JAN 2 0 2017

A BILL FOR AN ACT

RELATING TO CLIMATE CHANGE.

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

- 1 SECTION 1. The legislature finds that not only is climate
- 2 change real, but it is the overriding challenge of the 21st
- 3 century and one of the priority issues of the senate. Climate
- 4 change poses immediate and long-term threats to the State's
- 5 economy, sustainability, security, and way of life. Hawai'i has
- 6 a tradition of environmental leadership, having prioritized
- 7 policies regarding conservation, reduction in greenhouse gas
- 8 emissions, and development and use of alternative renewable
- 9 energy. The legislature has passed numerous measures over the
- 10 last decade to address climate change.
- 11 The legislature recognized in Act 234, Session Laws of
- 12 Hawaii 2007, that "climate change poses a serious threat to the
- 13 economic well-being, public health, natural resources, and the
- 14 environment of Hawaii . . . " and that the "potential adverse
- 15 effects of global warming include a rise in sea levels resulting
- 16 in the displacement of businesses and residences and the
- 17 inundation of Hawaii's freshwater aquifers, damage to marine

- 1 ecosystems and the natural environment, extended drought and
- 2 loss of soil moisture, an increase in the spread of infectious
- 3 diseases, and an increase in the severity of storms and extreme
- 4 weather events." Countless scientific studies have concluded
- 5 that greenhouse gas emissions are a leading contributing factor
- 6 to global warming. The purpose of Act 234 was to achieve a
- 7 cost-effective statewide greenhouse gas emissions limit at or
- 8 below the State's greenhouse gas emissions estimates of 1990 by
- 9 2020. However, even if greenhouse gas emissions are reduced to
- 10 1990 levels, Hawai'i will still be significantly impacted by
- 11 climate change well into the future, thus the legislature
- 12 acknowledges that climate change requires a two-pronged approach
- 13 reduction of activities that contribute to global warming and
- 14 adaptations to mitigate the impacts of climate change on the
- 15 State.
- 16 Act 73, Session Laws of Hawaii 2010, established the
- 17 environmental response, energy, and food security tax, otherwise
- 18 known as the barrel tax, to provide resources for addressing the
- 19 effects of climate change. Act 286, Session Law of Hawaii 2012,
- 20 amended the Hawaii State Planning Act to establish climate
- 21 change adaptation priority guidelines, which require that all

- 1 county and state activities consider the impacts of climate
- 2 change in land use, capital improvement, and program decisions.
- 3 The legislature also finds that in 2013, President Barack Obama
- 4 appointed former Governor Neil Abercrombie to serve on the
- 5 President's Task Force on Climate Preparedness and Resilience to
- 6 develop recommendations on how the federal government can better
- 7 support state, local, and tribal efforts in climate mitigation,
- 8 adaptation, and resilience in the areas of Disaster Management;
- 9 Built Systems (water, transportation, energy, facilities, and
- 10 coastal infrastructure); Natural Resources and Agriculture; and
- 11 Community Development and Health. The Hawaii Climate Adaptation
- 12 Initiative Act, Act 83, Session Laws of Hawaii 2014, established
- 13 an interagency climate adaptation committee and authorized the
- 14 office of planning to coordinate development of statewide
- 15 climate adaptation plans to address the effects of climate
- 16 change through 2050 to protect the State's economy, health,
- 17 environment, and way of life.
- 18 The legislature further finds that on December 12, 2015,
- 19 one hundred ninety-five countries at the 21st Conference of the
- 20 Parties of the United Nations Framework Convention on Climate
- 21 Change adopted an agreement addressing greenhouse gas emissions

1	mitigation,	adaptation,	and	finance	starting	in	the	year	2020	
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- 2 known as the Paris Agreement. Under the Agreement, the parties
- 3 will set greenhouse gas reductions goals, record and communicate
- 4 information through a transparency mechanism, and provide
- 5 support to undeveloped countries through a finance mechanism.
- 6 Specifically, the Paris Agreement aims to strengthen the global
- 7 response to the threat of climate change, in the context of
- 8 sustainable development and efforts to eradicate poverty,
- 9 including by:
- 10 (1) Holding the increase in the global average temperature
- 11 to well below 2 degrees Celsius above pre-industrial
- levels and pursuing efforts to limit the temperature
- increase to 1.5 degrees Celsius above pre-industrial
- 14 levels, recognizing that this would significantly
- reduce the risks and impacts of climate change;
- 16 (2) Increasing the ability to adapt to the adverse impacts
- of climate change and foster climate resilience and
- low greenhouse gas emissions development, in a manner
- that does not threaten food production; and

1	(3) Making finance flows consistent with a pathway toward
2	low greenhouse gas emissions and climate-resilient
3	development.
4	The Agreement will be implemented to reflect equity and the
5	principle of common but differentiated responsibilities and
6	respective capabilities, in light of different national
7	circumstances. The Paris Agreement was adopted on November 4,
8	2016, and is the largest concerted global effort to combat
9	climate change to date. Regardless of federal action, the
10	legislature supports the goals of the Paris Agreement to combat
11	climate change and its effects on environments, economies, and
12	communities around the world.
13	Therefore, the purpose of this Act is to ensure statewide
14	support for Hawaii's green initiatives and to further the
15	State's commitment to combat climate change by systematically
16	reducing and mitigating greenhouse gas emissions through the
17	enactment of principles that mirror many of the provisions
18	adopted in the Paris Agreement.
19	SECTION 2. (a) The State, through the lead of the
20	department of accounting and general services, shall undertake
21	strategies and mechanisms to reduce and mitigate the greenhouse

- 1 gas emissions of all state departments and agencies. Such
- 2 strategies and mechanisms shall utilize the best available
- 3 science to reduce greenhouse gas emissions and be closely
- 4 aligned with the climate change ideals adopted in the Paris
- 5 Agreement. The department of accounting and general services
- 6 shall prepare, communicate, and maintain successive state-
- 7 determined goals that it intends to achieve. Through the lead
- 8 of the department of accounting and general services, all state
- 9 departments and agencies shall pursue local mitigation measures,
- 10 with the aim of achieving the goals. The successive state-
- 11 determined goals shall represent a progression beyond the
- 12 State's current state-determined contribution of greenhouse gas
- 13 emissions and shall reflect its highest possible ambition to
- 14 reduce greenhouse gas emissions.
- 15 (b) In communicating the state-determined goals, the
- 16 department of accounting and general services shall provide to
- 17 all state departments and agencies the information necessary for
- 18 clarity, transparency, and understanding in order for each
- 19 entity to reduce its greenhouse gas emissions. The department
- 20 of accounting and general services shall communicate the
- 21 greenhouse gas emission contribution levels every five years and

- 1 post that information on its website. In accounting for
- 2 anthropogenic emissions and removals corresponding to determined
- 3 contributions, the department of accounting and general services
- 4 shall promote environmental integrity, transparency, accuracy,
- 5 completeness, comparability and consistency, and ensure the
- 6 avoidance of double counting. The State shall strive to
- 7 formulate and communicate long-term low greenhouse gas emission
- 8 development strategies. The State shall take action to conserve
- 9 and enhance, as appropriate, sinks and reservoirs of greenhouse
- 10 gases, including forests, wetlands, and nature preserves.
- 11 (c) The legislative, executive, and judicial branches are
- 12 encouraged to take action to implement and support policy
- 13 approaches and positive incentives for activities relating to
- 14 reducing emissions from deforestation, forest degradation, the
- 15 reduction and removal of wetlands, and the role of conservation,
- 16 and alternative policy approaches including joint mitigation and
- 17 adaptation approaches for the integral and sustainable
- 18 management of forests, wetlands, and nature preserves while
- 19 reaffirming the importance of incentivizing, as appropriate,
- 20 non-carbon benefits associated with such approaches.

1	(d)	The State shall promote sustainable development and
2	ensure en	vironmental integrity and transparency. The departmen
3	of accoun	ting and general services shall establish a mechanism
4	to contri	bute to the mitigation of greenhouse gas emissions and
5	support s	ustainable development in the State. The mechanism
6	shall aim	to:
7	(1)	Promote the mitigation of greenhouse gas emissions
8		while fostering sustainable development;
9	(2)	Incentivize and facilitate participation in the
10		mitigation of greenhouse gas emissions by public and
11		private entities;
12	(3)	Contribute to the reduction of emission levels in the
13		State; and
14	(4)	Deliver an overall mitigation in state emissions.
15	The depar	tment of accounting and general services shall adopt
16	rules in	accordance with section 91 to implement the mechanism.
17	(e)	The State recognizes the importance of integrated,
18	holistic,	and balanced non-market approaches to assist in the
19	implement	ation of assessing its state-determined contributions
20	of greenh	ouse gases and in achieving its goals to reduce and

mitigate those gases in a coordinated and effective manner,

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- 1 including through mitigation, adaptation, finance, technology
- 2 transfer, and capacity-building, as appropriate. These
- 3 approaches shall aim to:
- 4 (1) Promote mitigation and adaptation ambition;
- 5 (2) Enhance public and private sector participation in the
- 6 implementation of state-determined goals; and
- 7 (3) Enable opportunities for coordination across
- 8 instruments and relevant institutional arrangements.
- 9 (f) The State, through the lead of the department of
- 10 accounting and general services, establishes the statewide goal
- 11 of adaptation by enhancing adaptive capacity, strengthening
- 12 resilience, and reducing vulnerability to climate change, with a
- 13 view to contributing to sustainable development and ensuring an
- 14 adequate adaptation response in the context of the temperature
- 15 goal of well below 2 degrees Celsius above pre-industrial
- 16 levels. The State recognizes that adaptation is a global
- 17 challenge faced by all with local, subnational, national,
- 18 regional, and international dimensions, and that it is a key
- 19 component of and makes a contribution to the long-term global
- 20 response to climate change to protect people, livelihoods, and
- 21 ecosystems, taking into account the urgent and immediate needs

- 1 of those who are particularly vulnerable to the adverse effects
- 2 of climate change.
- 3 The State recognizes that the current need for adaptation
- 4 is significant and that greater levels of mitigation can reduce
- 5 the need for additional adaptation efforts, and that greater
- 6 adaptation needs can involve greater adaptation costs. The
- 7 State acknowledges that adaptation action should follow a state-
- 8 driven, gender-responsive, participatory, and fully transparent
- 9 approach, taking into consideration vulnerable groups,
- 10 communities, and ecosystems, and should be based on and guided
- 11 by the best available science and, as appropriate, traditional
- 12 knowledge, knowledge of indigenous peoples, and local knowledge
- 13 systems, with a view to integrating adaptation into relevant
- 14 socioeconomic and environmental policies and actions.
- 15 (g) The State recognizes the importance of support for and
- 16 statewide cooperation on adaptation efforts and the importance
- 17 of taking into account the needs of those who are particularly
- 18 vulnerable to the adverse effects of climate change. The State
- 19 recognizes the role of healthy ecosystems in providing natural
- 20 solutions for both mitigation and adaptation. Healthy coral
- 21 reefs, coastal trees, and foliage provide protection to coastal

1	communities.	Forested	catchments	and	wetlande	filter	and	manage
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- 2 the quality and flow of water. Land and marine nature reserves
- 3 conserve essential biodiversity and provide added resilience to
- 4 climate change. All departments and agencies of the State shall
- 5 strengthen their cooperation with other parties on enhancing
- 6 action on adaptation by:
- 7 (1) Sharing information, good practices, experiences and
- 8 lessons learned, including those that relate to
- 9 science, planning, policies, and implementation in
- 10 relation to adaptation actions;
- 11 (2) Strengthening institutional arrangements to support
- the synthesis of relevant information and knowledge,
- and the provision of technical support and quidance;
- 14 (3) Strengthening scientific knowledge on climate,
- including research, systematic observation of the
- 16 climate system, and early warning systems, in a manner
- 17 that informs climate services and supports decision-
- 18 making; and
- 19 (4) Improving the effectiveness and durability of
- 20 adaptation actions.

1	(h)	The department of accounting and general services
2	shall eng	age in adaptation planning processes and the
3	implement	ation of actions, including the development or
4	enhanceme	nt of relevant plans, policies, and goals, which may
5	include:	
6	(1)	The implementation of adaptation actions,
7		undertakings, or efforts;
8	(2)	The process to formulate and implement statewide
9		adaptation plans;
10	(3)	The assessment of climate change impacts and
11		vulnerability, with a view to formulating state-
12		determined prioritized actions, taking into account
13		vulnerable people, places, and ecosystems;
14	(4)	Monitoring, evaluating, and learning from adaptation
15		plans, policies, programs, and actions; and
16	(5)	Building the resilience of socioeconomic and
17		ecological systems, including through economic
18		diversification and sustainable management of natural
19		resources.
20	(1)	The department of accounting and general services

shall submit and update periodically an adaptation report that:

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1	(1)	may include its priorities, implementation, and
2		support needs, plans, and actions; and
3	(2)	Shall include a state adaptation plan and
4		recommendations regarding the following:
5		(A) The enhancement of the implementation of
6		adaptation actions;
7		(B) The adequacy and effectiveness of adaptation and
8		support provided for adaptation; and
9		(C) The overall progress made in achieving the state
10		goal on adaptation.
11	(j)	The State recognizes the importance of averting,
12	minimizing	g, and addressing loss and damage associated with the
13	adverse ei	Efects of climate change, including extreme weather
14	events and	d slow onset events, and the role of sustainable
15	developmer	nt in reducing the risk of loss and damage. The State
16	shall enha	ance understanding, action, and support, as
17	appropriat	te, on a cooperative and facilitative basis with
18	respect to	o loss and damage associated with the adverse effects
19	of climate	e change. Accordingly, areas of cooperation and
20	facilitat	ion to enhance understanding, action, and support may
21	include:	

1	(1)	Early warning systems;
2	(2)	Emergency preparedness;
3	(3)	Slow onset events;
4	(4)	Events that may involve irreversible and permanent
5		loss and damage;
6	(5)	Comprehensive risk assessment and management;
7	(6)	Risk insurance facilities, climate risk pooling, and
8		other insurance solutions;
9	(7)	Non-economic losses; and
10	(8)	Resilience of communities, livelihoods, and
11		ecosystems.
12	(k)	The State shall hold a long-term vision on the
13	importanc	e of fully realizing technology development and
14	transfer	in order to improve resilience to climate change and to
15	reduce gr	eenhouse gas emissions. The State, noting the
16	importanc	e of technology for the implementation of mitigation
17	and adapt	ation actions under this Act and recognizing existing
18	technolog	y deployment and dissemination efforts, shall
19	strengthe	n cooperative action on technology development and
20	transfer.	Accelerating, encouraging, and enabling innovation is
21	critical	for an effective, long-term global response to climate

- 1 change and promoting economic growth and sustainable
- 2 development.
- 3 (1) Capacity-building under this Act shall enhance the
- 4 capacity and ability of developing areas, in particular areas
- 5 with the least capacity, and those that are particularly
- 6 vulnerable to the adverse effects of climate change to take
- 7 effective climate change action, including to implement
- 8 adaptation and mitigation actions, and should facilitate
- 9 technology development, dissemination and deployment, access to
- 10 climate finance, relevant aspects of education, training and
- 11 public awareness, and the transparent, timely, and accurate
- 12 communication of information. Capacity-building shall be state
- 13 driven, based on and responsive to state needs, at state and
- 14 local levels. Capacity-building should be guided by lessons
- 15 learned and should be an effective, iterative process that is
- 16 participatory, cross-cutting, and gender-responsive. Capacity-
- 17 building activities shall be enhanced through appropriate
- 18 institutional arrangements to support the implementation of this
- 19 Act. All state departments and agencies shall cooperate in
- 20 taking measures to enhance climate change education, training,

1	public awareness, public participation, and public access to
2	information.
3	(m) In order to build mutual trust and confidence and to
4	promote effective implementation, an enhanced transparency
5	framework for action and support with built-in flexibility is
6	established. The purpose of the framework for transparency of
7	action is to provide a clear understanding of climate change
8	action, including clarity and tracking of progress toward
9	achieving the State's state-determined goals and adaptation
10	actions, including good practices, priorities, needs, and gaps
11	to inform the public. The department of accounting and general
12	services shall regularly provide the following information:
13	(1) A state inventory report of anthropogenic emissions by
14	sources and removals by sinks of greenhouse gases,
15	prepared using good practice methodologies; and
16	(2) Information necessary to track the State's greenhouse
17	gas emission contribution levels and the progress made
18	in implementing and achieving the State's state-
19	determined goals of reducing and mitigating greenhouse
20	gas emissions.

1	(n) The State shall periodically review the implementation
2	of this Act to assess progress toward achieving the purpose of
3	this Act and its long-term goals. It shall do so in a
4	comprehensive and facilitative manner, considering mitigation,
5	adaptation, and the means of implementation and support, and in
6	the light of equity and the best available science. The State
7	shall undertake its first review in 2023 and every five years
8	thereafter. The outcome of the review shall inform the State in
9	updating and enhancing, in a state-determined manner, its
10	actions and support in accordance with the relevant provisions
11	of this Act.
12	SECTION 3. There is appropriated out of the general
13	revenues of the State of Hawaii the sum of \$ or so
14	much thereof as may be necessary for fiscal year 2017-2018 and
15	the same sum or so much thereof as may be necessary for fiscal
16	year 2018-2019 for administering strategies and mechanisms to
17	reduce and mitigate the greenhouse gas emissions of all state
18	departments and agencies.
19	The sums appropriated shall be expended by the department
20	of accounting and general services for the purposes of this Act.

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1 SECTION 4. This Act shall take effect on July 1, 2017.

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Report Title:

Climate Change; Paris Agreement; Policy Priorities; Appropriation

Description:

Enacts relevant provisions of the Paris Agreement as Hawaii state law. Makes an appropriation.

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