THE SENATE THIRTY-SECOND LEGISLATURE, 2023 STATE OF HAWAII

S.B. NO. ¹⁰⁰² S.D. 1

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 temperatures and more frequent incidences of extreme weather. 4 5 According to the Emissions Database for Global Atmospheric Research, more than thirty billion tons of carbon dioxide has 6 been released into the atmosphere every year since 2005. While 7 8 the State has set the goal to reach one hundred per cent 9 renewable energy use by 2045, the State must take additional climate action beyond the adoption of renewable energy. 10

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 is being built 9 that will capture thirty-six thousand tons, and the state of 10 Wyoming is preparing for the world's largest direct air carbon 11 capture plant to begin operation in 2023, which is projected to 12 remove five million tons of atmospheric carbon dioxide annually. 13 Future advances in carbon capture technology will likely expand 14 those capabilities significantly. The legislature also finds 15 that the United States Department of Energy has announced 16 funding for carbon capture technologies, and this Act may assist 17 the State in obtaining federal funds.

18 The legislature further finds that the threat to the State 19 posed by climate change and the utilization of carbon offsetting 20 strategies and technologies to limit global warming are matters 21 of statewide concern that fall under the legislature's purview

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pursuant to article X, section 6, of the Hawaii State
 Constitution.

The purpose of this Act is to direct the Hawaii state energy office in conjunction with the Hawaii natural energy institute to develop and submit a strategy interim report and final report no later than forty days prior to the convening of the regular sessions of 2024 and 2025, respectively, for the construction of at least one atmospheric carbon capture plant in the State by 2028.

10 SECTION 2. The Hawaii state energy office, in conjunction with the Hawaii natural energy institute, shall develop a 11 12 strategy for the construction of an atmospheric carbon capture 13 plant in the State to be constructed by 2030. The strategy shall detail the type of construction, proposed location, 14 estimated costs, staffing requirements, and estimated annual 15 carbon dioxide capture rate of potential atmospheric carbon 16 17 capture plants.

18 SECTION 3. The Hawaii state energy office shall submit:
19 (1) An interim report of its progress on developing a
20 strategy for the construction of an atmospheric carbon
21 capture plant in the State by 2028 to the legislature



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1 no later than forty days prior to the convening of the regular session of 2024; and 2 3 (2) Its final report regarding the recommended strategy 4 for the construction of at least one atmospheric 5 carbon capture plant in the State by 2028, including any proposed legislation, to the legislature no later 6 7 than forty days prior to the convening of the regular session of 2025. 8 9 SECTION 4. This Act shall take effect upon its approval.

1. Alternative Herrice Harrison



Report Title: Hawaii State Energy Office; Hawaii Natural Energy Institute; Atmospheric Carbon Capture Plant

Description:

Directs the Hawaii State Energy Office, in conjunction with the Hawaii Natural Energy Institute, to develop and submit a strategy report to the Legislature by 2025 for the construction of at least one atmospheric carbon capture plant in the State by 2030. (SD1)

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