SENATE DOCKET, NO. 159 FILED ON: 1/15/2021

SENATE . . . . . No. 2165

The Commonwealth of Massachusetts

PRESENTED BY:

James B. Eldridge

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 increasing solar rooftop energy.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	
James B. Eldridge	*Middlesex and Worcester*	
Mike Connolly	*26th Middlesex*	
Jack Patrick Lewis	*7th Middlesex*	*2/11/2021*
Tami L. Gouveia	*14th Middlesex*	*2/26/2021*
Joanne M. Comerford	*Hampshire, Franklin and Worcester*	*3/5/2021*
Michael O. Moore	*Second Worcester*	*3/9/2021*
Sal N. DiDomenico	*Middlesex and Suffolk*	*4/4/2021*

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SENATE . . . . . No. 2165

By Mr. Eldridge, a petition (accompanied by bill, Senate, No. 2165) of James B. Eldridge, Mike Connolly, Jack Patrick Lewis, Tami L. Gouveia and other members of the General Court for legislation to increase solar rooftop energy. Telecommunications, Utilities and Energy.

[SIMILAR MATTER FILED IN PREVIOUS SESSION
SEE SENATE, NO. *1957* OF 2019-2020.]

The Commonwealth of Massachusetts

In the One Hundred and Ninety-Second General Court
(2021-2022)

An Act increasing solar rooftop energy.

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

The General Laws, as appearing in the 2018 Official Edition, are hereby amended by inserting after chapter 143 the following chapter:-

CHAPTER 143A. SOLAR HOMES AND BUSINESSES.

Section 1. As used in this chapter the following words shall have the following meanings unless the context clearly requires otherwise:-

“Board”, state board of building regulations and standards.

“Department”, department of public safety.

“Developer”, any person or company that constructs residential or commercial buildings.

"Effective solar area", the portion of a building roof on which the output from a solar energy system, taking into account shading from existing permanent natural or manmade barriers external to the building (including but not limited to trees, hills, and adjacent structures), would be equivalent to 70 percent or greater of the output of an unshaded solar energy system on an annual basis.

"Large commercial building", a commercial building of 10,000 or more square feet.

"Multi-family dwelling", a building intended to be inhabited as a primary or secondary residence by multiple individuals or groups of individuals living in separate apartments.

"New construction", any newly constructed residential or commercial building that requires a building permit to proceed.

"Single-family dwelling", a building intended to be inhabited as a primary or secondary residence by one individual or group of individuals.

"Solar energy system", any system that uses solar energy to provide all or a portion of the electrical needs of a residential or commercial building.

"Solar hot water heater", any system that uses solar energy to heat water for use in a residential or commercial building.

"Substitute renewable energy system", any system that uses renewable energy resources other than solar energy to provide for all or a portion of the electrical needs of a residential or commercial building; provided, that a renewable energy system shall use a technology eligible for the renewable portfolio standard under subsection (c) of section 11F of chapter 25A of the General Laws

Section 2. (a) All new construction shall be built to accommodate the installation of a solar energy system. The board shall promulgate regulations within 1 year from the passage of this act to amend the state building code to establish minimum standards that must be met for new construction to accommodate a solar energy system.

(b) In drafting the regulations, the board shall take into account existing building code requirements and compliance costs. The board shall also consult with scientists, engineers, and professional societies with relevant expertise in solar energy systems and building construction.

(c) At a minimum, the board shall include requirements for: (1) static load roof strength, with a requirement that roofing where solar equipment could be placed be capable of supporting a minimum of 6 pounds per square foot; (2) placement of non-solar related rooftop equipment, taking into account positioning that avoids shading of solar equipment and maximization of continuous roof space; (3) sizing and provision of extra electrical panels to accommodate the addition of an appropriately sized future solar energy system; and (4) provision of space for a solar energy system DC-AC inverter in the utility room or on an outside wall.

(d) The board shall also consider including requirements for: (1) roof orientation and angle; (2) roof types that are compatible with a solar installation mounting strategy that will require minimal or no roof penetrations; and (3) a conduit for wiring from roof to electric panel.

(e) To the extent necessary, the board shall promulgate separate standards for residential and commercial construction.

(f) In developing these regulations, the board shall consult with the department of energy resources, the Massachusetts Clean Energy Center, and other state agencies with relevant expertise.

Section 3. (a) The board shall promulgate regulations within 1 year from the passage of this act to amend the state building code to require certain types of new construction, as specified in this section, to have a solar energy system.

(b) Single-family dwellings shall have a solar energy system producing sufficient electricity on an annual basis to meet 100 percent of the average electricity demand of dwellings of a similar size and type.

(c) Multi-family dwellings and large commercial buildings up to ten stories in height shall have a solar energy system producing sufficient electricity on an annual basis to meet minimum standards established by the board.

(d) The board may require other categories of new construction or renovated buildings to have a solar energy system, and set minimum standards for the capacity of the solar energy system.

(e) The board may reduce the required minimum capacity of solar energy systems for single-family and multi-family dwellings by up to 25 percent if installed in conjunction with a battery storage system with a minimum capacity of 7.5 kilowatt-hours per dwelling unit.

(f) The board shall determine the average electricity consumption for the types of buildings described in this section and revise its determination at least every three years, taking into account changes in electricity consumption due to energy efficiency improvements, electric vehicle charging, air source heat pumps and other electric heating technologies, and other factors.

Section 4. (a) Developers may seek an exemption from the inspector of buildings or building commissioner from the requirements under sections 2 and 3 of this chapter upon a sufficient showing that the effective solar area is less than 80 contiguous square feet.

(b) Developers may seek an exemption from the inspector of buildings or building commissioner from the requirements under sections 2 and 3 of this chapter upon a sufficient showing that a substitute renewable energy system will be installed at the time of construction, producing an equal or greater amount of electricity on an annual basis as the minimum required solar installation under section 3 of this chapter. Developers may seek a reduction in the required size of a solar energy system upon a sufficient showing that a substitute renewable energy system will be installed at the time of construction, producing sufficient electricity on an annual basis to offset the reduction in electricity produced by the solar energy system.

(c) Developers may seek an exemption from the inspector of buildings or building commissioner from the requirements under sections 2 and 3 of this chapter, or a reduction in the required size of a solar energy system, upon a sufficient showing that a solar hot water heater will be installed at the time of construction. Such exemption or reduction shall only be granted to the extent that the installation of a solar hot water heater will reduce the portion of the effective solar area available for a solar energy system.

(d) The board may allow exemptions for affordable housing developments, after consulting with affordable housing developers and operators, organizations that represent affordable housing residents, and other stakeholders.

(e) The board shall promulgate regulations within 1 year of the passage of this act that clearly define the process for seeking an exemption.

Section 5. (a) All future editions and amended versions of the building code, as adopted by the board, shall include regulations meeting the requirements of sections 2, 3, and 4 of this chapter.

(b) The board may from time to time revise the regulations promulgated under sections 2, 3, and 4 of this chapter, in accordance with changes in technology and building practices.

Section 6. Compliance with the provisions of this chapter shall not impair a building's eligibility for any incentives, rebates, credits, or other programs in existence to encourage development of renewable energy resources.

Section 7. A building permit for new construction shall not be granted without a showing that the building complies with the requirements of this chapter.

Section 8. Any person who fails to comply with or otherwise violates this chapter shall be liable for a civil administrative penalty not to exceed $10,000 for each violation, or twice the estimated additional cost that would have been incurred by constructing a building to meet the requirements of this chapter, whichever is greater.