H.B. NO. 1019

A BILL FOR AN ACT

RELATING TO LONG DURATION CLEAN ENERGY STORAGE.

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

SECTION 1. The legislature finds that extreme weather exacerbated by climate change affects the supply and availability of all forms of energy, including local renewable resources and imported fuels.

The legislature also finds that the ability to store locally produced clean energy can mitigate the supply disruptions that could result from extreme weather or other events that might disrupt the flow of imported energy commodities or the availability of local renewable resources.

The legislature recognizes that the United States Department of Energy has a goal of reducing the cost of long duration storage by ninety per cent by 2031, and intends to make available significant levels of funding to support its energy storage grand challenge roadmap.

The legislature further finds that the vast majority of utility-scale energy storage capacity in the United States is pumped storage hydroelectric capacity, due to its relatively low water consumption, capital cost, and land requirements.

The purpose of this Act is to identify likely pumped storage hydropower locations, or sites for other long duration clean energy storage technologies, and promote their development.

SECTION 2. Section 196-10, Hawaii Revised Statutes, is amended to read as follows:

"[~~[~~] §196-10 [~~]~~] **Hawaii renewable hydrogen and long duration clean energy storage program.** There is established, within the department of business, economic development, and tourism, a Hawaii renewable hydrogen and long duration clean energy storage program to manage the State's transition to a renewable hydrogen economy. The program shall design, implement, and administer activities that include:

(1) Strategic partnerships for the research, development, testing, and deployment of renewable hydrogen and long duration clean energy storage technologies;

(2) Engineering and economic evaluations of Hawaii's potential for renewable hydrogen use and long duration clean energy storage, including near-term project opportunities for the State's renewable energy resources;

(3) Electric grid reliability and security projects that will enable the integration of a substantial increase of electricity from renewable energy resources on the island of Hawaii;

(4) Hydrogen and long duration clean energy storage demonstration projects, including infrastructure for the production, storage, and refueling of hydrogen vehicles;

(5) A statewide hydrogen and long duration clean energy storage economy public education and outreach plan focusing on the island of Hawaii, to be developed in coordination with Hawaii's public education institutions;

(6) Promotion of Hawaii's renewable hydrogen and long duration clean energy storage resources to potential partners and investors;

[~~(7) A plan, for implementation during the years 2007 to 2010, to more fully deploy hydrogen technologies and infrastructure capable of supporting the island of Hawaii's energy needs, including:~~

~~(A) Expanded installation of hydrogen production facilities;~~

~~(B) Development of integrated energy systems, including hydrogen vehicles;~~

~~(C) Construction of additional hydrogen refueling stations; and~~

~~(D) Promotion of building design and construction that fully incorporates clean energy assets, including reliance on hydrogen-fueled energy generation;~~

~~(8) A plan, for implementation during the years 2010 to 2020, to transition the island of Hawaii to a hydrogen-fueled economy and to extend the application of the plan throughout the State; and~~

~~(9)~~] (7) Evaluation of policy recommendations to:

(A) Encourage the adoption of long duration clean energy storage and potential customers of that storage, including hydrogen-fueled vehicles;

(B) Continually fund the hydrogen and long duration clean energy storage investment capital special fund; and

(C) Support investment in hydrogen and long duration clean energy storage infrastructure[~~, including~~

~~production, storage, and dispensing facilities.~~];

and

(8) Engineering and economic evaluations of potential locations for long duration clean energy storage, including pumped storage hydroelectric projects as a priority, and hydrogen that:

(A) Maximize the positive ecological, social, and economic benefits to nearby resources, including agricultural and recreational land use; and

(B) Minimize or avoid negative impacts on cultural heritage, productive agricultural land, and habitat."

SECTION 3. Section 206M-63, Hawaii Revised Statutes, is amended to read as follows:

"[~~§~~]**§206M-63**[~~]~~] **Hydrogen and long duration clean energy storage investment capital special fund.** (a) There shall be established the hydrogen and long duration clean energy storage investment capital special fund, into which shall be deposited:

(1) Appropriations made by the legislature to the fund;

(2) All contributions from public or private partners;

(3) All interest earned on or accrued to moneys deposited in the special fund; and

(4) Any other moneys made available to the special fund from other sources.

(b) Moneys in the fund shall be expended by the development corporation:

(1) To provide seed capital for and venture capital investments in private sector and federal projects for research, development, testing, and implementation of the Hawaii renewable hydrogen and long duration clean energy storage program, as set forth in section 196-10; and

(2) For any other purpose deemed necessary to carry out the purposes of section 196-10."

SECTION 4. There is appropriated out of the energy security special fund established in section 201-12.8, Hawaii Revised Statutes, the sum of $3,500,000 or so much thereof as may be necessary for fiscal year 2025-2026 for the activities described in section 196-10, Hawaii Revised Statutes, including temporary staff that may be needed to support actions related to the activities of this Act.

The sum appropriated shall be expended by the Hawaii state energy office for the purposes of this Act.

H.B. NO. 1019

SECTION 5. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

SECTION 6. This Act, upon its approval, shall take effect on July 1, 2025.

INTRODUCED BY: Nadine K. Nakamura

BY REQUEST

JAN 21 2025

H.B. NO. 1019

Report Title:
Hawaii State Energy Office; Renewable Energy; Energy Storage; Appropriation

Description:
Requires high quality resource characterization of pumped storage hydropower locations, or other long duration clean energy storage technologies, and promotes their development.

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

H.B. No. 1019

JUSTIFICATION SHEET

DEPARTMENT: Business, Economic Development, and Tourism

TITLE: A BILL FOR AN ACT RELATING TO LONG DURATION CLEAN ENERGY STORAGE.

PURPOSE: To identify likely pumped storage hydropower locations, or sites for other long duration clean energy storage technologies, and promote their development.

MEANS: Amend sections 196-10 and 206M-63, Hawaii Revised Statutes.

JUSTIFICATION: This bill is needed to address pressing concerns related to energy security and sustainability in Hawaii, align with national energy goals, and establish a program to support research, development, and deployment of renewable hydrogen and long duration clean energy storage technologies. Also, this bill ensures that the Hawaii renewable hydrogen and long duration clean energy storage program will consider the importance of pumped storage hydroelectric capacity, which can have ecological, social, and economic benefits while minimizing negative impacts on the environment and cultural heritage.

Impact on the public: The public would benefit from understanding where long duration clean energy storage is available to promote reliable and secure local clean energy supplies.

Impact on the department and other agencies: The Hawaii State Energy Office would be able to support the State's energy security and decarbonization goals.

GENERAL FUND: None.

OTHER FUNDS: $3,500,000 from the Energy Security Special Fund.

PPBS PROGRAM DESIGNATION: BED-120.

OTHER AFFECTED AGENCIES: Department of Land and Natural Resources and Department of Health.

EFFECTIVE DATE: July 1, 2025.