto were installed by a Hawaii-based company. Ocean Thermal Energy Conversion was significantly advanced in Hawai'i, yet it is in several Asian countries that are taking the lead. Many Hawaii solar and energy efficiency companies are looking towards California and the West Coast as places receptive to build renewable energy systems.

We are already a leader in research, what we need is local deployment.

HB 1704, HD1: "The energy resources coordinator [DBEDT Director] shall establish a government-industry consortium ... Establish Sustainable Energy Innovation, LLC [and] shall seek participation in the government-industry consortium from ..."

While the Consortium would have two local entities (DBEDT, UH), it would be heavily weighted by people from elsewhere:

VIRGINIA (Managed Energy Technologies, LLC)

DELAWARE (Boeing Company)

MARYLAND (Lockheed Martin Corporation)

TEXAS (Entech)

OHIO (Battelle Memorial Institute)

ALABAMA (Auburn University,)

TEXAS (Texas A&M University)

WASHINGTON D.C. (Department of Energy, National Science Foundation, National Aeronautics and Space Administration, Office of Naval Research, Defense Advanced Research Projects Agency)

JAPAN (Kobe University, Mitsubishi Trading Company)

HB 1704, HD1: "Hawaii has already established a leadership position in the development and demonstration of key new technologies ... The purpose of this Act is to ... Demonstrate that Hawaii is a leader in renewable energy development"

Hawai'i has enormous technical know-how regarding renewable energy. If a consortium is established, it should rely on this local technical expertise, and local companies, universities, and non-profits.

Mahalo

Henry Curtis



**HOUSE COMMITTEE ON ECONOMIC REVITALIZATION, BUSINESS, & MILITARY AFFAIRS
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION**

February 19, 2009, 11:30 A.M.

Room 312

(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF HB 1704

Chairs McKelvey and Morita and members of the committees:

The Blue Planet Foundation supports SB 1303, directing and funding the state energy resources coordinator to establish a government-industry consortium to increase the level of clean energy research and development occurring in Hawai'i. This idea has merit and it would be worthwhile to give the energy resources coordinator specific policy direction that these activities are important to further the goal of Hawaii's energy independence. Further, this consortium could leverage outside research dollars and help elevate Hawaii's role as a center for clean energy research and development.

While Blue Planet believes the general fund appropriation in HB 1704 is warranted, we feel that this sort of clean energy R&D program is best funded through a portion of the per-barrel oil surcharge as contemplated in HB 1271.

In addition, Blue Planet also believes that it may be time to consider elevating the level of energy planning, research, and implementation in Hawai'i. If we are serious about ending our addiction to fossil fuel and seek to be powered by 100% clean, renewable, and indigenous sources, the government office charged with guiding the transition deserves greater standing and funding within state government. We would support the creation of a state Hawai'i Energy Security Authority (HESA), something akin to the existing Hawai'i Tourism Authority (HTA). HESA would be a stand-alone entity, tasked with all aspects of planning, research, permitting, and implementation of Hawaii's clean energy future. The Authority would be funded solely from a fee on each barrel of oil imported into the state; as dependency on oil decreases, so does the work of the Authority, and the budget decreases accordingly. Given Hawaii's energy independence the status, funding, and prioritization it deserves would help ensure that we achieve our clean energy goals.

Blue Planet nonetheless supports the research consortium concept established by HB 1704.

Thank you for the opportunity to testify.

Jeff Mikulina, executive director • jeff@blueplanetfoundation.org

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**Statement of Dr. Neville Marzwell,
Ph.D. in applied Physics and International Economics
Adjunct Professor of Physics and Robotics
University of Hawai'i
Hawai'i**

and

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PERSONAL TESTIMONY

RE: HB 1704, HD1-RELATING TO ECONOMIC DEVELOPMENT

Chair Morita, Chair McKelvey, Vice-Chair Choy, Vice-Chair Coffman, and members of the Committees.

The State of Hawai'i, and indeed the United States, must establish sustainable and affordable new energy sources. Various leaders in Hawai'i, the United States, and the International Community have already established this point, therefore, I have decided not to be repetitive of what is already stated and supported by every testimony in front of you, including my testimony in SB 1303 Relating to Energy Independence, which is also attached as an Appendix.

I have therefore decided to use the few minutes granted to me to address the economical issues and business growth potentials for HB 1704, which includes job creation, a source of sustainable revenues, other than tourism, to the Cities and the State of Hawai'i for the next few decades. I will also address the clean environmental issue that is part of the Hawaiian culture and values.

The proposed bill is an economical investment in the future of the State, an educational investment, a skill and competencies investment, a job creation and retention investment, and a tax base creation with a “multiplier effect” for the economy of Hawaii. It will insure that the graduate of the University of Hawaii will stay and work in Hawaii; instead of leaving the State to seek higher paying jobs elsewhere.

This Bill is NOT only about energy strategy, or the mix of renewable technologies for the State of Hawaii. The State of Hawai'i can easily acquire the “know-how” and have more analysis done by qualified organization, without creating this for profit consortium. In fact, the State of Hawai'i has its own Hawaii Clean Energy Initiative (HCEI) to conduct analysis as did the Booz Allen study, but the present HR 1704 goes much further than energy studies or

recommendations, that is why it is titled Hawaii sustainable “Economic Development”, and that is why it is submitted for approval by both the Hawaii Committee on Energy & Environmental Protection, and the Hawaii House Committee on Economic Revitalization, Business & Military Affairs. This bill is enabling and pivotal to the Economic Revitalization, future Business in Hawaii, and the next generations of Hawaiians.

Under the present course of actions, Hawai’i will still import 90% of its energy need, but instead of paying for fossil fuel, it will pay for the imported 100% of the hardware, software, maintenance, replacement parts, and “know-how” from jobs created outside Hawaii, with Hawaiian money. The “net benefit” to Hawaii from cash flow savings in Hawaii to stimulate the Hawaiian Economy will be small at best, and will dwindle over the years with inflation, unless a business model is created that will keep the cash in Hawaii to stimulate the Hawaiian economy.

Contrary to other testimonial opinion, the implementation of the proposed for profit consortium business model will complement and invigorate HCEI, and will turn to reality the implementation and priorities set forth in the Executive Biennium Budget, although funding distribution may need to be re-prioritized, in few of the financial benefits to the State.

The proposed business consortium is a Hawaiian based LLC entity, with participant from every aspect of Hawaiian life, culture and values, that will slowly but surely bring capital to Hawaii and encourage investment in Hawaii and it will pay taxes in Hawaii. Therefore, it is not a foreign to Hawaii.