

AMENDED IN SENATE APRIL 2, 2009

SENATE BILL

No. 128

Introduced by Senator Padilla

February 5, 2009

An act to add Division 25.6 (commencing with Section 38700) to the Health and Safety Code, relating to climate change.

LEGISLATIVE COUNSEL'S DIGEST

SB 128, as amended, Padilla. California Climate Change Institute.

The existing California Global Warming Solutions Act of 2006 requires the State Air Resources Board (state board) to adopt regulations to require the reporting and verification of emissions of greenhouse gases and to monitor and enforce compliance with the reporting and verification program, and requires the state board to adopt a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions level in 1990 to be achieved by 2020. The act requires the state board to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective greenhouse gas emission reductions.

~~This bill would state the intent of the Legislature to enact legislation to~~ create the California Climate Change Institute to (A) identify and support, through a merit-based peer-reviewed competitive grant process, research and education to be undertaken at academic and research institutions and laboratories throughout the state, (B) oversee, coordinate, and manage a nonduplicative, targeted research and development program for the purposes of achieving the state's targets for reducing emissions of greenhouse gases and mitigating the effects of those emissions, (C) develop effective model education pathways, training, model curriculum, and professional development necessary

for emerging green technologies and industries, and (D) ensure that its climate change research is conducted in a manner that is targeted and nonduplicative of other research programs. *The bill would make implementation of its provisions subject to sufficient funds being appropriated by the Legislature for its purposes.*

Vote: majority. Appropriation: no. Fiscal committee: ~~no~~ yes.
 State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. Division 25.6 (commencing with Section 38700)
 2 is added to the Health and Safety Code, to read:

3
 4 DIVISION 25.6. RESEARCH AND DEVELOPMENT
 5 RELATED TO CLIMATE CHANGE

6
 7 PART 1. GENERAL PROVISIONS

8
 9 38700. The Legislature finds and declares all of the following:

10 (a) There is now overwhelming scientific consensus among the
 11 experts that our fossil fuel-intensive energy economy is driving
 12 climate change. The impact of climate change will be pervasive,
 13 altering our water resource base and our agricultural system, with
 14 effects upon human and ecological health.

15 (b) While a global phenomena, climate change will likely impact
 16 affluent and poorer communities differently, as well as requiring
 17 new methods for protecting endangered ecosystems. As a society,
 18 we must have a research base to show how fast the climate is
 19 changing, what degree of climate protection we can implement
 20 through low-carbon energy systems, and how we can adapt to the
 21 climate change we cannot prevent.

22 (c) California has long been a leader in altering “business as
 23 usual” carbon-intensive economic behavior and demonstrating
 24 how those alterations can moderate greenhouse gas emissions, and
 25 thus, the extent and pace of climate change. California must
 26 continue and expand these efforts, and to do so will require
 27 information, knowledge, and understanding, not only about the
 28 science of climate change, but also about new practices to lower
 29 energy demand, and the emerging economic and legal frameworks

1 that can help manage our energy demand and the impacts climate
2 change will have on the planet.

3 (d) The risks of climate change and the economic insecurity
4 that high fossil fuel energy prices have brought to California and
5 the global economy have unleashed a wave of efforts to set state,
6 national, and regional targets to safeguard the planet. Some of the
7 most notable are the 25-percent reduction in emissions of
8 greenhouse gases by 2020 and the 80-percent reduction by 2050
9 that California has adopted under the California Global Warming
10 Solutions Act of 2006 and Executive Order S-3-05, the 70-percent
11 or more reductions proposed in the United Kingdom, New Zealand,
12 and Japan, and the 100-percent fossil fuel free plans of Sweden.
13 These plans are consistent with the 80-percent or more reduction
14 in emissions of greenhouse gases that the Intergovernmental Panel
15 on Climate Change has determined is needed by 2050.

16 (e) California’s unique history in addressing climate change
17 includes pathbreaking scientific and technological research, as
18 well as the development of new economic techniques and
19 assessments of the social impacts of changing environmental
20 conditions. University of California researchers have been at the
21 forefront of international research efforts that have found there
22 can be significant local benefits to confronting climate change,
23 including energy savings from “greening” the state’s buildings
24 and industries, creating job growth, and building export
25 opportunities in some of the fastest growing economic sectors.

26 (f) To maintain California’s position of leadership in climate
27 science, and to address the many questions that climate change
28 brings to society, California must mobilize an unprecedented
29 network of scholars, at our universities, national laboratories,
30 California’s private universities, civic and government leaders,
31 industry associations and companies, and environmental groups
32 to create the world’s leading climate research and action-oriented
33 institute.

34 (g) California has in place not only the California Global
35 Warming Solutions Act of 2006, that calls for a return to 1990
36 emissions levels by 2020 and the goal of 80 percent overall cuts
37 by 2050, as contained in Executive Order S-3-05, but also an
38 important package of policies across many state agencies that need
39 to respond to the challenge of climate change. California’s
40 economy is particularly sensitive to the climate due to our reliance

1 on water storage in snowpack and our productive agricultural
 2 systems, and California has unique air quality issues owing to the
 3 geography of the state. These factors make California particularly
 4 vulnerable to climate change and give the state a unique role in
 5 addressing the problem.

6 (h) California needs to both support research and implementation
 7 efforts to address the scientific issues of climate change and to
 8 deploy climate-friendly energy, water, agricultural, and industrial
 9 systems to benefit not only the state, but the global community
 10 that often looks to innovations in California as ways to address
 11 new challenges. This, in turn, provides economic opportunities for
 12 California, as its science, technology, and policy innovation
 13 landscape can be, and often is, exported to the rest of the nation
 14 and the world.

15 (i) New legal requirements and changing practices relative to
 16 the energy generation and conservation sectors will lead to new
 17 industries dependent upon an educated and highly skilled
 18 workforce. Conservation of natural resources and efforts to mitigate
 19 the impact of climate change are affecting the education and
 20 continuing education needs of engineers, scientists, and the myriad
 21 of workers in California’s emerging green economy. California
 22 must invest in the preparation of the workforce entrusted to be
 23 stewards of our resources and those who will invent, manufacture,
 24 install, repair, market, and ship goods around the world.

25 (j) The pervasive nature of the threat of climate change further
 26 means that coordination across not only state agencies, but also
 27 local municipalities, educational institutions, and business and
 28 industry sectors is vital to a successful and timely approach to
 29 climate change. These functions, as well as coordination with
 30 existing world-class state efforts on energy and resource
 31 management and avoidance of duplication of efforts, are important
 32 core missions of a climate change response initiative.

33

34 PART 2. ~~INTENT OF THE LEGISLATURE-CALIFORNIA~~
 35 *CLIMATE CHANGE INSTITUTE*
 36

37 38705. ~~It is the intent of the Legislature to enact legislation to~~
 38 ~~create the California Climate Change Institute~~*The California*
 39 *Climate Change Institute is hereby created to do all of the*
 40 *following:*

1 (a) Identify and support, through a merit-based peer-reviewed
2 competitive grant process, research and education to be undertaken
3 at academic and research institutions and laboratories throughout
4 the state. It is the intent of the Legislature that all California
5 institutions of higher education and all federal laboratories in
6 California be eligible to participate in the institute's grant programs.

7 (b) Oversee, coordinate, and manage a nonduplicative, targeted
8 research and development program for the purposes of achieving
9 the state's targets for reducing emissions of greenhouse gases and
10 mitigating the effects of those emissions, and helping California
11 mitigate and adapt to the impacts of climate change.

12 (c) Develop effective model education pathways, training, model
13 curriculum, and professional development necessary for emerging
14 green technologies and industries. The institute shall also provide
15 the Legislature, the Labor and Workforce Development Agency,
16 school districts and charter schools that maintain any of
17 kindergarten and grades 1 to 12, inclusive, and the California
18 Community Colleges recommendations on implementation of the
19 education pathways, training, model curriculum, and professional
20 development.

21 (d) Ensure that its climate change research is conducted in a
22 manner that is targeted and nonduplicative of other research
23 programs.

24 (e) Focus on the following program areas:

25 (1) Research on technologies that advance California's targets
26 for reducing emissions of greenhouse gases or mitigating the effects
27 of those emissions, with an emphasis on making these technologies
28 commercially viable and available.

29 ~~(2) Social science research to facilitate the transition to a~~
30 ~~low-carbon economy by increasing knowledge about human~~
31 ~~behavior and decisionmaking to improve policies, programs, and~~
32 ~~analytic methods and accelerate clean technology adoption and~~
33 ~~climate-positive action.~~

34 ~~(3)~~

35 (2) Adaptation and forecasting, including understanding,
36 assessing, monitoring, and predicting the effects of climate change
37 on California's resources, including its water supply, forests,
38 coastal lands, agricultural lands, species, and habitat.

39 (4)

1 (3) Green workforce development strategies, including career
2 exploration at the middle school level, high school career technical
3 education, and articulation between kindergarten and grades 1 to
4 12, inclusive, certificate programs at community colleges,
5 state-approved apprenticeships, and other postsecondary
6 educational programs.

7 38706. *This part shall be implemented only to the extent that*
8 *sufficient funds are appropriated by the Legislature for its*
9 *purposes.*

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