SENATE No. 1652

The Commonwealth of Alassachusetts PRESENTED BY: Cynthia S. Creem To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled: The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill: An Act promoting energy efficient state government. PETITION OF:

NAME: DISTRICT/ADDRESS:

Cynthia S. Creem

SENATE No. 1652

By Ms. Creem, a petition (accompanied by bill, Senate, No. 1652) of Cynthia S. Creem for legislation to promote energy efficient state government. Telecommunications, Utilities and Energy.

[SIMILAR MATTER FILED IN PREVIOUS SESSION SEE SENATE, NO. 1477 OF 2009-2010.]

The Commonwealth of Massachusetts

In the Year Two Thousand Eleven

An Act promoting energy efficient state government.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 SECTION 1. It is hereby found and declared that: 2 (a) Massachusetts consumers continue to lose billions of dollars to wasteful 3 energy use annually; 4 (b) Massachusetts residents and businesses bear the burden of wasteful energy 5 use; 6 (c) statewide energy efficiency programs have a proven record of saving 7 consumers money; 8 (d) energy efficiency provides a buffer against fuel price increases;

9	(e) comprehensive energy efficiency measures will enhance the reliability of
10	our electricity supplies by making Massachusetts less dependent on imported fossil fuels;
11	(f) statewide energy efficiency programs can boost the Massachusetts economy
12	and avoid pollution created by excessive and wasteful energy generation.
13	SECTION 2. Establishment of Energy Efficiency Goal and Priority Status
14	(a) Notwithstanding any general law to the contrary, energy efficiency is
15	hereby paramount to all other state energy policy options. Any decision regarding energy policy
16	shall be weighed against all cost-effective energy efficiency strategies.
17	(b) The goal of the Commonwealth is to achieve by 2020, through energy
18	efficiency measures, a twenty percent (20%) reduction from 2011 levels of energy consumption
19	per unit of output in the Commonwealth of Massachusetts.
20	SECTION 3. Definitions.
21	In this section, the following words shall have the following meanings:
22	"Agency," state agency.
23	"Director," the director of the division of energy resources.
24	"Department," the department of telecommunications and energy.
25	"Facility," all buildings, equipment, structures, and other stationary items
26	which are located on a single site or on contiguous or adjacent sites and which are owned or
27	operated by the same person, or by any person who controls, is controlled by, or is under
28	common control with, such person.

29	"Division," the division of energy resources.
30	"Production unit," a process, line, method, activity, or technique, or a
31	combination or series thereof, used to produce a product.
32	"State agency," any agency or authority of the Commonwealth as defined in
33	section 1 of chapter 30A of the General Laws.
34	"Energy efficiency measures," any cost effective measure which, if taken,
35	would reduce the energy used per unit of production, including:
36	(1) Product reformulation, which refers to substituting for an existing end-
37	product an end-product which requires of the consumer less energy to use that end-product upon
38	purchase;
39	(2) Production unit redesign or modification, which refers to developing and
40	using production units of a different design than those currently used;
41	(3) Production unit modernization, which refers to upgrading or replacing
42	existing production unit equipment and methods with other equipment and methods based on the
43	same production unit;
44	(4) Improved operation and maintenance of production unit equipment and
45	methods which refers to modifying or adding to existing equipment or methods including, but
46	not limited to, such techniques as improved housekeeping practices, system adjustments, product
47	and process inspections, or production unit control equipment or methods; or

48	(5) Recycling or reuse of energy by using equipment or methods which
49	become an integral part of the production unit of concern, including but not limited to combined-
50	cycle energy generation and other high efficiency heat and electricity production methods.
51	SECTION 4. State Energy Use Inventory
52	(a) Within six months of this legislation becoming law, the division of capital
53	asset management shall complete an energy audit and inventory for the purpose of determining
54	the most recent 3-year average of energy consumption by all state facilities.
55	(1) Said audit shall calculate a baseline of kilowatt hours or Btu
56	equivalents consumed by all state agencies.
57	(2) Said audit shall be broken down by facility and by responsible
58	agencies for the purposes of energy use reduction planning by those agencies.
59	(3) Said audit shall be referred to herein as the "2011 state energy
60	audit".
61	(b) The division shall be responsible for completing an energy audit and
62	inventory on an annual basis and shall post results on a web site, in coordination with the
63	division of energy resources.
64	(c) The division shall evaluate the potential for increasing the energy
65	efficiency of each building owned by a state agency or leased by such agency for at least a ten
66	year period, and will submit those assessments both to the division of energy resources, and to
67	such agencies, departments and divisions as have an energy efficiency planning interest in that
68	facility.

69	SECTION 5. State Energy Use Reduction Requirements, State Energy
70	Procurement Cap Renewable Energy Source Requirement
71	(a) State agencies are required to reduce the annual energy consumption of
72	their facilities by the year 2020 to a level no less than twenty percent below the consumption
73	levels of those facilities as inventoried by the 2011 state energy audit following enactment of this
74	section.
75	(b) Beginning January 1, 2013, state agencies that must exceed the
76	consumption levels of their respective facilities, as inventoried by the 2011 state energy audit,
77	are required to procure energy produced from renewable sources to meet that demand, and
78	provide documentation to that effect to the division of energy resources.
79	(c) The division of energy resources shall post on its website annually the
80	progress each state agency has made toward the ten-year energy reduction requirement, along
81	with any requests by agencies to exceed its 2011 state energy audit demand levels, along with the
82	type and amount of renewables that the state agency has procured to meet those needs.
83	(d) The division shall report to the legislature on March 1, 2020, an initial
84	analysis of the success of state agencies in meeting the twenty percent energy reduction
85	requirements, and shall submit an assessment of state energy goals for the next ten year period.
86	SECTION 6. State Energy Efficiency Planning.

date of this law, promulgate energy efficiency planning guidelines, designed to assist state

(a) The division of energy resources shall, within 4 months of the effective

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agencies in their efforts to have facilities achieve energy use reduction requirements. Those
 guidelines shall include:

- (1) incremental energy efficiency gains that state agencies, divisions and departments must meet or exceed for every year between implementation of those requirements and 2020;
- (2) guidelines for how state agencies, divisions and departments can meet energy efficiency requirements through construction, installation, leasing and retrofitting.
- (b) Within 10 months of the effective date of this law, each state agency, in coordination with the division of capital asset management, must file with the division of energy resources its plans to reduce energy consumption to reach both the incremental annual efficiency requirements, and the ten-year energy use reduction requirements. Following the filing of the initial plans, revised plans pertaining to the following fiscal year shall be submitted to the division three months prior to the end of each fiscal year.
- (c) Each state agency shall notify employees that the Commonwealth is undertaking policies to reduce energy usage and improve energy efficiency; the Division of Energy Resources shall create an electronic 'suggestion box' so that employees and the public may make recommendations.
 - SECTION 7. State procurement of energy efficient buildings and equipment.
- (a) The division of energy resources shall establish minimum contract specifications for the purchase of solar-powered or "energy efficient" products that are in the upper 25 percent of energy efficiency for all similar products, or products that are at least 10

- percent more efficient than the minimum level that meets federal standards as determined by the
 U.S. Department of Energy and Section 161 of the Energy Policy Act of 1992.
 - (b) The division of energy resources shall establish minimum contract specifications for the purchase of computer and other office equipment that complies with the U.S. Environmental Protection Agency's "Energy Star" designation and which contains equipment to "power down" pursuant to Presidential Executive Order #12845, "Requiring Agencies to Purchase Energy Efficient Computer Equipment".
 - (c) The division of energy resources shall provide assistance to all state agency and facility purchasing agents in identifying products that meet the energy efficiency and renewable energy guidelines included in this section.

SECTION 8. Lifecycle costing for state.

- (a) Any state agency initiating the construction of a new facility, or substantial renovation of an existing facility that includes the replacement of systems, components and other building elements that effect energy or water consumption, and that is either owned or operated by Massachusetts, shall design and construct such facility to minimize the lifecycle cost of the facility by utilizing energy efficiency, water conservation or wind or solar powered energy technologies, pursuant to the following criteria:
- (1) The term "economically feasible" means providing a payback period of not more than 10 years as determined by a lifecycle cost analysis.
- 129 (2) The division of energy resources shall establish, within one year of the enactment of this section, a methodology for use by agencies in assessing lifecycle costs.

(3) State agencies shall conduct a lifecycle cost analysis to evaluate the economic and technical feasibility of using a wind powered or passive solar or active solar energy system to provide lighting, space heating, water heating, or electricity. State agencies shall use wind or solar powered systems when the lifecycle cost analysis has determined that such systems are economically feasible.

- (b) State agencies shall file a report with the division of energy resources for each renovation or construction project demonstrating compliance with the requirements of this section.
- (c) The division shall publish for the public an annual report on its web site detailing the compliance record of all state agencies with the construction and renovation provisions of this section.
 - SECTION 9. Replacement of state vehicles with high efficiency vehicles.
- (a) Motor vehicles owned and operated by the commonwealth shall only be replaced with vehicles that have average fuel efficiency ratings not less than 20 percent better than new vehicles in their size classes as determined pursuant to section two A of chapter sixty-four H. No state agency may approve the purchase of four wheel drive vehicles in the light truck category, including so-called Sport Utility Vehicles (SUV's), without first obtaining an authorization from the division of energy resources acknowledging the necessity of the purchase for a specific use that cannot be met by other more fuel-efficient vehicles. The division, within six months of the effective date of this act, shall promulgate parameters for what set of circumstances may be considered a necessity for the purposes of this section.

SECTION 10. Expanded support for building code revision, enforcement.

The division of energy resources is authorized and directed to develop and implement programs that will support the continued revision and implementation of state-of-the-art residential building codes, including programs to train municipal inspectors and building contractors in new efficiency techniques and materials.