SB 2357

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
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
Thursday, January 28, 2010
3:00 PM
State Capitol, Conference Room 225

in consideration of
SB 2357
RELATING TO RENEWABLE ENERGY.

Chair Gabbard, Vice Chair English, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) offers comments on SB 2357, which directs the Department of Land and Natural Resources (DLNR) to work with natural gas utility companies on planning and permitting processes to expedite the development of renewable energy resources. It also directs the development of a renewable portfolio standard for gas utilities, with oversight by the Public Utilities Commission (PUC).

While deferring to DLNR and the PUC on this matter, we would like to note that DBEDT has the statutory responsibility for coordinating and facilitating permitting for renewable energy projects under HRS 201-N.

We recognize the significant potential for the production and use of biomass-based gaseous fuels to displace synthetic natural gas in Hawaii and would like to recommend, as an alternative to the modifications in HRS sections 196-41, 296-91, 296-92, 296-93, 296-94 and

296-95 in this bill, that a new section be added to HRS section 196 to codify State support of alternative gaseous fuels.

Such a section could read, "The State shall facilitate the development of alternative gaseous fuels to displace fossil-based gaseous fuels, and support the attainment of a statewide alternative gaseous fuel standard of 25 per cent of gaseous fuel sales by 2020 and 40 per cent by 2030."

Thank you for the opportunity to offer these comments.

WRITTEN ONLY

TESTIMONY OF CARLITO P. CALIBOSO
CHAIRMAN, PUBLIC UTILITIES COMMISSION
DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
JANUARY 28, 2010

MEASURE: S.B. No. 2357
TITLE: Relating to Renewable Energy

Chair Gabbard and Members of the Committee:

DESCRIPTION:

This bill would establish renewable portfolio standards for natural gas utility companies.

POSITION:

The Public Utilities Commission ("Commission") supports the policy objectives of this bill.

COMMENTS:

This bill would require that natural gas utilities under the Commission's jurisdiction meet renewable portfolio standards ("RPS") of twenty-five per cent by 2020, and forty per cent by 2030. While gas utilities meeting the RPS would reduce the amount of fossil fuel burned in the state, the Commission is unsure of the potential ability or inability of the gas utility to meet any specific standards without further evaluation. The Commission is aware that the Gas Company is exploring ways in which it can use renewable sources for either its feedstock or its end product, but we do not have any information on whether the proposed standard is realistic and feasible.

Thank you for the opportunity to testify.

THE GAS COMPANY

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January 28, 2010

Testimony in opposition SB 2357 Relating to Renewable Energy

Aloha Chair Gabbard, Vice Chair English and Members of the Energy and Environment Committee:

My name is Stephanie Ackerman, Vice President Public Policy and Communications of The Gas Company. Thank you for the opportunity to provide testimony on SB 2357.

The Gas Company (TGC) is one of Hawaii's oldest, well-established and reliable businesses with a dedicated workforce of about 300 energy professionals working daily to ensure that our customers – large and small – get reliable gas energy for all their heating needs without interruption. TGC was founded in 1904 and is Hawaii's only government franchised full-service gas energy company making gas products and services available in Hawaii.

TGC manufactures synthetic natural gas (SNG) for its utility customers on Oahu and also provides both regulated and unregulated gas distribution throughout the state of Hawaii — Oahu, Maui, Hawaii, Kauai, Molokai and Lanai. We serve every community in our state with the lowest cost fuel for water heating, cooking and clothes drying. Our market research leads us to believe we supply about 20 percent of the resident market and about 70 percent of the Accommodations and Food Services industry – which includes primarily hotels, resorts and restaurants.

Our carbon footprint is 40 percent that of electricity on an energy equivalent basis. Equally as important, The Gas Company has developed, is committed to, and is already implementing a renewable energy strategy. Our strategy includes, among other technologies, utilizing methane from landfills, converting municipal solid waste to gas and recovering gas from other organic sources such as animal, fish, and vegetable fats, thus further reducing Hawaii's carbon footprint. We expect in five years to have 50 percent of our SNG feedstock from renewables. Already, a portion of The Gas Company's production comes from recycled wastewater.

We respectfully oppose this measure and ask that you hold it.

Unlike the comprehensive due diligence process that was afforded to the electric company, if enacted, SB 2357 would unfairly force TGC to comply with an arbitrary set of RPS without any substantive justification to support its basis. As defined in SB 2357 the gas we will produce from plant oil, animal fat, or municipal waste would not qualify as renewable. More importantly, this measure is more restrictive to TGC than to the electric utility. The electric utility is not allowed to add petroleum based generating capacity but they can keep what is now in place. The provisions of SB 2357, require TGC to replace our existing facilities with new facilities that handle renewable fuels thereby forcing us to retire our existing SNG plant at a substantial cost to our customers.

Currently, TGC is in the midst of investing millions of dollars of our own funds as we move toward creating more renewable energy. These initiatives will take some time to develop as it involves technology that has not been used at this scale ever before. To our company, they represent the same kinds of challenges faced by the State in its efforts to build the undersea cable between Lanai, Molokai, and Oahu. As a result, we cannot now know, in which year we will achieve our goal of producing 50% of our gas from renewable and sustainable sources. More importantly, since our initiative relies heavily on Hawaii produced material, we may not be able to acquire the volumes we need when our plant is ready to accept them. By way of example, if a city is committed to shipping its municipal solid waste to the mainland under a long term contract, then we will need to wait for that material to become available to us.

The Gas Company does not want to be in a position of having to import material like Palm Oil just to comply with the technical provisions of a statute.

It is also difficult for us to commit to a particular time schedule since we are using our own funds to develop this technology. TGC has not sought tax credits or government subsidies. We need the flexibility and ability to pursue the renewable energy sources that best serve our customers. This measure imposes unfair standards and requirements that could hamper our ability to move toward a renewable energy future, and harm our business and our customers.

Four years ago, the state and federal governments, utility regulators, Consumer Advocate on behalf of consumers, and the Hawaiian Electric Companies all came together to work in collaboration to create an energy Agreement that was aimed at reducing Hawaii's dependence on imported petroleum. While this Agreement incorporated new metrics for measurement and oversight so that the State could monitor its clean energy progress, all of the parties came to a mutual agreement before any Renewable Portfolio Standards (RPS) were ever presented the Hawaii Legislature to be enacted into law. In addition, the parties through mutual consent crafted and structured the formation of integrated resource planning; the establishment of a Public Benefits Fund (PBF); the formation of a new rate structure which allowed for decoupling, feed-in tariffs, and net energy metering measures. And lastly, the parties agreed to support the development of Energy Efficiency Portfolio Standards for the State of Hawaii.

We believe that without adequate planning, experimentation, and time to report to and discuss the measure with the legislature, the Gas Company's operations could be irreparably harmed.

By way of example, we note that there is no definition of renewable energy sources of biogas. We query whether biogas would have to come from products grown or produced in Hawaii to be considered renewable. Reliance only on local resources may potentially hamper the state's ability to transition to the production of biogas or other biofuels. We urge you to work with us as we develop technology that may provide a model for an energy platform for the rest of our nation. We have voluntarily embraced the need to move away from petroleum as a source of energy for our State. We urge you not to adopt this legislation that will force us to an alternative that does not permit us to provide the best solution for Hawaii's energy needs.

In the interest of time, we have limited our comments to the overall impact of this legislation, but we are willing to work with the legislature to explore the impact of legislation and to consider further such discussions and ask that you will give us the opportunity to do so. Again, we ask that you hold this measure, and instead allow TGC to continue to independently pursue our renewable initiatives.

Mahalo for the opportunity to testify.

Proposed Amendments to S.B. 2357 (bold, underlined and italics):

1. Ensure that renewable sources of hydrocarbons are not excluded from the definition of "natural gas" in such a way that the RPS is unable to be met.

Insert after the proposed definition of "natural gas" the language in bold, italics as follows:

""Natural gas" means any hydrocarbons or mixture of hydrocarbons and other gases consisting primarily of methane which at normal operating conditions is in a gaseous state. "Natural gas" includes synthetic natural gas. ***For purposes of this section, "hydrocarbons" may include methane, renewable diesel, fuel oil, naptha if sourced from non-petroleum feed stock, including but not limited to plant oil, algae and algae products, organic material, organic waste, municipal solid, waste water or sewage waste.***

2. Provide credit toward meeting the natural gas Renewable Portfolio Standard for the "input value" (e.g. both the quantity and energy value of renewable feedstock. The current draft provides credit toward the RPS only for the methane component. Provide energy efficiency credit to providers of natural gas for savings at natural gas production facilities and customer premises in a manner similar to other utilities.

Insert after the proposed RPS the language in bold, italics as follows:

(b) Each natural gas utility company that sells natural gas for consumption in the State shall establish a renewable portfolio standard of:

(1) Twenty-five per cent of its natural gas sales by December 31, 2020; and

(2) Forty per cent of its natural gas sales by December 31, 2030.

Notwithstanding any other provision herein, the "input value" which shall be defined as both the quantity and energy value of any renewable feedstock shall be counted toward the compliance with sections (b)(1) and (b)(2) above. Furthermore, energy efficiency savings at any natural gas production facility within the state or as experienced by the natural gas end user shall be credited toward compliance of the natural gas producer with sections (b)(1) and (b)(2) above.

3. Base Renewable Portfolio Standards on a parity basis with other utilities, e.g. take into account the energy efficiency of natural gas which is approximately 300 percent of petroleum measured at the refinery input.

Insert, additionally, the following language in bold, italics:

For purposes of this section natural gas "energy efficiency savings" shall be calculated on the basis of three times that of the petroleum it displaces, as measured at the refinery input.

4. Provide natural gas producers with the opportunity to benefit on a parity basis to other utilities in all tariffs, credits, grants and other programs offered as renewable energy incentives and initiatives at the producer or end-user levels.

Insert a new section "5" into the bill, with the following language in bold, italics:

A natural gas utility company may, for purposes of this section, apply for, be granted, benefit from or otherwise participate in each and every state tariff, credit, grant or other program offered to any electrical utility for renewable initiatives at the natural gas producer or end user levels to the full extent otherwise provided by law.

5. Establish a process equivalent to the one established for the electrical utility to establish a Renewable Portfolio Standard prior to the adoption of final provisions on the renewable energy component and percent of gas composition.

Insert a new section "6" into the bill, with the following language in bold, italics:

Notwithstanding any other provision herein as to the date certain for compliance, no renewable portfolio standard shall be imposed on natural gas until the chair of the state Public Utilities Commission has certified that a process equivalent to that established for the electrical utility to establish the electrical utilities' renewable portfolio standards shall have been completed.

6. Ensure that a "favored nations" clause can protect all utilities on a parity basis and that no benefit shall inure to any utility that is a non-natural gas producer as a result of this measure.

Natural gas utilities shall be granted any and all benefits to which any electrical utility is, has been, or will be entitled as a result of the adoption of any renewable energy portfolio standards in this act or any other applicable legislation, regulation or procedure adopted by any regulatory body including but not limited to the Hawaii Public Utilities Commission.

7. Insert a defective date to ensure that additional constructive dialog can take place prior to adoption of this measure.

This Act shall take effect on July 1, 2099.

MĀLAMA I KA HONUA

Sierra Club
Hawaiʻi Chapter
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SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

January 28, 2010, 3:00 P.M.

(Testimony is 2 pages long)

TESTIMONY IN STRONG SUPPORT OF SB 2357, WITH A PROPOSED AMENDMENT

Aloha Chair Gabbard and Members of the Committee:

The Sierra Club, Hawai`i Chapter strongly supports SB 2357, which creates a renewable portfolio standard for natural gas utilities. We suggest, however, that the standards proposed (25% by 2020, 40% by 2030) ***be amended to reflect the testimony submitted by the Gas Company to this body, i.e., a commitment to 50% renewable by 2015.***

The Gas Company has repeatedly made public commitments towards renewable energy. For example, last year the Gas Company testified that it was "developing a renewable energy strategy to produce 50 percent of its supply from renewable resources such as landfill gas and bio-methane within five years."[1] A public Gas Company ad proclaims that natural gas is the best heat energy "next to the Sun itself"[2]

With 67,000 customers[3] (more than the County of Kauai), we know that the Gas Company has a very real impact on Hawai`i's energy security and greenhouse gas production. This measure connects the Gas Company's public rhetoric to a quantifiable and established standard. It would also put the electrical and gas industries on similar footing with respect to moving Hawai`i to a clean and renewable energy future.

There are additional benefits to this measure. Natural gas can be made from renewable resources, such as sugarcane or even waste products. These materials are neither as scarce nor as expensive as crude oil. Even more importantly, these materials are available here. By passing SB 2357, Hawaiʻi would set a clear course for a steady, incremental transition to renewable fuels.

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1 Testimony of Jeffrey Kissel, February 5, 2009 regarding Senate Bill 1348.

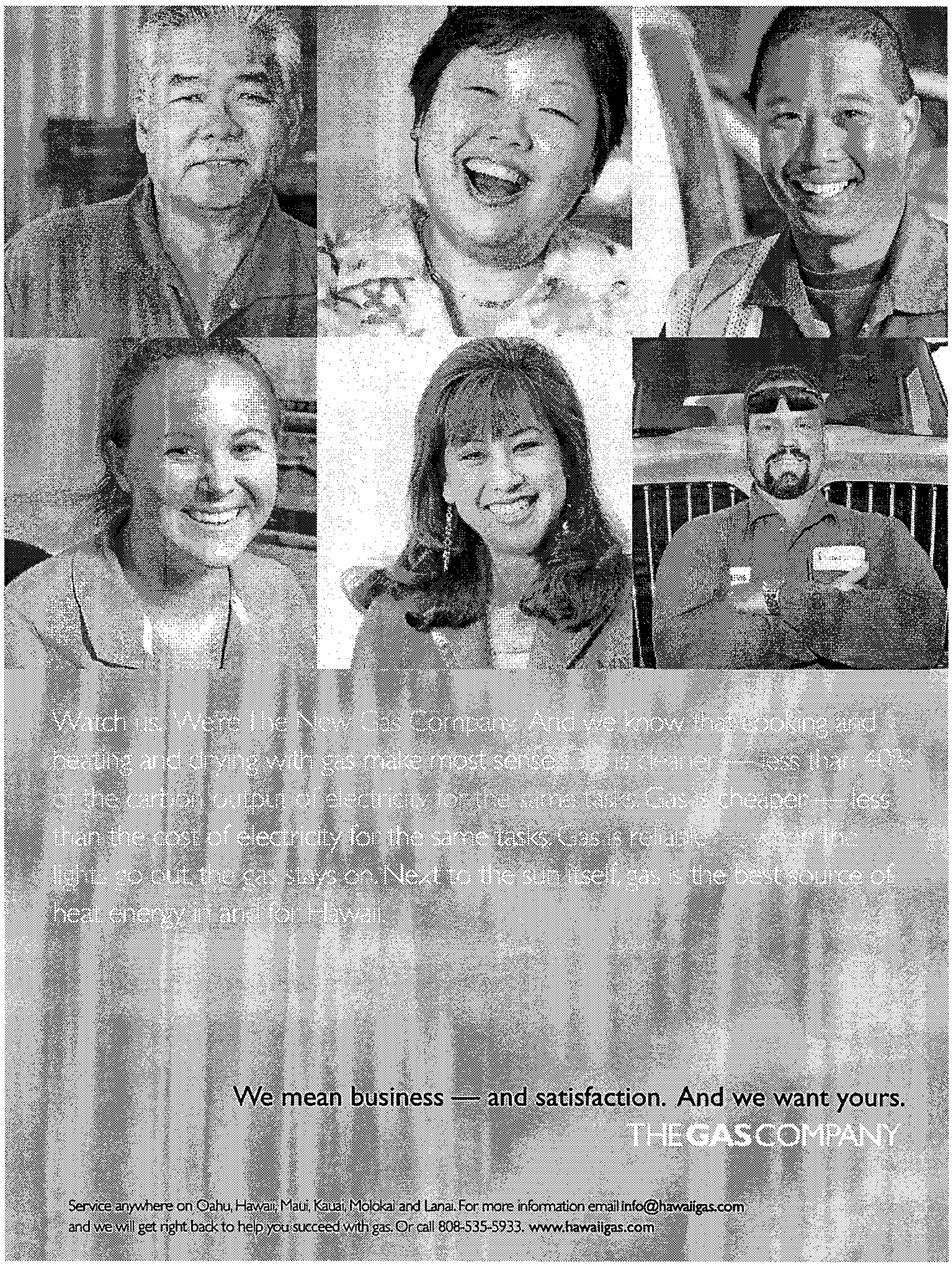
2 *See* page 2.

3 Testimony submitted by Steven Golden on March 13, 2008 to Senate Bill 644 SD 3.

This measure could lower fuel costs, diversify our fuel supply, provide energy security and create a new market for Hawaii farmers to produce fuel from Hawaii crops and waste materials.

Thank you for this opportunity to provide testimony.

An example of the Gas Company's environmental marketing



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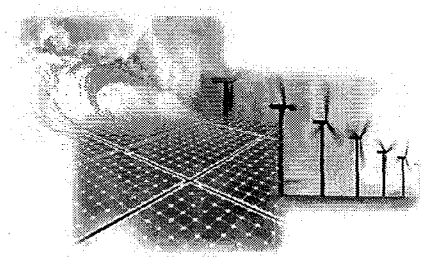

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
January 28, 2010, 3:00 P.M.
Room 225

(Testimony is 3 pages long)

TESTIMONY IN SUPPORT OF SB 2357, SUGGESTED AMENDMENT

Chair Gabbard and members of the Committee:

The Blue Planet Foundation supports Senate Bill 2357, a measure to expand the benefits of the renewable portfolio standard to natural gas utility companies. This measure will help to wean Hawai'i from imported oil while helping to avoid a distorted energy market as the electric utilities are required to comply with a renewable portfolio standard.

Blue Planet applauds the Gas Company for its stated efforts to produce more of its synthetic natural gas (SNG) from renewable and plant-based sources. We believe that SB 2357 should be amended to codify the Gas Company's goals: 15% renewable standard by 2012 and 50% by 2015.

By using local sources to create SNG, Hawai'i can reduce its carbon emissions while weaning itself from fossil fuel. Further, the new renewable gas feedstock market may help support local agricultural operations and waste recycling operations.

The Gas Company has suggested that it is prepared to aggressively move forward to use more plant-based and renewable sources as SNG feedstock. The attached *Honolulu Advertiser* article from November 22, 2009 (with emphasis added) discusses the Gas Company's plans and their belief that integrating high amounts of local feedstock is a good business decision and may save gas customers money.

We ask that this committee amend SB 2357 with a 15% gas RPS by 2012 and a 50% gas RPS by 2015.

Thank you for the opportunity to testify.

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Honolulu Advertiser

NOVEMBER 22, 2009

GAS COMPANY SETS PLANS TO TURN FAT INTO FUEL

By Greg Wiles

Hawai'i's sole producer of synthetic natural gas is turning to the barnyard as it looks to go greener with renewable fuel sources.

The Gas Company is eyeing animal fats -- some of it being tossed into landfills now -- as a means to produce half of its synthetic natural gas by the year 2015.

It's drawn up plans to turn fats such as beef tallow, poultry fat and choice white grease from pigs into biomethane, a gas that's chemically identical to natural gas. Currently the company uses petroleum byproducts from local refineries for its feedstock.

"We hope to in five years be about 50 percent renewables in our system," said Jeffrey Kissel, president and chief executive officer of the Honolulu-based company.

"As we ramp up, I hope we create demand for local production so we can buy the majority of our material from local resources."

Already, 5 percent of the company's production at its Campbell Industrial Park plant is from agricultural feedstocks, with Kissel setting a goal of boosting it to 15 percent by the end of March.

By the end of the year, he wants 1 million gallons of the 20 million to 25 million gallons of feedstock used annually to be from renewable resources.

The effort is in keeping with goals by the state of weaning itself off petroleum for economic and security reasons. Oil accounts for almost 90 percent of all energy consumed in Hawai'i, making the state more dependent on imported petroleum than anywhere in the country. Three-quarters of the state's electricity is generated using oil as a fuel.

The problems with this addiction were apparent last year when crude oil spiked to $147 a barrel in July 2008, sending Hawai'i's nation-leading gasoline and electricity prices to record highs. The oil shock drove home an already stated goal by Gov. Linda

Lingle of converting Hawai'i into a renewable energy model for others to emulate. Lingle set a target of having 70 percent of the state's energy come from renewables by 2030. Hawai'i's electric utilities have signed on to the effort, while there's been a jump in interest in solar photovoltaics, wind energy and geothermal endeavors. Not-so-well-known alternate energy technologies such as wave power and ocean thermal energy conversion are also receiving serious consideration.

"We need to create an energy system that will survive," said Ted Peck, state energy administrator.

"It makes sense from an energy security standpoint. At $75 a barrel it makes sense from a business standpoint."

RENEWED INTEREST

The Gas Company isn't subject to renewable portfolio standards as are the state's utilities. But Kissel said the company and its parent, Macquarie Infrastructure Co., decided it made good business sense in that it would produce sustained returns on a long-term basis.

The project uses technology that's been around for years. But there's been renewed interest of late in using animal and other fats to produce fuels. Pacific Gas & Electric on the Mainland is looking at a pilot project, and in Louisiana, Tyson Foods and Syntroleum Corp. formed a company to produce biodiesel and jet fuels from chicken fat and other animal oils.

In Hawai'i, Hawaiian Electric Co. will do testing of its new $137 million generator using biodiesel from Renewable Energy Group, an Iowa-based company that will provide fuel made from animal fats.

While Hawai'i's use of natural gas is lowest of any state, it still has a good market among hotels and restaurants that use the gas on O'ahu as a more efficient alternative for heating water and cooking compared to electricity. The Gas Co., formed in 1904, maintains 1,100 miles of pipelines that deliver synthetic natural gas to 28,000 customers.

Kissel said the company has the only operating SNG plant in the U.S. and provides an advantage for the renewable venture since The Gas Co. won't have to invest millions into building a plant. Instead, he said existing equipment will be converted to accommodate the new feedstock at a cost of less than $10 million that will be funded out of the company's operations.

The company has formed a joint venture with energy and power industry contractor Primoris Services Co. of Lake Forest, Calif., to work out processes for the renewable project. Hawai'i's SNG customers pay the highest rates in the country, with local prices quoted by the U.S. Energy Information Administration being more than two times the next closest state's average.

<u>Kissel said the project may actually lower prices for The Gas Co. customers depending on what it has to pay for the animal fat. The utility does not make a profit on feedstock prices, which are passed directly through to customers.</u>

<u>"We will not be raising rates as a result of this," Kissel said. He noted the price cuts will depend on what's paid for feedstock, with animal fats ranging between 5 percent and 20 percent less expensive than the current feedstock.</u>

ISLES WOULD BENEFIT

Moreover, the venture could provide a catalyst for more cattle ranching or agriculture operations in the state. It also could take methane gas produced by landfills or use algae as a feedstock, Kissel said.

"If we provide a market for local commodities we'll be generating more jobs here and making Hawai'i more sustainable from a food-producing standpoint," he said.

Then there are the environmental benefits of reducing the state's carbon footprint by switching from oil. It won't process used restaurant oil that's currently refined by Pacific Biodiesel Inc. on Maui and O'ahu for transportation fuel. The initial concentration will be on use of animal and fish fats.

"If the Gas Company has found a local supply, we would look favorably on that," said Henry Curtis, executive director of Life of the Land, a nonprofit environmental group following the state's energy issues.

"It's important to reuse this material."

The renewable process will also produce propane that can eventually be sold to the company's customers on the Neighbor Islands, as well as hydrogen. Kissel said the surplus hydrogen is being investigated for possible uses as a transportation fuel or fuel cells.

"What the Gas Company is doing is just tremendously exciting," said Peck, the state's energy czar.

"They're really moving and we're thrilled."