STAND. COM. REP. NO. 459

Honolulu, Hawaii FFB 16 2007

RE: S.B. No. 1669

S.D. 1

Honorable Colleen Hanabusa President of the Senate Twenty-Fourth State Legislature Regular Session of 2007 State of Hawaii

Madam:

Your Committees on Energy and Environment and Education, to which was referred S.B. No. 1669 entitled:

"A BILL FOR AN ACT RELATING TO ENERGY,"

beg leave to report as follows:

The purpose of this measure is to appropriate funds for various renewable energy projects in Hawaii.

This measure appropriates \$3,000,000 for fiscal year 2007-2008, for the research and development of a five-acre pilot project, to be located at the Natural Energy Laboratory of Hawaii, to produce biodiesel from marine algae.

This measure also appropriates \$5,250,000 for fiscal year 2007-2008, to establish the Hawaii Renewable Energy and Biofuel Center in Maui, to equip the University of Hawaii at Hilo, College of Agriculture, Forestry and Natural Resources Management with an oil and feedmill building to house existing equipment to be used in processing oilseed and for research and demonstration of a germplasm collection.

Testimony in support of this measure was submitted by the University of Hawaii at Manoa, the University of Hawaii at Hilo, Hawaiian Electric Company, Inc., the World Business Academy, Enterprise Honolulu, Hawaii Biodiesel Consortium, the Sierra Club, Hawaii Chapter, Aloha Green, and Oceanic Institute.

Your Committees find that while ethanol can be used in cars, biodiesel or bio-jet fuel is needed for heavy transportation, ships, and jetliners. One means with excellent potential for producing biodiesel fuel is to extract it from algae, especially salt water or marine algae. Algae can produce vastly more biofuel oil per acre than any other source. Using current technology for producing marine algae, six thousand gallons per acre of biodiesel from algae is a realistic production target. This compares to a fuel yield of only fifteen hundred gallons per acre for sugarcane ethanol produced using the Brazilian method. Algae uses no fresh water and far less land than any other biofuel crop, and can be grown on any land that is near the ocean. Algae from sea water would have the added benefit of consuming excess carbon dioxide as an aid to algae growth, reducing a harmful greenhouse gas that contributes to global warming.

Your Committees further find that Maui county has declared that its top priority in renewable energy and biodiesel production is a facility to house the concerted research and demonstration activities needed for feedstock development. The facility would also be home to the development of supporting related technologies that will truly create a sustainable biofuel industry in the State of Hawaii.

Your Committees further find that while this measure, in part, appropriates funding for the research and development of a five-acre pilot project, to be located at the Natural Energy Laboratory of Hawaii in order to produce biodiesel from marine algae, private funding exists for this purpose. To this end, your Committees amended this measure by removing this appropriation and amending the purpose section to reflect this deletion.

It is the intent of your Committees to appropriate funds to establish the Hawaii Renewable Energy and Biofuel Center in Maui, to equip the University of Hawaii at Hilo, College of Agriculture, Forestry and Natural Resources Management with an oil and feedmill building to house existing equipment to be used in processing oilseed, and providing funding for research and demonstration of a germplasm collection.

As affirmed by the records of votes of the members of your Committees on Energy and Environment and Education that are attached to this report, your Committees are in accord with the intent and purpose of S.B. No. 1669, as amended herein, and recommend that it pass Second Reading in the form attached hereto

as S.B. No. 1669, S.D. 1, and be referred to the Committee on Ways and Means.

Respectfully submitted on behalf of the members of the Committees on Energy and Environment and Education,

JORMAN SAKAMOTO, Chair

RON MENOR, Chair

The Senate Twenty-Fourth Legislature State of Hawaii

Record of Votes Committee on Energy and Environment ENE

Bill / Resolution No.:* Committee Referral: Date: SB 1669 ENE/EDU, WAM 2/03/57								
The committee is reconsidering its previous decision on this measure. If so, then the previous decision was to:								
The Recommendation is:								
Pass, unamended Pass, with amendments Hold Recommit 2312 2311 2310 2313								
Members	Aye	Aye (WR)	Nay	Excused				
MENOR, Ron (C)	4							
HOOSER, Gary L. (VC)	<i>''</i>							
IHARA, Jr., Les	V							
KOKUBUN, Russell S.				1				
TRIMBLE, Gordon	W_							
TOTAL	9		Verentifikasuumanaanaa	1				
Recommendation: Adopted								
Chair's or Designee's Signature:								
Distribution: Original Yellow Pink File with Committee Report Clerk's Office Drafting Agency								

*Only one measure per Record of Votes

The Senate Twenty-Fourth Legislature State of Hawaii

Record of Votes Committee on Education EDU

Bill / Resolution No.:*	Committee Referral: Date:							
53 1669	ENELEDY, WAM 02/15/07							
The committee is reconsidering its previous decision on this measure. If so, then the previous decision was to:								
The Recommendation is:								
Pass, unamended Pass, with amendments Hold Recommit 2312 2311 2310 2313								
Members		Aye	Aye (WR)	Nay	Excused			
SAKAMOTO, Norman (C)		X .						
TOKUDA, Jill N. (VC)		Yanana Yanan						
CHUN OAKLAND, Suzanne		1			X			
HEE, Clayton					X			
NISHIHARA, Clarence K.		X						
TANIGUCHI, Brian T.					X			
GABBARD, Mike		X						
		150 AT 150 HS 1850 HS						
				~	COOPERSON AND DESCRIPTION			
TOTAL	-	4	Ø	P	3			
Recommendation: Adopted Not Adopted								
Chair's or Designee's Signature:								
Distribution: Original Yellow Pink File with Committee Report Clerk's Office Drafting Agency								