

JAN 28 2009

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# A BILL FOR AN ACT

RELATING TO ENERGY INDEPENDENCE.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

1           SECTION 1. The legislature finds that in the coming years,  
2 it will be crucial for the United States and its allies to  
3 establish sustainable and affordable new energy sources.  
4 Nowhere is this need more pressing than in Hawaii and throughout  
5 the Pacific Basin. The economy of the State and vital United  
6 States emergency and security operations across the region  
7 depend upon identifying, developing, demonstrating, and  
8 validating sustainable and affordable alternative sources of  
9 energy. Hawaii currently imports more than ninety per cent of  
10 the State's energy in the form of fossil fuels, which has a  
11 tremendous cost to Hawaii's economy. Although green energy  
12 technologies, such as conventional photovoltaic arrays and  
13 traditional biomass fuels, exist, these technologies alone are  
14 incapable of meeting Hawaii's challenges.

15           The legislature finds that new technologies have emerged  
16 during the past decade that may be used to make Hawaii energy  
17 independent within a generation. These technologies include new



1 solutions in space, such as space solar power and solar energy  
2 system management satellites, and ground-based systems, such as  
3 integrated solar energy systems, solar-augmented synthetic  
4 fuels, and "brilliant grids" for power distribution.

5       The legislature finds that identifying and making  
6 significant new investments in sustainable and affordable energy  
7 solutions will be a priority for the United States government  
8 and many other countries during the next several years. Hawaii  
9 has already established a leadership position in the development  
10 and demonstration of key new technologies, in particular,  
11 through the success of a recent international demonstration of  
12 wireless solar power transmission technologies between the  
13 islands of Maui and Hawaii. The legislature further finds that  
14 Hawaii has a strong foundation of innovative small businesses  
15 and robust educational institutions, as well as the presence of  
16 major international industries across the State. Accordingly,  
17 the legislature finds that a focused new initiative is needed to  
18 establish Hawaii as one of the principal leaders in research,  
19 commercialization, and application of new ground-based and  
20 space-based energy technologies.

21       The purpose of this Act is to create an energy initiative  
22 that will:



- 1           (1) Lead the development and demonstration of  
2           transformational new energy technologies, including  
3           both space and terrestrial solar energy solutions;
- 4           (2) Demonstrate that Hawaii is a leader in renewable  
5           energy development;
- 6           (3) Implement a portfolio of visionary short-term and  
7           long-term energy solutions;
- 8           (4) Create profitable high-quality new business  
9           opportunities for innovative technology-based start-up  
10          firms in Hawaii;
- 11          (5) Establish Hawaii as a world-class leader in  
12          sustainable energy education, research, development,  
13          demonstrations, manufacturing, and operations; and
- 14          (6) Enable Hawaii to achieve energy self-sufficiency  
15          within a generation, as an example for the rest of the  
16          world.

17          SECTION 2. (a) The energy resources coordinator shall  
18          establish a government-industry consortium which shall:

- 19          (1) Establish the Sustainable Energy Innovation, LLC, to  
20          leverage the systems' expertise of the various  
21          universities and aerospace industries located in  
22          Hawaii;



- 1           (2) Seek federal and private industry funding for  
2           renewable energy technology research;
- 3           (3) Develop and demonstrate advanced energy technology  
4           projects and testing in Hawaii, including space solar  
5           power prototypes, integrated solar energy systems, and  
6           green fuel generation, beginning with integrated  
7           ground-based testing of the first prototype solar  
8           power satellite;
- 9           (4) Provide funding for qualified small business ventures  
10          to work on projects in partnership with the University  
11          of Hawaii and other universities, corporations, and  
12          the international community to rapidly establish  
13          renewable energy technologies and businesses; and
- 14          (5) Assist the University of Hawaii to develop new  
15          curricula for advanced sustainable energy economics  
16          and systems and to lead the education of the next  
17          generation of researchers, engineers, and technicians.
- 18          (b) The energy resources coordinator shall seek  
19          participation in the government-industry consortium from:
- 20               (1) The department of business, economic development, and  
21               tourism;
- 22               (2) The University of Hawaii;



- 1           (3) Managed Energy Technologies, LLC;
- 2           (4) Federal agencies, including but not limited to the
- 3           Department of Energy, National Science Foundation,
- 4           National Aeronautics and Space Administration, Office
- 5           of Naval Research, and Defense Advanced Research
- 6           Projects Agency; and
- 7           (5) National and international energy experts, such as the
- 8           Boeing Company, Lockheed Martin Corporation, ENTECH,
- 9           Inc., Battelle Memorial Institute, Kobe University,
- 10          Mitsubishi Trading Company, Auburn University, and
- 11          Texas A&M University.

12           (c) The energy resources coordinator shall submit an

13   annual report of the findings and progress of the government-

14   industry consortium to the legislature no later than twenty days

15   prior to the convening of each regular session.

16           SECTION 3. There is appropriated out of the general

17   revenues of the State of Hawaii the sum of \$1,000,000 or so much

18   thereof as may be necessary for fiscal year 2009-2010 and

19   \$2,000,000 or so much thereof as may be necessary for fiscal

20   year 2010-2011 for the organization and operations of the

21   government-industry consortium pursuant to section 2 of this

22   Act.



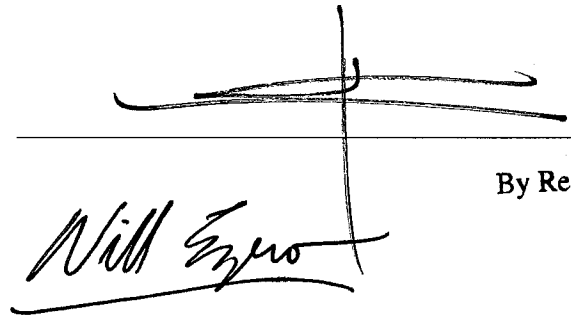
# S.B. NO. 1303

1           The sums appropriated shall be expended by the department  
2 of business, economic development, and tourism for the purposes  
3 of this Act.

4           SECTION 4. This Act shall take effect on July 1, 2009.

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INTRODUCED BY: \_\_\_\_\_

A handwritten signature in cursive script, appearing to read "Will Ezyro", is written over a horizontal line. A vertical line intersects the horizontal line, extending upwards and downwards.

By Request



**Report Title:**

Energy Independence; Government-Industry Consortium

**Description:**

Directs the energy resources coordinator to establish a government-industry consortium for funding, research, and development of renewable energy resources.

