
A BILL FOR AN ACT

RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS SUSTAINABLE CONCRETE INITIATIVE.

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

1 SECTION 1. The legislature finds that the Pacific
2 international space center for exploration systems, including its
3 proposed aerospace technology research and development park
4 project, is an economic driver for the island of Hawaii that
5 promotes the establishment and growth of new sustainable and
6 green industries along with associated jobs, workforce
7 development, internships, and science, technology, engineering,
8 and math education programs.

9 The legislature also finds that the Pacific international
10 space center for exploration systems aerospace technology
11 research and development park project will attract investment
12 that will help leverage the costs of expanding the island of
13 Hawaii's broadband capacity.

14 Current market demands for concrete in Hawaii are primarily
15 met through cement and asphalt imports. Research and
16 development enabling innovative technologies in basalt concrete



1 composition and delivery is an attractive and self-sustaining
2 alternative to continued cement and bitumen imports.

3 There is also interest in and work being done on developing
4 various basaltic concrete binding methods at the National
5 Aeronautics and Space Administration, Hanyang University of
6 Korea, Purdue University, American Society of Civil Engineers,
7 and many other professional organizations. In addition to
8 enabling three dimensional concrete printing technology, this
9 work holds amazing potential for creating advanced manufacturing
10 jobs and inexpensive building options in the State of Hawaii.

11 The proposed Pacific international space center for
12 exploration systems sustainable concrete initiative is an
13 important step toward realizing this potential, providing an
14 investment in the future of Hawaii and its economy by offering a
15 self-sufficient and in-situ source of concrete for local
16 applications.

17 The purpose of this Act is to provide state funding to
18 support the investigative stage of the Pacific international
19 space center for exploration systems sustainable concrete
20 initiative, to be matched by funds from out-of-state parties
21 interested in investing in the Pacific international space
22 center for exploration systems sustainable concrete initiative.



1 This investigative stage will help identify appropriate binding
2 methods and technologies; quantifiably test and validate the
3 identified technologies in terms of durability, compressive
4 strength, and other ASTM International certification standards;
5 and help identify appropriate out-of-state partners and
6 investors, as well as other extramural funding sources, for
7 program development.

8 SECTION 2. There is appropriated out of the general
9 revenues of the State of Hawaii the sum of \$ or so much
10 thereof as may be necessary for fiscal year 2013-2014 to support
11 the investigative stage of the Pacific international space
12 center for exploration systems sustainable concrete initiative;
13 provided that these funds are matched dollar-for-dollar from
14 sources outside the State of Hawaii, including but not limited
15 to the federal government, private industry, universities, and
16 other state governments.

17 The sum appropriated shall be expended by the department of
18 business, economic development, and tourism for the purposes of
19 this Act.

20 SECTION 3. The Pacific international space center for
21 exploration systems shall submit a report that includes:



- 1 (1) An updated business plan regarding the aerospace
2 technology research and development park project;
- 3 (2) Details on any progress made toward the development of
4 a world-class space center in Hawaii;
- 5 (3) The development of technologies for basalt concrete
6 composition and delivery and any effect on the level
7 of cement and bitumen imports into the State;
- 8 (4) The status of all working relationships with
9 educational and research institutions, federal
10 agencies, and local industry on the use of existing
11 basalt resources in the State to identify, verify, and
12 validate sustainable and in-situ concrete binders;
- 13 (5) Details on any progress made toward the development of
14 a robotic operator training and certification program,
15 including program location, course and curriculum
16 development, and when the program is expected to begin
17 accepting students;
- 18 (6) The level of private sector investment in aerospace
19 and related industries, including the number and
20 nature of any partnerships with private industry to
21 facilitate state-based manufacturing and operations
22 related to green energy technology;



1 (7) The status of the memorandum of understanding with
2 Hawaii Techworks and the east Hawaii community
3 development corporation regarding the cultivation of a
4 skilled local workforce to support planned
5 manufacturing operations; and

6 (8) A detailed statement of assets, liabilities, revenues,
7 and expenses for each fiscal year ending June 30,
8 to the legislature no later than September 1, 2013.

9 SECTION 4. This Act shall take effect on July 1, 2050.



Report Title:

Pacific International Space Center for Exploration Systems
Sustainable Concrete Initiative; Appropriation

Description:

Appropriates funds to support the investigative stage of the Pacific international space center for exploration systems sustainable concrete initiative, contingent upon a dollar-for-dollar match from other sources. Effective July 1, 2050.
(SB930 HD1)

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

