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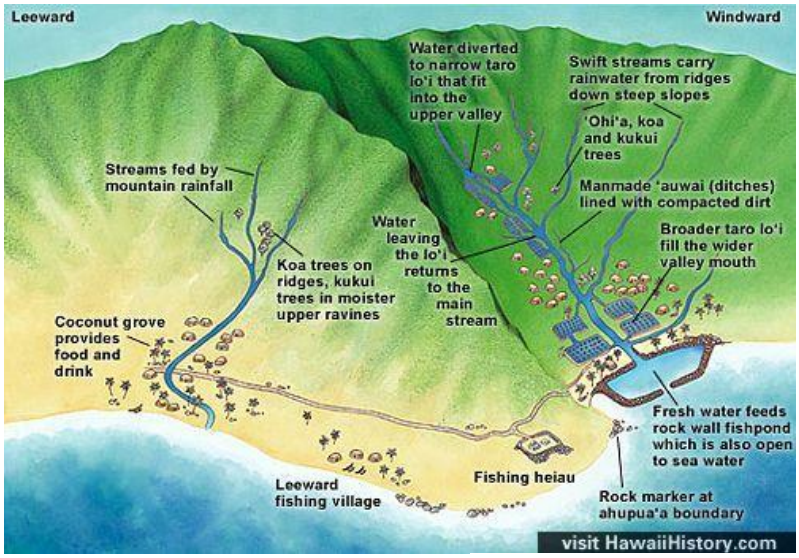
Hawaii's Energy and Agriculture Sectors: Path to Sustainability

INTRODUCTION

Hawaii is one of the most biodiverse places in the world—despite being the most isolated archipelago on our planet.[1] Over more than 40 million years[2] the Hawaiian Islands have risen from the ocean and slowly but surely become home to more than 1.3[3] million people and 25,000 unique species. [4]

As the number of people has grown, the challenges of managing the land, water, and other resources of the islands have grown as well. These challenges have been well documented. For example, we import all the oil we use to generate more than 90 percent of our primary energy,[5] and also import 85 percent of the food consumed by our islands' residents and visitors.

The early Hawaiians managed Hawaii's land and water resources sustainably by dividing the islands into ahupuaʻa,[6] divisions of land that extend from the mountains to the sea along the natural boundaries of Hawaii's watersheds. The residents of each ahupuaʻa managed the resources contained there sustainably and cooperatively. For example, those living nearer to the coast would trade fish from the sea for taro farmed in areas higher up. This system of resource management allowed the early Hawaiians to take advantage of the bounty of the land while respecting the natural resources that made their way of life possible.



Source: www.hawaiihistory.com

Our challenges today are greater. With more people living and visiting our islands and the demands of the modern world weighing upon us, charting a sustainable path forward for Hawaii is of paramount importance.

The Hawaii 2050 Sustainability Plan provided the state's first definition of "sustainability" as:[7]

A Hawaii that achieves the following:

- Respects the culture, character, beauty, and history of our state's island communities.
- Strikes a balance among economic, social and community, and environmental priorities.
- Meets the needs of the present without compromising the ability of future generations to meet their own needs.

Helping Hawaii achieve these goals will require effort on the part of each one of us—and from every facet of our community. From the federal, state, and county governments, to local businesses and community groups, we must all come together to ensure that our shared future is bright.

Energy and food security are two areas that are fundamental to meeting these objectives**.** We can't continue to rely on importing so much of the energy and food that we consume from other places if we want to preserve Hawaii's quality of life and ensure that our keiki have the opportunities and security that previous generations have enjoyed. Therefore, we need to continue the progress that we have made—and we need federal policies that will help us to get there.

I have been a strong advocate for changing the direction of our federal energy and agriculture policies so that they become more forward thinking and support Hawaii's sustainability efforts. Over the past several years, under the leadership of President Obama, we have made some positive progress.

The agenda I've outlined below focuses on each of these critical and interconnected areas. Section one focuses specifically on energy, and section two focuses on agriculture. The ordering of these sections is not an indication that one is more important than the other. Rather, the entire plan is intended to provide an update of the progress we've made in these areas as a state and nation, the path we've been on, and where I think we should head in the future.

Of course, this is not set in stone—on the contrary, I hope to hear from you and other community members about what you think is the best path forward and how we can get there together.

Mahalo Nui Loa,

Mazie K. Hirono
Member of Congress

ENERGY

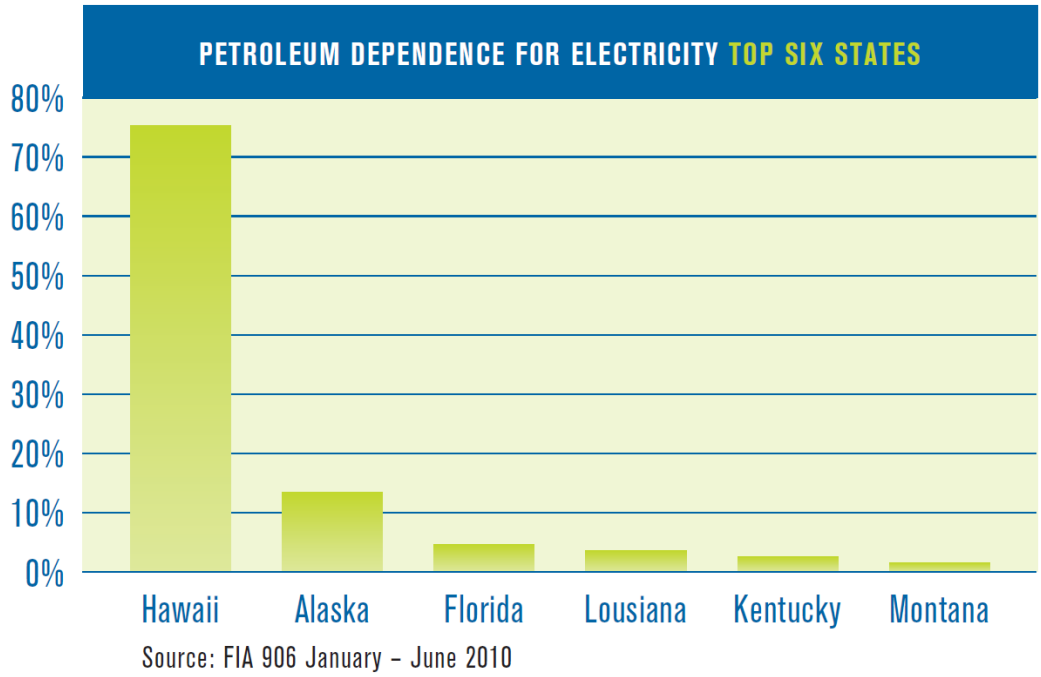
ENERGY INDEPENDENCE IS ESSENTIAL TO OUR ECONOMIC AND NATIONAL SECURITY

After generations of an energy policy based on access to cheap foreign oil and other fossil fuels, Hawaii and the nation are at a crossroads. With developing nations purchasing more and more energy to fuel their growing economies, international oil supplies are strained. As a result, the cost of buying food, fueling our cars, and even turning on the lights in our homes continue to rise.

Energy is a foundational element of our economy which we all rely on to power our homes and businesses. For Hawaii to build a strong 21st century economy, we need a strong foundation. Energy independence is vital to ensuring this strong foundation.

How shaky is our current foundation?

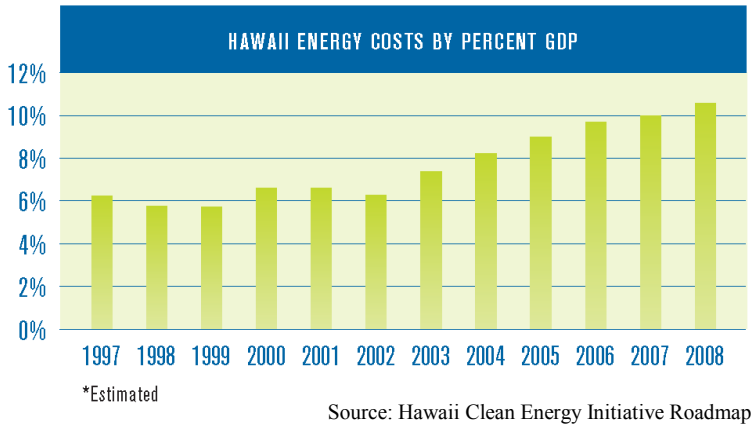
The impact of international oil market fluctuations significantly hurts Hawaii. Our state is reliant on imported oil for nearly 90 percent of the energy we use to power our cars and homes. [8] Over the past 40 years total energy costs have increased by an average of 9 percent per year. [9]



Hawaii Clean Energy Initiative Roadmap

In recent years, oil costs have increased even more substantially. In fact, annual statewide expenditures on oil have increased from $1.8 billion in 2002 to more than $5 billion in 2008—an increase of more than 178 percent. [10]

According to an analysis conducted by the University of Hawaii for the U.S. Department of Energy, every time oil prices double, Hawaii's economy shrinks by 2.4 percent. [11] According to the U.S. Bureau of Economic Analysis, Hawaii's gross state product in 2010 was approximately $67 billion.[12] Therefore, doubling of oil prices would mean a reduction of $1.6 billion in economic activity—nearly the same amount as the entire operating costs of the City and County of Honolulu.[13]



Source: Hawaii Clean Energy Initiative Roadmap

Increased oil prices mean families have to stretch paychecks further and businesses have to find even more room in their budgets just to keep their doors open. High oil prices also increase the cost of visiting Hawaii, which hurts our state's key economic driver—our travel and tourism industry.

Hawaii's reliance on oil, how it impacts far more than just gas prices, and how it factors into Hawaii's future sustainability have helped generate productive discussions, which have led to meaningful actions. For example, the Hawaii Energy Policy Forum has worked to build consensus and foster dialogue on energy issues. These discussions and recommendations helped to inform the establishment of the Hawaii Clean Energy Initiative (HCEI).

The HCEI sets forth the most ambitious clean energy goal in the nation—to make Hawaii 70 percent clean energy powered by 2030. To achieve this, Hawaii's government, communities, businesses, and people are all working together to generate 40 percent of Hawaii's electricity from clean, renewable, Hawaii-made energy sources. Another 30 percent will come from energy efficiency measures in our homes, offices, and other buildings.[14] And we are working to reduce our use of petroleum for ground transportation by 70 percent.[15] This undertaking has been supported by the U.S. Department of Energy.

The people and communities of Hawaii are not the only ones committed to strengthening the foundation of our economy through energy independence. The U.S. military has also recognized that volatile energy prices aren't simply a matter of economics—they are also a matter of national security.

The U.S. military uses one percent of all the energy in the U.S—making it the largest energy consumer in the country. [16] In 2011, the Department of Defense spent a total of $15 billion on energy.[17] Four billion dollars went to providing electricity to the 300,000 buildings operated by the Department of Defense around the world. The remainder went to fuel to operate tanks, ships, and planes and run the generators needed to power remote bases in locations such as Afghanistan and Iraq.[18]

Recognizing that its reliance on fossil fuels was not only a drain on financial resources but was putting lives in danger on the battlefield, the U.S. military has for the first time developed and implemented an Operational Energy Strategy. The Fiscal Year 2009 National Defense Authorization Act, which was supported by Congresswoman Hirono,[19] established an Assistant Secretary of Defense for Operational Energy Plans and Programs.[20]

The military is currently implementing the Operational Energy Strategy on a service-wide basis. Each service has budgeted funds for implementing energy efficiency measures, research and development of new fuel sources, and other programs.[21] Hawaii's installations have been leaders, with the Navy launching the first alternative fueling stations at Joint Base Pearl Harbor-Hickam,[22] as well as sustainability initiatives undertaken by the U.S. Army Garrison Hawaii.[23]

The Defense Department's goals are bold. They include generating 25 percent of its energy from renewables by 2025, utilizing biofuels for 50 percent of the Air Force's domestic aviation by 2016, and reducing the Navy's fuel usage by 15 percent by 2020.[24]

The leadership and investment of the Department of Defense complements existing initiatives under the Obama Administration on the civilian side. [25] These initiatives include mandating higher fuel efficiency of the federal vehicle fleet[26] and federal buildings,[27] setting new fuel efficiency standards for cars and trucks,[28] investing in green jobs, increasing research and development of clean energy, and other incentives to help develop the green U.S. economy. [29]

Congresswoman Hirono has worked with the Obama Administration and her colleagues in Congress to support these changes in federal energy policy. It is this fundamental change that we need to continue in order to support an energy-independent Hawaii and establish our state as a green leader in the 21st century economy. Energy independence is both a challenge and an opportunity that requires real leadership.

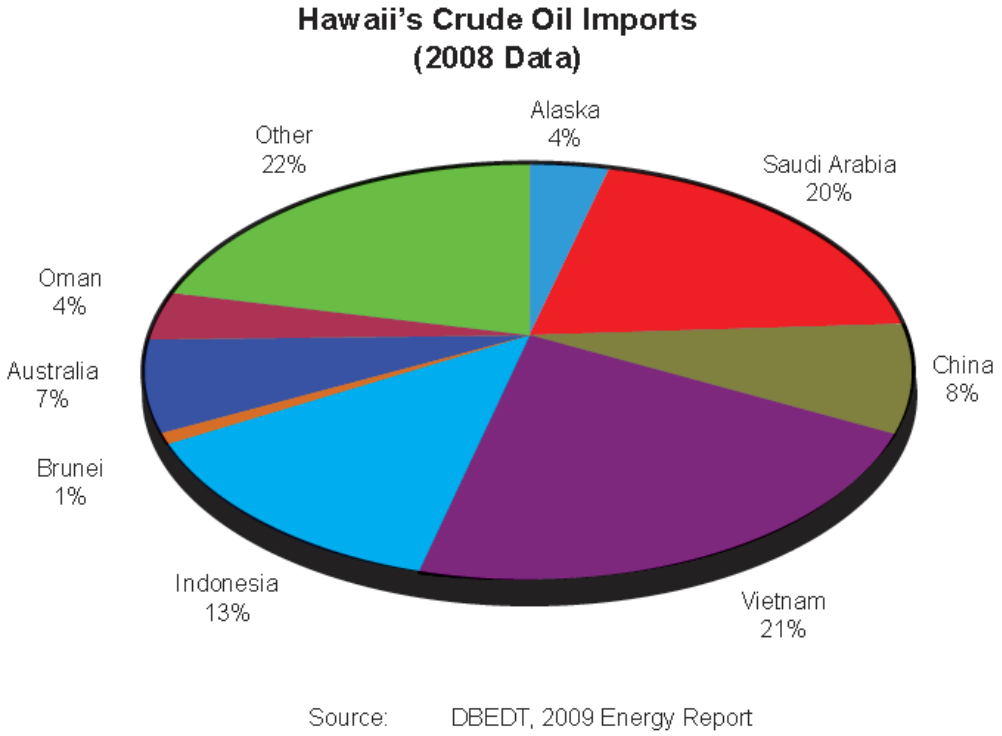
Why must we make these fundamental changes? The national security implications alone are compelling, but the financial burdens of inaction are tremendous. In this era of economic challenges, we need to follow the lead of the military and meet these challenges head on in order to reduce the long-term costs that serve as an anchor on economic growth in Hawaii and

nationwide, and make us even more vulnerable to outside threats. We can do it, but we must do it together.

Ending our Reliance on Imported Energy in Favor of a Secure Energy Supply That Creates Jobs in Hawaii

The Challenge: We have to start by ending our reliance on imported energy. We all know that this reliance leaves our economy on a shaky foundation—a foundation that gets shakier as global energy prices fluctuate because of events out of our control. We have to get energy prices—particularly for transportation—under control in the short-term in order to continue the work we have started to reduce our reliance on fossil fuels over the long-term.

Fuel prices are set on the international market according to the laws of supply and demand. When the supply is low and the demand is high, the price goes up. This is the situation we find ourselves in now, as emerging nation's like China, Brazil, and India are increasing their demand[30] for fossil fuels and other resources.[31] In fact, in 2011 China overtook the U.S. as the largest market for automobiles when its consumers purchased more than 13 million new cars.[32] Given the tight demand for global oil, it is important that U.S. policies support U.S. consumers and businesses by accelerating our transition to cleaner fuel sources.



While international markets impact oil prices across the U.S., Hawaii is in a particularly unique situation. Hawaii's largest import is crude oil, accounting for 76 percent of all products imported into the state.[33] Nearly 75 percent of that oil comes from foreign countries: Saudi Arabia, Vietnam, Indonesia, and others.[34] The remaining 25 percent comes from the U.S. mainland and Alaska.[35] This makes Hawaii vulnerable to supply disruptions and price changes both in international markets and U.S. domestic markets. Therefore, the best way to stabilize energy prices and reduce costs for Hawaii's people and businesses is to insulate ourselves from these markets—by developing clean, sustainable, Hawaii-made energy sources for transportation, our homes, and businesses.

For years, U.S. taxpayers have provided more than $4 billion per year to the nation's largest oil companies for subsidies they no longer need. In fact, the three biggest oil companies in the U.S. brought home more than $80 billion in profits last year.[36] These profits are from the high prices paid by drivers in Hawaii and across the country. Oil companies also receive significant additional benefits, such as oil and gas leases on federal lands, federal approval of more drilling, and high gas prices worldwide.[37]

Subsidies and incentives can be necessary to help fledgling industries that will help our economy grow. But, when an industry can make profits at the rate the oil companies do, it is clear that they no longer need taxpayer support. Instead, during this time of tight federal budgets, we need to reorient our priorities and reinvest those resources in programs that will help end our reliance on fossil fuels and build a clean energy economy.

Ending oil company subsidies is only the first step. We also need to continue developing a secure, Hawaii-made energy supply that helps to create jobs and keep money in the islands. Hawaii's reliance on imported fossil fuels leaves our economy on a shaky foundation for the 21st century. To strengthen this foundation and set a course for Hawaii to be a green energy leader, we must invest in Hawaii-made clean energy. This will require responsibly utilizing all of Hawaii's abundant resources—including solar, wind, biomass, geothermal, and ocean energy. We can move the ball forward on these critical investments if we end subsidies for Big Oil and redirect those resources in a more productive direction: meeting our clean energy goals.

One of the biggest challenges to harnessing locally developed energy sources is upgrading our current electricity infrastructure, also known as "the grid."

"The grid" serves as the backbone of our electricity system—as well as the backbone of our clean energy future. In the last century, this system was designed to simply carry electricity from power plants, over power lines, and into homes and businesses. However, this system generally does not facilitate electricity movement in two directions and poses challenges to improving efficiency and utilizing Hawaii-made energy sources.

For example, in many parts of the country, including Hawaii, electricity utilities are reliant on homeowners and businesses to notify them when there are power outages. Another challenge that our current grid cannot overcome is how to utilize the amount of Hawaii-made clean energy that can be generated. This system is outdated and needs to be upgraded for the 21st century.

What we need is a "smart grid" that will serve as a key component of our overall grid modernization efforts. A smart grid is an electricity grid that communicates with homeowners, businesses, and the utility about how power is flowing through the system.[38] It would operate somewhat like the internet by linking to computer systems that help to control and monitor the grid. By better coordinating how the grid operates through computers, energy use data can be provided directly to homeowners and businesses who can then tailor their energy usage more effectively—leading to lower electricity bills.

The technology and engineering necessary to meet these challenges still requires significant research and testing. Fortunately, Hawaii is the perfect place to do this type of high-tech research and development.

With a system made up of four separate and small grids, Hawaii can serve as a world-class test bed for developing smart grid technologies. Investments in our energy grid, particularly smart grid technology, will allow our people to utilize more Hawaii-made energy while adapting their energy use to reduce costs and boost efficiency.

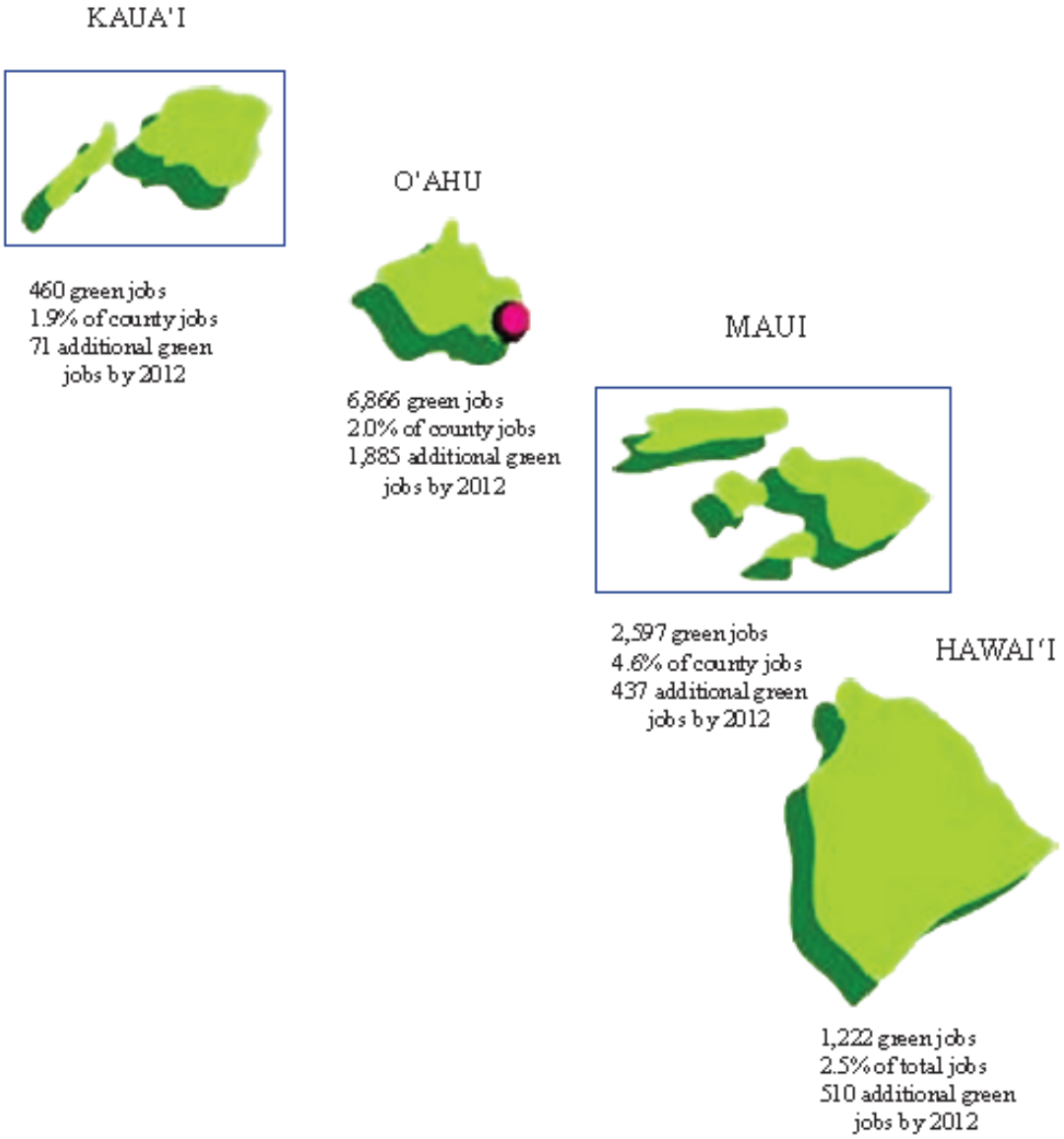
The Recovery Act supported projects in Hawaii that have the potential to revolutionize energy use in our state and nation. More than $5 million in federal funds was awarded to Hawaiian Electric Company to install new technology to better manage electricity in East Oahu. [39] The U.S. Department of Energy also provided $7 million in Recovery Act funding for the Maui Smart Grid Project[40, 41] and $5.5 million for the Kauai Island Utility Cooperative's smart grid demonstration project.[42] These projects have attracted significant private support and are even generating global interest[43, 44, 45] making them model public-private partnerships that will help to sustain the important research being conducted even after Recovery Act funds are no longer available.

Modernizing our grid is a crucial investment in Hawaii's clean energy future. However, we must also continue investing in research and innovation to improve these clean energy sources and make them commercially viable. In addition, it's vital that Hawaii's people have the education and training resources to take advantage of the green jobs these new industries will generate. In 2011 Hawaii ranked 3rd in the nation in green job growth and is projecting a 26 percent increase in 2012.[46] These include jobs in the research, development, and production of renewable fuels, installation and maintenance of energy efficiency technologies and systems, green product designers, and other occupations.[47]

What We've Done: In 2011, Hawaii's clean energy industries generated $1.2 billion[48] and supported more than 11,000 jobs.[49] This tremendous momentum has been supported by federal, state, and county policies that have helped to incentivize research and development into new energy sources, and encourage development and construction of projects across the islands.

Summary of Green Jobs Statewide

Source: Hawaii Department of Labor and Industrial Relations, "Hawaii's Green Workforce: A Baseline Assessment"



Key Priorities: Congresswoman Hirono has worked with the Obama Administration to change the course of U.S. energy policy. This is a big job and we need to keep up the momentum by continuing investments in clean energy, providing businesses with financial support to help them utilize and benefit from today's clean energy technologies, and supporting entrepreneurs with investments in innovation. Together, these measures will help Hawaii's private sector lead on

clean energy innovation, development, and deployment in the 21st century—and give our communities and homes the capacity to utilize those energy sources affordably.
There are several key areas that Congresswoman Hirono has worked on to support Hawaii's clean energy development:

End Subsidies for Big Oil

Congresswoman Hirono has voted to end these subsidies in the past,[50] and supports legislation that would stop taxpayers from subsidizing some of the most profitable companies in the nation. She will continue working to see subsidies for oil companies ended.[51, 52]

Investments in Hawaii's Clean Energy Programs and Infrastructure

- The U.S. Department of Energy, through the 2009 Recovery Act, provided more than $71 million to Hawaii for clean energy programs and projects. [53] This included $2.5 million for education and research in clean energy and island sustainability,[54] which will help develop a green workforce for tomorrow's smart grid technology.

- Encouraged investment in smart grid research, building on Recovery Act funds provided to Hawaii for developing smart grid projects on Oahu, Kauai, and Maui. These investments have helped generate foreign investment in other smart grid projects from Japan[55] and Korea. [56]

- Supported the military's efforts to initiate and support the development of clean fuels and energy efficiency in Hawaii and across the country.

Financing Assistance for Businesses

Congresswoman Hirono meets with representatives from First Wind, in the background a wind turbine is being moved into place.

- Supported legislation to provide innovative financing and loans for clean energy projects through the Department of Energy.[57] These programs helped to finance the Kahuku Wind project on Oahu.[58]

- Supported the Recovery Act program that provided cash grants for clean energy projects, providing more than 100 Hawaii businesses with approximately $63 million in

investments for clean energy.[59]

- Voted to extend tax provisions to incentivize clean energy projects and business growth.

Empowering Clean Energy Innovation

- Strongly supported[60] programs that provide entrepreneurs with federal support to develop innovative solutions to our energy challenges through the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. [61] Provisions similar to the bills she introduced were included in the National Defense Authorization Act of 2012.[62]

- The Recovery Act helped to support Hawaii innovators by funding research at the University of Hawaii[63] ocean energy,[64] private sector research in advanced biofuels,[65] and other beneficial projects. These efforts would not have received as much support as they have without the Recovery Act.

What's Next: Congresswoman Hirono will continue pushing for measures to increase the development and deployment of clean energy projects, training, and programs that will help create jobs in Hawaii:

1.) Support extending tax incentives[66] for clean energy projects and continue these important job creating policies for an extended period of time to provide certainty to businesses. In particular, she will continue to work on bipartisan legislation she helped introduced to incentivize biofuel production. [67]

Congresswoman Hirono speaks with representatives from Cellana about biofuel production in Hawaii.

2.) Continue to support improved science, technology, engineering, and mathematics (STEM) education and the development of a green workforce by passing legislation she introduced to create a grant program for education and training partnerships.[68]

3.) Support legislation that would allow the military to enter into 15-year contracts for clean energy—giving entrepreneurs and energy producers a guaranteed market for the development of biodiesel and other clean fuels.[69]

4.) Work to pass legislation to provide export assistance to clean energy manufacturers and businesses.[70]

5.) Work to pass legislation to support additional clean energy manufacturing in the United States.[71]

6.) Continue to support incentives to improve battery storage technology and increase deployment.[72]

Managing Prices at the Pump During Our Clean Energy Transition

The Challenge: Rising gas prices act like a tax on all of us—a tax that takes money out of our pockets and transfers it out of the state. However, until we can affordably accelerate our transition to alternative fuel vehicles, the fact is that we need to manage the price at the pump.

According to the latest U.S. Department of Transportation statistics there are approximately 889,000 registered drivers in Hawaii.[73] Hawaii's Department of Business, Economic Development, and Tourism (DBEDT) estimates that there are approximately 1.05 million registered motor vehicles in our state,[74] ranking Hawaii 7th in the nation when it comes to the number of drivers per registered vehicle.[75]

Of those 1.05 million registered vehicles, nearly 1 million still rely on gasoline for fuel to get to work and school.[76] This high reliance on gasoline-powered vehicles means that we are especially vulnerable when gas prices increase. In addition, the high number of people who rely on their cars to get to work and school contributes to severe traffic congestion, which wastes fuel and time.

In addition, oil markets are global, and the trading of oil goes on constantly. However, not all of this trading is done according to the laws of supply and demand. Speculators try to make money by placing bets based on what they think the price of commodities like oil will do in the future—potentially increasing the price of oil per barrel by more than $23 and raising the price at the pump by more than 50 cents per gallon.[77]

This is occurring despite increased oil production within the U.S. Over the past few years U.S. oil and gas production has increased significantly. In 2011, more than 2 billion barrels of oil were produced here in the U.S and a record-setting nearly 1,200 oil rigs are currently operating.[78] Despite this increase in domestic supply, international, demand continues to grow.

Since the U.S. owns only 2 percent of the world's total oil reserves, we can't rely on more drilling to reduce gas prices and meet our energy needs over the long-term.[79] However, until we can develop the technology and fulfill the investments we need to end our reliance on oil, we need to make sure that the oil we do produce benefits Americans, and we use our existing resources to ease the burden of high gas prices.

What We've Done: The good news is that Hawaii leads the nation in electric vehicle fueling stations[80] and more and more consumers are buying electric and hybrid vehicles each month.[81] In addition, Hawaii's counties have been able to use federal resources to purchase cleaner fueled buses.

Key Priorities: However, until electric, hybrid, and highly fuel-efficient vehicles are in wider use, we have to do our best to manage the price at the pump. This includes cracking down on speculators, ensuring that the drilling that is occurring in the U.S. benefits U.S. consumers, and ensuring that when times are tough the government can step in to provide relief. We also have to continue making progress on transitioning to clean energy vehicles and helping expand transportation options through public transportation.

Congresswoman Hirono joins Better Place executive Brian Goldstein and VP Jason Wolf to charge up an electric car

Supporting and Expanding Cleaner Public Transportation Options

- Congresswoman Hirono believes that improving access to public transportation gives commuters more options, can help get cars off the road, and ease pain at the pump. That's why she has supported legislation that provided the same tax benefits available for parking to those who utilize public transit.[82] This benefit expired in January 2012, but she is working to see this benefit reinstated and made permanent. She also supports legislation to provide benefits to commuters who bike or use vanpools and other modes of transportation.[83]

- Congresswoman Hirono has worked with her colleagues in Hawaii's Congressional delegation to acquire, and help the state compete for, federal funds to build and maintain our public transportation systems—from bus systems to rail. Most recently, she joined Senators Inouye and Akaka and Congresswoman Hanabusa in announcing a $15 million investment in public transportation on Oahu, Maui, and Hawaii Island.[84] These investments have helped our growing public transit agencies to invest in cleaner running buses; for example, Recovery Act funds helped Maui purchase three new buses in 2009[85] and the competitive federal funds that Honolulu won for eight new electric buses in 2011.[86] In addition, the delegation has worked to help Hawaii secure approximately $120 million for Oahu's rail system, helping to provide more affordable public transportation options to meet the needs of Oahu's growing population.[87]

Cracking Down on Speculation

- Congresswoman Hirono was proud to support the Dodd-Frank Wall Street Reform and Consumer Protection Act,[88] which gave the Commodities Futures Trading Commission (CFTC) and Securities and Exchange Commission (SEC) additional authority to address speculation in energy markets.[89] She has also fought to see that the CFTC and SEC receive enough funding to carry out these new responsibilities.[90]

- She has voted in favor of providing the Commodities Futures Trading Commission with the necessary resources to crack down on oil speculation and price manipulation. [91]

- Congresswoman Hirono supports protecting consumers through the Department of Justice's Gas Price Fraud Working Group.[92] The goal of this group is to investigate and crack down on illegal activities that may contribute to raising gas prices. Working with state attorney general offices and other federal agencies, the Working Group is charged with monitoring the oil and gas markets and taking swift action to stop illegal conduct.

Making Sure Our National Energy Supplies Are Secure

- That's why Congresswoman Hirono has supported utilizing resources held in the U.S. Strategic Petroleum Reserve (SPR) to provide limited, targeted price relief[93] when prices are extremely high.[94]

- Congresswoman Hirono supports the "Keep America's Oil Here Act," which would ensure that the oil being pumped and processed in the U.S. is kept in the U.S. to increase our own domestic supply.[95]

What's Next: Congresswoman Hirono knows that for a sustainable, independent energy future, the first step is to end our reliance on imported oil. That's why we need to continue supporting federal policies that support Hawaii's efforts in this regard. To do this she will:

1.) Continue fighting to see that the Commodities Futures Trading Commission and the Securities and Exchange Commission have the resources they need to crack down on speculators and police energy markets.[96]

2.) Push for temporary, targeted relief for Hawaii's drivers by urging President Obama to release some of our nation's Strategic Petroleum Reserve.

3.) Keep what we produce. Even though the U.S. doesn't own the reserves necessary to drill our way to affordable energy, we need to make sure that what we do produce is used to benefit American families and businesses. She will continue fighting to see that our supplies are secure and reliable.

4.) Continue pushing legislation to make sure that commuters who use public transit, bike, or other modes of transportation[97] have access to tax benefits as well as invest in expanding access to public transit in Hawaii and across the country.[98]

Reducing Costs for Families and Businesses and Better Managing Our Resources through Energy Efficiency

The Challenge: Nearly 60 percent of Hawaii's imported petroleum is used to meet our transportation needs. The other 40 percent is used to generate the electricity we need to power our homes and businesses.[99] One critical way to reduce our reliance on imported petroleum is to increase energy efficiency. This is a critical component of Hawaii's clean energy goals. Under the Hawaii Clean Energy Initiative, 30 percent of Hawaii's efforts to meet the goal of 70 percent clean electricity by 2030 is to come from energy efficiency measures.

The good news is that we are making significant progress.[100] Hawaii is second in the nation in installing solar panels, according to the Interstate Renewable Energy Council,[101] and we're a leader in upgrading the energy efficiency of our workplaces and other buildings.[102] In addition, the efforts of Hawaii's military installations are helping to reduce overall energy use and increase efficiency across the branches of the military. Hawaii's annual electricity consumption in

Congresswoman Hirono meets with Jan Gouveia and Dean Seki of the Hawaii Department of Accounting and General Services to learn more about the solar panels installed on the roof of the Kalanimoku Building.

2010 was below the levels of usage in 2000.[103]

We need to continue this momentum and provide the tools that will give Hawaii's families and businesses the ability to monitor their energy use and learn how to reduce it.

What We've Done: Congresswoman Hirono has been a leader in advocating for federal policies that put Hawaii's businesses and consumers first when it comes to energy efficiency. She has fought for increased consumer choices by incentivizing manufacturing of more energy-efficient appliances and vehicles, encouraging upgrades of federal government buildings, and provide access to energy efficiency upgrades for homes and small businesses.

More Choices for Consumers and Businesses

Putting consumers first sometimes means encouraging the private sector to step up its efforts to provide better products. In 2007, the Congresswoman cosponsored the Energy Independence and Security Act,[104] which was signed into law by President Bush and set new energy efficiency standards for consumer products, transportation fuels, and research and development.[105] This landmark legislation included a number of provisions that have increased energy efficiency in products we use and incentivized private sector participation in developing cleaner energy sources:

- The law updated Corporate Average Fuel Economy (CAFÉ) standards, or the miles per gallon requirements for new cars and trucks. Raising the fuel economy standards means cars and trucks manufactured and sold here will be more energy efficient.[106] This translates into savings for consumers who don't have to fill up as often. Congresswoman Hirono supported the Obama Administration's agreement with the U.S. auto industry to strengthen these standards in 2011 to 54.5 miles per gallon by Model Year 2025.[107] Cars that meet these standards are projected to save consumers nationwide $1.7 trillion at the pump, $8,200 per family over the lifetime of the vehicle, reduce oil use by 12 billion barrels, and avoid 6 billion metric tons of carbon dioxide pollution.[108]

- Set a Renewable Fuels Standard (RFS) for transportation fuels that requires increased use of biofuels.[109] This requires us to increase the amount of homegrown, sustainable biofuels used in our cars and trucks, and decreases our dependency on foreign oil.

- Improved consumer choice and increased energy savings by setting new energy efficiency standards for light bulbs and household appliances.[110]

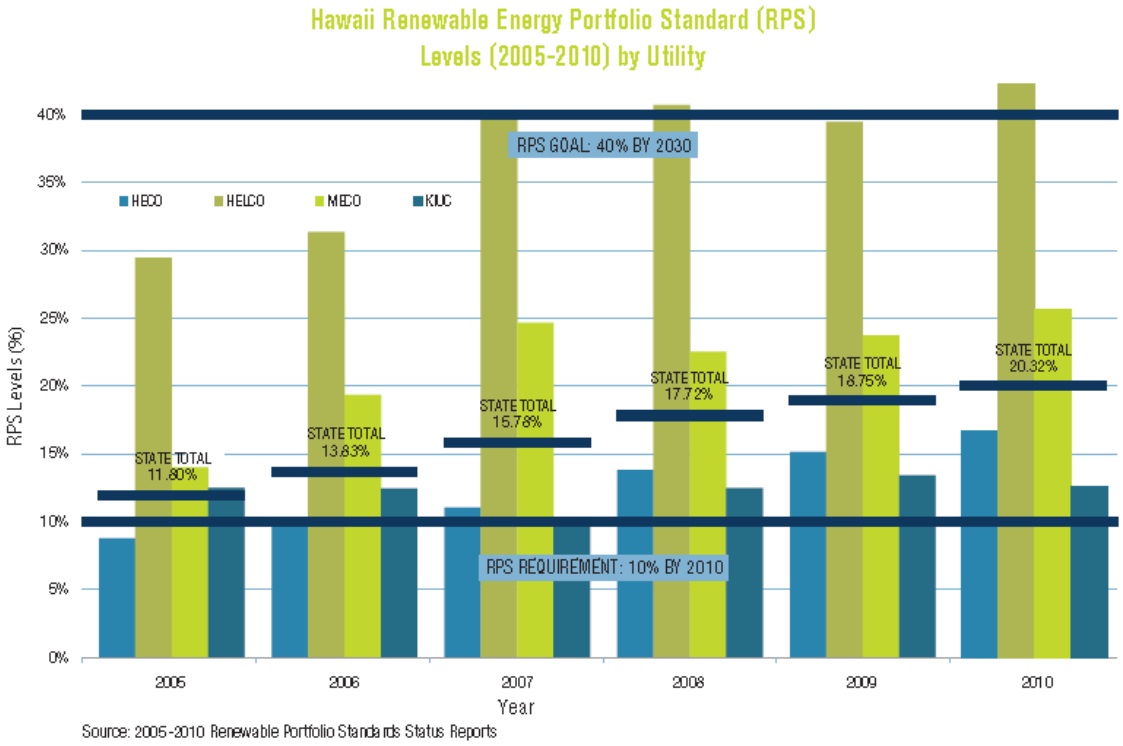
To continue the momentum started in the landmark legislation in 2007, Congresswoman Hirono:

- Supported federal investments[111] to support programs established in the 2007 law through annual appropriations and the American Recovery and Reinvestment Act. [112]

- Supported developing smart grid technology and battery research, which will help incorporate renewable energy on the existing electric grid and store energy from sources like solar and wind more efficiently. In early 2012, she led a bicameral letter to President Obama asking for inclusion of a "Smart Grid Hub" in his 2013 Budget. A Smart Grid Hub would complement existing federal energy research hubs, which act as "think tanks" seeking answers to some of the toughest energy challenges our nation faces.[113] Thanks to the investments made through the Recovery Act, and the innovations occurring across the state, Hawaii is well positioned to compete for this new Hub. She also supports legislation to provide tax incentives for battery technology installations. [114]

Encouraging Energy Efficient Buildings

Homes, offices, and public buildings utilize a tremendous amount of energy. Over the past decade, Hawaii has made progress in utilizing other sources of energy to generate electricity and reached a renewable portfolio standard level of more than 20 percent in 2010.[115] In addition, from 2003 to 2011, 53 buildings in Hawaii have been certified as ENERGY STAR buildings—31 private buildings, including offices, hotels, and retail stores, and 22 public buildings, including offices, a courthouse, and school.[116]



- Congresswoman Hirono has cosponsored bills to update national standards for energy efficiency in buildings—from commercial and residential buildings to schools, hospitals, and government buildings. [117]

- Supported the Recovery Act, which funded the Department of Energy's "BetterBuilding Initiative.[118]

- Supports increasing the tax deduction for constructing energy-efficient commercial buildings.[119]

Provide Access to Financial Incentives for Homeowners and Businesses

Energy efficiency upgrades can save consumers and businesses significant costs over the long-run. Unfortunately, the up-front cost of installing some energy efficiency measures, such as new solar water heaters and other large appliances and measures can be cost prohibitive. Congresswoman Hirono believes that Hawaii's residents should not be denied access to these money-saving options and has worked to support incentives for homeowners and businesses to make upgrades.

- Congresswoman Hirono supported the Recovery Act which allocated $4.5 million of U.S. Department of Energy's State Energy Program for the Electric Vehicle (EV) Ready Program. This provided $2.6 million to the State Energy Office for installation of about 120 charging stations, 250 ports at 100 locations, $1.4 million for car and charging station rebates, and $500,000 to the state to lead by example.[120]

- To encourage consumers to consider energy-efficient appliances and cars, Congresswoman Hirono supported tax incentives like the Energy Star Rebate program[121] and the Residential Energy Property Credit.[122]

- She has also worked to see that resources are available to pursue new, innovative approaches to help finance energy efficiency upgrades. She supported the inclusion of[123] $1 million[124] for the Commerce Department to create a program to allow small businesses to finance energy efficiency upgrades.[125]

What's Next: We need federal policies that keep our nation moving forward after passage of the 2007 energy legislation and Recovery Act. To support these continued efforts Congresswoman Hirono will:

1.) Push for passage of legislation to increase energy efficiency in federal buildings[126] and green schools.[127]

2.) Push for additional legislation to help small businesses finance energy efficiency upgrades.[128]

3.) Push for passage of bipartisan legislation to authorize Fannie Mae and Freddie Mac to allow homeowners to take advantage of Property Assessed Clean Energy (PACE) programs for financing energy efficiency upgrades.[129]

4.) Push for the extension and revival of expired, or expiring, tax incentives for electric vehicles and energy efficient appliances.

5.) Encourage continued investment into research, development, and deployment of smart grid technology and improved battery storage.

AGRICULTURE AND FOOD INDEPENDENCE

Introduction: Ensuring a Solid Foundation for Agriculture in Hawaii

Hawaii has a long agricultural history, including traditional Hawaiian agricultural, fishing, hunting, and gathering practices; export-focused plantation agriculture and large-scale ranching; and, currently more small-scale diversified agriculture where farmers grow a variety of crops. Some of these crops are for local consumption (lettuce, taro, tomatoes, eggs); others are primarily for export markets (macadamia nuts, spirolina, noni); and still others are for both local consumption and export (papayas, pineapples, coffee). We also have farms that are primarily geared to providing a visitor experience, coupled with value-added processing.

We have significant challenges as we look for ways to meet the infrastructure, research, and marketing needs of our farmers and ranchers. Challenges that were difficult but manageable for plantation agriculture—like transporting products to markets, developing water resources, and supporting research that solves production problems—are far harder for small diversified farmers growing a wide variety of crops.

Today we find ourselves importing most of our food, yet our local farmers struggle to find markets. Our long-standing agriculture industries, like sugar, macadamia nuts, coffee, and ranching face increased challenges. Despite, and perhaps because of, the challenges of our geographic isolation, some agricultural innovators have found ways to thrive through agritourism and value-added products geared toward our millions of visitors. The Hawaii brand is a powerful asset, and we need to continually look for ways to enhance that brand and capitalize on it.

Some of these challenges are amenable to federal solutions; others fall within the realm of the state or county governments or private industry associations. But what is clear is that we all have to work together toward solutions.

Meeting Basic Needs for Hawaii's Agriculture Sector

The Challenge. Congresswoman Hirono is a strong advocate for Hawaii's agriculture industry. She takes every opportunity to explain to her colleagues how Hawaii is unique and how our agricultural challenges are quite different from those in the rest of the country. Our geographic isolation, being almost 2,500 miles from California, the fact that the state is comprised of seven inhabited islands, our subtropical climate, year-round growing season, susceptibility to invasive species (due to a perfect climate that pests like as much as people do), and the fact that most of what we grow is not grown anywhere else in the United States are just some of the ways we're different. In addition, unlike the rest of the country, which is seeing a move toward fewer but larger farms, Hawaii is experiencing a transition from large-scale agribusiness operations to small-scale diversified farming. This has caused significant problems, especially in regard to addressing what has always been one of the most important limiting factors in Hawaii agriculture: availability of water for irrigation and for animals.

Our geographic isolation and the fact that Hawaii is a relatively small state means that the costs of importing agricultural inputs such as fertilizer, fencing material, agricultural chemicals, and animal feed greatly increase the costs of production. Energy costs are also significantly higher in Hawaii than in the rest of the country. The cost of shipping our final products to markets on the mainland means that Hawaii farmers have to get a premium price. In addition, the fact that goods also need to be moved between islands adds another complicating factor. Unlike mainland cities, which have the options of rail or highway transport between states, goods in Hawaii must be moved island to island or state to state by air or water.

Our different crops, year-round growing season, and hospitable climate for pests mean that Hawaii has unique research needs. Very little of the crop research done in universities on the U.S. mainland is helpful to Hawaii. Although research on corn or wheat performed in Illinois may be useful to famers in Iowa or Nebraska, no one else in the United States is doing research on papaya diseases, pineapple nutrition, macadamia nut pests, or rambutan cultural practices. In the past, Hawaii's sugar and pineapple industries

self-funded most of the research they needed to develop new varieties, respond to pests and diseases, and determine the best cultural and mechanical processes. Small farmers don't have these resources; they must rely on our universities to provide the research services they need.

Kohala Watershed

One of the greatest challenges facing Hawaii agriculture is the need for water delivery infrastructure. This is one of the areas where the transition from large- to small-scale agriculture has been most difficult. Hawaii's sugar plantations, in particular, had massive water delivery systems covering large acreage. Most of these systems have fallen into disrepair because there was no one to assume responsibility for maintaining the systems. Federal funding has been used to rehabilitate the Lower Hamakua Ditch Project. Other former sugar irrigation systems designed for plantation could be rehabilitated and used to bring water to our diversified farmers. A sugar-era irrigation system in east Kauai that is owned by the state but maintained and managed by a cooperative, the East Kauai Water Users Association, could benefit from federal support. Other systems, like the Ka'u irrigation system and the Kohala Ditch urgently need help to prevent further deterioration of these tremendous agricultural assets.

What We've Done: Congresswoman Hirono's top agricultural priorities since coming to Congress have been to address the need for (1) water delivery infrastructure, (2) Hawaii-specific research on crops, diseases, and pests, and (3) assisting Hawaii's farmers and ranchers address Hawaii-specific problems.

- **Water for Agriculture**. Among the Congresswoman's highest priorities have been addressing the limiting factor of water affecting farmers and ranchers.

    - She has been the champion in the House of the USDA's **Watershed Protection and Flood Prevention Program** (also known as PL 566). This program is especially appropriate for Hawaii because it can address large-scale projects that service a variety of farmers. No other federal agricultural program can meet Hawaii's needs in this regard. She has helped secure more than $8.7 million in earmarks (2007-2010) for the projects under the program, including the Lower Hamakua Ditch Watershed Project, which will service some 150 diversified farmers and ranchers on Hawaii Island; the Upcountry Maui Watershed Project;

the Lahaina Watershed (flood control) Project; and the Wailuku-Alenaio Watershed (flood control) Project in Hilo. Since the elimination of earmarks and in the face of efforts to eliminate the program, Congresswoman Hirono has also led efforts urging appropriators to fund the program. She was successful during consideration of the House Agricultural Appropriations bill in getting strong bipartisan support to restore $3 million to the program, which had been zeroed out.

- To further address farmers' water needs, Congresswoman Hirono worked to get Hawaii added to the **Agricultural Management Assistance (AMA) Program**, which among other benefits provides a federal cost-share of up to 75 percent for installation of new on-farm irrigation systems. The program was designed to help states that are underserved by federal crop insurance, but Hawaii wasn't one of the 15 states covered. The USDA determined that Hawaii wasn't underserved because we have fairly high usage of the few federal crops insurance products available. Congresswoman Hirono convinced members of the House Agriculture Committee that Hawaii was underserved because there were so few policies available, and as a result, Hawaii was added to the AMA program in the 2008 Farm Bill. Hawaii farmers and ranchers have received $777,000 in assistance from this program since its enactment, including $660,000 in direct financial assistance and $117,000 in technical assistance.

Agricultural Research to Address Hawaii's Needs

- *Specialty Crop Block Grants in 2008 Farm bill*. As a member of the Congressional Specialty Crops Caucus, Congresswoman Hirono has advocated for increased funding for specialty crops, which includes virtually everything that Hawaii grows. Traditionally, most of the Farm Bill crop funding has gone to support the so-called program crops: corn, wheat, cotton, rice, and soybeans. Members of districts that produce fruits and vegetables, which represent more than half the value of U.S. agriculture, were successful for the first time in the 2008 Farm Bill in securing significant funding for these grants. Some Hawaii grants provided under this program include:
    - UH College of Tropical Agriculture and Human Resources to provide specialty crop farmers with on-farm food safety training, education, outreach, and technical assistance.
    - Kokua Hawaii Foundation's 'AINA in Schools Program to provide educational materials and cafeteria procurement and preparation guides highlighting Hawaii specialty crops for use by Hawaii schools participating in the federal Fresh Fruits and Vegetable Program.

- Maui County Farm Bureau to implement a "Grown on Maui" program to provide a market edge for Maui farmers.

- *Support for research at the University of Hawaii and the USDA's Pacific Basin Agriculture Research Center (PBARC), located near the UH-Hilo campus*. Congresswoman Hirono has secured millions of dollars in earmarks for the College of Tropical Agriculture and for tropical agriculture research. She also secured funding for floriculture research, efforts to prevent the spread of the Varroa mite (affecting honeybees), and for research on pineapple, papaya, sugarcane, and exotic tropical fruit.
- *USDA Fruit fly sterilization and rearing facility*. Hirono successfully advocated for and secured funding for maintaining a Hawaii-based capability for raising sterile fruit flies to combat infestations of the Mediterranean fruit fly as well as the other three non-native fruit flies now established in Hawaii.
- *Biomass for renewable energy research*. Secured millions of dollars for the University of Hawaii's High Yield Feedstock and Biomass Conservation Technology for Renewable Energy Production and Economic Development program. The program seeks to answer questions about yields of different energy crops and to explore technologies to harvest and process such crops.

Other Assistance for Hawaii Farmers and Ranchers

- *Geographically Disadvantaged Farmers and Ranchers Program*. This program, created by Senator Inouye, was in the Senate version of the last Farm Bill. Congresswoman Hirono lobbied the leadership of the House Agriculture Committee to ensure its inclusion in the 2008 Farm Bill that became law. This program has helped farmers offset the higher cost of agricultural inputs by providing about $900,000 each year for small farmers.

- *Farm Bill Conservation Programs*. Many federal agriculture programs don't work well for Hawaii, but Farm Bill conservation programs are an exception. For example, the Environmental Quality Incentive Program (EQIP) provides around $9 million annually in financial and technical assistance to Hawaii's farmers and ranchers to help them comply with environmental laws and conserve water and soil. Hirono has been a consistent supporter of Farm Bill conservation programs.

- *Disaster Assistance*.
  - Hawaii's ranchers, who have had a very difficult few years, would be in far worst shape if not for federal disaster assistance programs, such as the Livestock Forage Program and the Livestock Indemnity Program.

Together, these programs provided almost $3.5 million to ranchers who faced losses due to drought conditions in 2011.

- Federal crop insurance has also worked well for the macadamia nut industry, with 71 percent of all acres covered. Insured macadamia nut growers in Hawaii received $2.5 million in compensation for losses in 2011, more than 5 times what they paid in premiums.
- We have newer crop insurance programs for coffee, papayas, and bananas, but there aren't policies for most of Hawaii's crops. There is, however, a disaster assistance program for which farmers who grow non-insured crops can sign up. In 2011, $4.4 million was paid to producers of non-insurable crops due to weather-related crop losses.
- Hawaii farmers face agricultural risks not shared by most farmers on the mainland. Damage from vog on Hawaii Island after the new vent opened at Halemaumau crater caused extensive losses for flower growers, especially in the Ka'u district. The vog continues to damage fencing in these areas. Congresswoman Hirono worked with USDA to get the word out to growers of a one-time opportunity to sign up for a general policy for non-insured crops that would make them retroactively eligible for disaster assistance from vog damage. A number of protea farmers were able to take advantage of this opportunity to at least cover a portion of their losses.

- *Support for Hawaii's* ***Four Resource Conservation & Development (RC&D) Councils.*** Hawaii's RC&Ds (Garden Island RC&D, Tri-Isle RC&D, Big Island RC&D, and Oahu RC&D Councils) have provided community-based leadership for agricultural development for many years. Congresswoman Hirono supported base funding for the national RC&D funding every year and was successful in securing additional funds in the House for Hawaii's RC&Ds. Unfortunately, Congress didn't fund RC&Ds in FY2011: Congresswoman Hirono is working with a group of like-minded members to support resuming funding for this program.

- ***Support for Organic Farmers.*** As a member of the House Organic Caucus, the Congresswoman has long supported both a strong national organic standard and funding to address the special needs of organic farmers. There are opportunities for Hawaii for import substitution in organic farming, as people who buy organic products value the concept of local production. And reducing or eliminating imports of organic produce would help reduce opportunities for new invasive pests and diseases to find their way to Hawaii.

- *Natural farming.* Congresswoman Hirono has been impressed by the results generated from using Korean "natural farming" techniques. One advantage is that the techniques rely on materials at hand and don't utilize imported fertilizers. Because of the interest in these methods among Hawaii farmers, the USDA's Natural Resources Conservation Service set aside some funds from the extra grant monies that the Hawaii Congressional Delegation was able to secure for Agricultural Development in Fiscal Year 2010. The Congresswoman learned that funds had not been distributed to farmers on Oahu. After following up with the funding agency, the grants were finalized and the farmers who won the grants have been notified.

Farmer Jesse Delaros shows Congresswoman Hirono 4.5 foot tall okra in Waianae valley, grown through natural farming techniques.

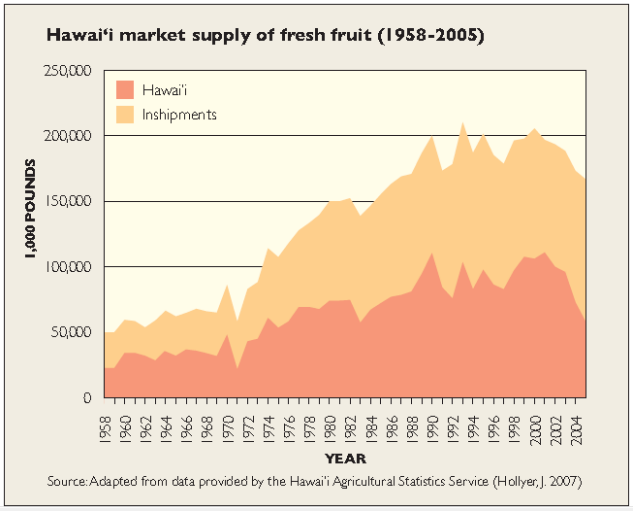
- *Working with federal agencies to solve specific problems for farmers*. For example, an orchid grower who recently contacted Congresswoman Hirono's office was frustrated because although he was certified to ship orchid plants with flowers on them, he needed a second certification from USDA to ship the flowers from the same plants in his certified nursery. After contacting USDA, the grower was certified to send flowers separately and USDA indicated that they would be looking at revising its rules based on this case. A change in policy will help other orchid growers to export flowers without having to get a second certificate.

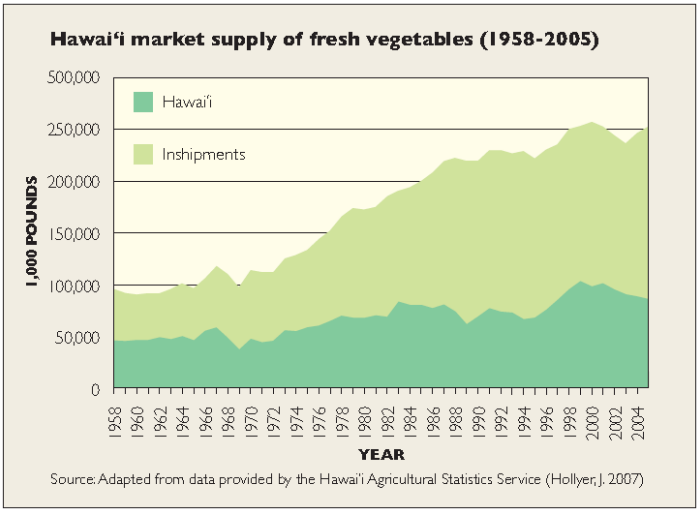
What's Next? Securing federal funding is becoming increasingly challenging. The 2008 Farm Bill, which provided the first substantial funding for specialty crops and strengthened the U.S. sugar program, expires on September 30, 2012. Funding for the 2012 Farm Bill is expected to be far lower than for the 2008 bill and there will be pressure to focus on the traditional beneficiaries of agricultural funding. Congresswoman Hirono will be fighting to protect the agricultural programs that matter most to Hawaii and that she has advocated for in the past.

In this time of declining federal funding, increased federal-state-county-private coordination will be critical. Hawaii's elected representatives at the federal, state, and county levels support agriculture, both as an economic force and as a way of life in our rural communities. Hawaii's farmers and ranchers have shown great ingenuity; they know better than any of us what help they need to succeed. We will continue to coordinate and even improve our efforts in meeting our

mutual goals of supporting our farmers and ranchers and in helping to make local food more available to Hawaii's consumers.

Producing More of the Food We Eat in Hawaii





The Challenge. Hawaii's farmers and ranchers face steep price competition from mainland competitors, who produce on a much larger scale than is possible in Hawaii. The cost of land is high and many of the agricultural inputs farmers need must be imported. Moreover, the transition from large-scale plantation agriculture to small-scale diversified farming has raised a variety of issues ranging from infrastructure for supply of agricultural water, to equipment repair, to research and marketing. In addition, farmers experience very high energy costs in Hawaii.

Fishing is another important component of our food security. We need to remember that what happens in the mountains and the shores affects the health of our coral reefs and our fisheries. We need to take appropriate actions to ensure the sustainability of our fisheries while ensuring the rights of subsistence and recreational fishers.

What We've Done: The key issue for Hawaii farmers is finding a market for what they produce that covers their costs of production and returns a reasonable profit. If we can grow it in Hawaii, we keep the money that would otherwise be sent outside of the state circulating in our economy. Hawaii's chefs and a few supermarkets have taken the lead in featuring local produce. Farmers markets are also a key outlet for local farmers. Congresswoman Hirono's priorities have been to:

- Support farmers markets, including the federal Senior Farmers Market Program and the Fresh Fruit and Vegetable Program in schools.
- Provide assistance through the Geographically Disadvantaged Farmer and Rancher Program to help offset the cost of importing agricultural inputs. In 2011, the program provided reimbursements of $884,845 to Hawaii farmers and ranchers.

- Encourage the buy local movement: Congresswoman Hirono is a cosponsor of the Local Farms, Food, and Jobs Act. This bill would bolster federal programs that support local and regional food systems, provide much-needed investment in rural communities, create jobs and support family farms, and help produce a bounty of healthy food for consumers. The bill would make it easier for schools to purchase local foods, establish a crop insurance program designed to meet the needs of organic and diversified farmers, and provide funding to build infrastructure necessary for farmers to sell their food locally.

What's Next? We need to identify the major constraints to producing and selling more of the food we eat here in Hawaii. To paraphrase respected farmer Richard Ha, who has said on more than one occasion: Farmers will grow crops if they can make money! So we need to figure out how we can help farmers prosper. Congresswoman Hirono believes the following are all a part of the solution:

- Increase promotion of Buy Local, based in part on the federal "Know Your Farmer, Know Your Food" initiative.
- Provide more outlets for farmers to sell their product directly to consumers.
- Increase assistance to small farmers on food safety issues. A food safety disaster, such as occurred in California with spinach and tomatoes, would seriously jeopardize our food security initiative.
- Promote school and community gardens so that families in Hawaii will become more used to eating fresh vegetables.

- Educate the public about the value of the traditional Hawaiian diet; in particular, support production of taro as the staple crop of Hawaii.
- Find ways to "grow" more farmers. The average age of Hawaii's farmers is approaching 60 years old. We need to prepare the next generation of farmers, ranchers, agricultural researchers, engineers, and entrepreneurs who will continue the effort to make Hawaii more food secure. The University of Hawaii's Community Colleges recently won a $24.6 million grant from the U.S. Departments of Labor and Education to work with local businesses to create and continue workforce development programs to train students for jobs in agriculture, energy, and healthcare. We also need to increase awareness of the Beginning Farmers and Ranchers Program, which provides preferential loans and technical

assistance to beginning farmers. In particular, Congresswoman Hirono wants to ensure that returning veterans from Iraq and Afghanistan have access to assistance if they would like to pursue agricultural careers.

- Build new linkages between farmers and institutions, farmers and restaurants, and farmers and academia. Congresswoman Hirono recently wrote USDA in support of a grant application by Kapiolani Community College to promote local food-to-institution linkages by establishing a culinary arts food production enterprise that will produce farm-to-school value-added meals for Hawaii's public school students. This provides culinary arts students with a working model of a food manufacturing, packaging, and research system; public school students with locally sourced nutritious food; and farmers with a new market.
- Celebrate and recognize companies, like KTA Supermarkets on Hawaii Island, that prominently feature local produce. KTA even has its own private label, Mountain Apple brand that features island-produced milk, eggs, beef, lamb, breads, cookies, coffee, and more.

Supporting Our Agricultural Exports

The Challenge. While sugar and pineapple have declined in Hawaii, we still have a very important sugar company on Maui on 34,000 acres that provides some 800 jobs. In addition, our coffee, macadamia nut, papaya, cattle, and seed industries bring in dollars from outside the state to support our economy. Crops that are used for dietary supplements, like spirulina (algae), noni, and awa have shown impressive growth. We need to make sure that we continue to nurture our existing industries and the jobs they provide as well to preserve our agricultural lands and open spaces.

What We've Done. Congresswoman Hirono supported strengthening the U.S. sugar program in the 2008 Farm Bill. This no-cost program brings some stability to our industry, while providing Americans with reasonably priced sugar. She has also opposed efforts in appropriations bills to eliminate the sugar program, which could lead to the demise of Hawaii's last sugar company.

Hirono also worked in the House to secure support for country of origin labeling for macadamia nuts, which was ultimately included in the Farm Bill.

In annual agricultural appropriations bills, Hirono has worked to strengthen funding for agricultural research that benefits Hawaii.

What's Next? One of Congresswoman Hirono's key priorities in the upcoming Farm Bill will be to make sure that the U.S. sugar program is not weakened. Another top priority will be to make sure that federal dollars continue to support research to address diseases and pests (like the coffee berry borer) that threaten our export industries.

We need to assess the health of our agricultural export industries and work to ensure that we meet the needs of these industries.

Not all of our export industries are old and long established. The success of the young Ka‘u coffee industry is especially encouraging. Three Ka‘u coffees recently placed in the top ten an international competition. What do we need to do to nurture this industry? How can we protect the Ka‘u coffee brand?

New Opportunities in Agriculture: Agritourism and the Hawaii Brand

The Challenge. Increasing the amount of food we produce for local consumption and ensuring the health of our agricultural export industries are important. Beyond these, where are there opportunities to help grow agriculture? Agritourism and promoting the Hawaii brand are key opportunities for additional economic growth. Some examples include:

- **Hawaiian Vanilla Company**, which is the only producer of vanilla in the United States, has expanded into a wide variety of value-added beauty and culinary products. Rather than try to place their products in stores on the mainland, the company brings visitors to the farm, lets them see how the product is grown, provides a meal using local ingredients, gives them an opportunity to shop for products, and builds a customer base for future internet sales. Whereas growing vanilla, which is very labor intensive, as a commodity in Hawaii makes no sense, producing it as part of a vertically integrated farming-manufacturing-tourism business makes a lot of sense. Hawaii is blessed with many return visitors. Many of these return visitors are looking for new experiences: agritourism is part of the answer.

- **Ali‘i Kula Lavender** was an early leader in the agritourism business. The lavender farm has become a significant visitor attraction on Maui and they have built a loyal following for their online business.

- **Parker/Kahua/Ponoholo ranches** all offer horseback riding and ATV touring opportunities to augment their cattle business. Parker Ranch even provides hunting opportunities for visitors.

- **Kahuku Farms on Oahu** provides tractor-pulled wagon tours of its fruit farm, a café, and both fresh fruit and value-added processed food, bath, and body products.

The Hawaii name is magic. People are willing to pay a little more to bring a little of it home with them.

Key Priorities

- **Agritourism**
    - Identify how we can help nurture this exciting new business. Do we need more commercial kitchens and places for small producers to sell their products?
    - Determine what opportunities exist for new agritourism businesses. What would visitors like to see?
    - Continue to push for passage of the Travel Regional Investment Partnership Act (TRIP Act), which will create a matching grant program to promote domestic tourism through local/regional partnerships. Congresswoman Hirono is an original cosponsor of the legislation (with Congressman Sam Farr of California). Promoting agritourism initiatives would be a natural type of project for such a grant.
    - Increasing the number of visitors, especially from China, and making it easier for Canadians to visit and stay longer would also be a boon to agritourism. Congresswoman Hirono's VISIT USA Act, a bipartisan bill supported by groups as diverse as the Chamber of Commerce and UNITE HERE, would make our visa process more efficient and help the United States get a larger share of the international tourism market.
- **Hawaii brand**
    - A lot of work has already gone into developing a Hawaii brand. Different islands have also developed their own brands.
    - Maintaining quality and authenticity is critical to maintaining the value of the Hawaii brand.

What's Next? We already have individuals in the states who are leading the way in both agritourism and the Hawaii brand (and island varients). How can government help? How can we expand agritourism in rural areas while minimizing any negative effects.

CONCLUSION

Making Hawaii more energy and food independent keeps dollars in Hawaii. It's a goal all of us can share. We appreciate your taking the time to read this paper and welcome your input and comments. There's a lot to do.

We know that energy and agriculture sustainability aren't the whole story. We need to address resource sustainability, like clean water for our families and protecting our unique environment and our open spaces. We need to improve our transportation infrastructure and promote smart growth that protects the quality of life we treasure. We need to strengthen our economy and our education system so Hawaii's children have opportunities here at home.

A great many people have been working for years to address the issues of sustainability. Congresswoman Hirono has been meeting with Hawaii leaders in agriculture and energy for many years and recently (April 2012) held a series of sustainability roundtables on Oahu, Kauai, Maui, and Hawaii Island. We want to learn from all of you. Let's work together to ensure a sustainable future for Hawaii.

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