
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 \$ or so
 18 much thereof as may be necessary for fiscal year 2009-2010 and
 19 \$ 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.

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.

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. (SD1)