S.B. NO. 399

JAN 1 5 2025

### A BILL FOR AN ACT

RELATING TO AN ATMOSPHERIC CARBON CAPTURE PLANT.

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

1 SECTION 1. The legislature finds that the threat posed by 2 climate change is of serious concern to the State and the world. 3 Proactive measures are needed to combat rising record 4 temperatures and more frequent incidences of extreme weather. 5 According to the Emissions Database for Global Atmospheric Research, more than thirty billion tons of carbon dioxide has 6 7 been released into the atmosphere every year since 2005. While 8 the State has set the goal to reach one hundred per cent 9 renewable energy use by 2045, the State must take additional 10 climate action beyond the adoption of renewable energy.

11 The legislature further finds that, in addition to reducing 12 carbon emissions through the use of renewable energy, the State 13 must utilize carbon offsetting strategies and technologies. 14 According to the Intergovernmental Panel on Climate Change, 15 limiting global warming to 1.5 degrees Celsius will be 16 impossible without the use of carbon capture technologies. 17 Currently, the most common method of carbon offsetting is the



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1 planting of trees. Alternatively, carbon capture plants require 2 substantially less land to remove an equivalent amount of carbon 3 dioxide. Advances in technology now allow for carbon to be 4 scrubbed from the atmosphere with a combination of high-powered 5 fans and filters and to be stored underground. In 2021, a 6 carbon capture plant using that technology began operation in 7 Iceland, removing four thousand tons of carbon dioxide from the 8 atmosphere each year. Another Icelandic plant opened in 2024, 9 which can capture thirty-six thousand tons of atmospheric carbon 10 dioxide annually. Future advances in carbon capture technology will likely expand those capabilities significantly. 11 The 12 legislature also finds that the United States Department of 13 Energy has announced funding for carbon capture technologies, 14 and this Act may assist the State in obtaining federal funds. 15 The legislature further finds that the threat to the State

16 posed by climate change and the utilization of carbon offsetting 17 strategies and technologies to limit global warming are matters 18 of statewide concern that fall under the legislature's purview 19 pursuant to article X, section 6, of the Hawaii State 20 Constitution.



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Accordingly, the purpose of this Act is to direct the
 Hawaii state energy office to conduct a feasibility study for
 the construction of an atmospheric carbon capture plant in the
 State.

5 SECTION 2. (a) The Hawaii state energy office, in
6 conjunction with the Hawaii nuclear energy institute, shall
7 conduct a feasibility study for the construction of an
8 atmospheric carbon capture plant in the State.

9 (b) The study shall include but not be limited to the type
10 of construction, proposed location, estimated costs, staffing
11 requirements, and the estimated annual carbon dioxide capture
12 rate of potential atmospheric carbon capture plants.

13 (c) The Hawaii state energy office shall submit a report
14 of its findings and recommendations, including any proposed
15 legislation, to the legislature no later than forty days prior
16 to the convening of the regular session of 2026.

17 SECTION 3. This Act shall take effect upon its approval.

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Hard that

INTRODUCED BY:



# S.B. NO. 399

#### Report Title:

HSEO; HNEI; Atmospheric Carbon Capture Plant; Feasibility Study; Report

#### Description:

Directs the Hawaii State Energy Office, in conjunction with the Hawaii Natural Energy Institute, to conduct a feasibility study for the construction of an atmospheric carbon capture plant in the State. Requires a report to the Legislature.

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