
HOUSE RESOLUTION

URGING THE DEPARTMENT OF AGRICULTURE AND BIOSECURITY TO EXPLORE AND PURSUE OPPORTUNITIES TO COLOCATE COMMUNITY-BASED RENEWABLE ENERGY GENERATING PROJECTS WITH AGRICULTURAL RESERVOIRS AND IRRIGATION WATER INFRASTRUCTURE.

1 WHEREAS, the State of Hawaii has established ambitious
2 clean energy goals, committing the State to achieving one
3 hundred percent renewable electricity by 2045 in order to reduce
4 dependence on imported fossil fuels, increase energy security,
5 and mitigate climate change; and

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7 WHEREAS, agricultural reservoirs and irrigation systems
8 across Hawaii represent underutilized infrastructure assets that
9 could support innovative renewable energy generation
10 technologies while continuing to serve essential water
11 management functions; and

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13 WHEREAS, renewable energy technologies that can be
14 colocated with water infrastructure include floating solar
15 photovoltaic systems and gravity-powered water energy generation
16 technologies that produce electricity from the movement of water
17 through pipes, canals, and irrigation systems without requiring
18 dams or major alterations to existing infrastructure; and

19
20 WHEREAS, Hawaii possesses an extensive network of
21 agricultural reservoirs, irrigation ditches, pipelines, and
22 gravity-fed water delivery systems originally developed to
23 support plantation agriculture and now used to support
24 diversified farming across the islands, which creates
25 opportunities to integrate renewable energy technologies without
26 interfering with irrigation operations; and

27
28 WHEREAS, collocating renewable energy systems with
29 agricultural water infrastructure can provide multiple benefits
30 by generating clean electricity, reducing water evaporation from
31 reservoirs, reducing algae growth, improving water quality,



1 improving water management efficiency, preserving valuable
2 agricultural lands for food production, and lowering energy
3 costs associated with water delivery and pumping; and
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5 WHEREAS, community-based renewable energy projects enable
6 residents, farmers, and local businesses to participate directly
7 in the benefits of renewable energy generation, including lower
8 energy costs, local ownership opportunities, and increased
9 economic development in rural communities; and
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11 WHEREAS, numerous community-led initiatives and local
12 organizations across Hawaii are actively working to develop
13 community-scale renewable energy projects, which demonstrates
14 strong public interest in locally controlled clean energy
15 solutions that benefit farmers, residents, and communities; and
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17 WHEREAS, successful examples of renewable energy generation
18 colocated on water infrastructure already exist in the United
19 States, including floating solar photovoltaic installations on
20 reservoirs and water treatment facilities that generate clean
21 electricity while conserving water resources; and
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23 WHEREAS, a study released by the National Renewable Energy
24 Laboratory found significant potential for floating solar
25 photovoltaic systems on reservoirs in the United States; and
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27 WHEREAS, the study determined that reservoirs across the
28 United States could host enough floating solar panels to
29 generate up to 1,476 hours of electricity, which means that
30 there are substantial opportunities to integrate renewable
31 energy generation with existing water infrastructure; and
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33 WHEREAS, gravity-powered in-pipe hydropower systems capture
34 energy from the natural movement of water through pipelines,
35 canals, and irrigation systems by installing turbines within
36 existing water conveyance infrastructure, which allows
37 electricity to be generated without dams or disruption to water
38 delivery; now, therefore,
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40 BE IT RESOLVED by the House of Representatives of the
41 Thirty-third Legislature of the State of Hawaii, Regular Session
42 of 2026, that the Hawaii Department of Agriculture and



H.R. NO. 170

1 Biosecurity is urged to explore and pursue opportunities to
2 colocate community-based renewable energy generating projects
3 with agricultural reservoirs and irrigation water infrastructure
4 throughout the State; and
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6 BE IT FURTHER RESOLVED that the Department is encouraged to
7 collaborate with farmers, community organizations, electric
8 utilities, renewable energy developers, and other relevant
9 stakeholders to identify suitable sites for floating solar and
10 gravity-powered water energy projects; and
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12 BE IT FURTHER RESOLVED that the Department is encouraged to
13 support feasibility studies, pilot projects, and demonstration
14 projects that evaluate the technical, economic, and
15 environmental potential of renewable energy systems integrated
16 with agricultural water infrastructure; and
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18 BE IT FURTHER RESOLVED that these projects should
19 prioritize community-based renewable energy participation
20 opportunities and ensure that the benefits of renewable energy
21 generation are intended to meaningfully benefit local
22 communities; and
23

24 BE IT FURTHER RESOLVED that certified copies of this
25 Resolution be transmitted to the Governor, Chairperson of the
26 Board of Agriculture and Biosecurity, Chairperson of the Public
27 Utilities Commission, and Chief Energy Officer of the Hawaii
28 State Energy Office.
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OFFERED BY: 
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