

# HOUSE . . . . . No. 3677

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## The Commonwealth of Massachusetts

PRESENTED BY:

*Mike Connolly and Jack Patrick Lewis*

*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 establishing solar neighborhoods.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
<i>Mike Connolly</i>	<i>26th Middlesex</i>	<i>1/20/2023</i>
<i>Jack Patrick Lewis</i>	<i>7th Middlesex</i>	<i>1/20/2023</i>
<i>David Henry Argosky LeBoeuf</i>	<i>17th Worcester</i>	<i>1/30/2023</i>
<i>James B. Eldridge</i>	<i>Middlesex and Worcester</i>	<i>2/19/2023</i>
<i>Carol A. Doherty</i>	<i>3rd Bristol</i>	<i>2/20/2023</i>
<i>Erika Uyterhoeven</i>	<i>27th Middlesex</i>	<i>2/22/2023</i>
<i>Tommy Vitolo</i>	<i>15th Norfolk</i>	<i>4/4/2023</i>

# HOUSE . . . . . No. 3677

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By Representatives Connolly of Cambridge and Lewis of Framingham, a petition (accompanied by bill, House, No. 3677) of Mike Connolly, Jack Patrick Lewis and others relative to establishing solar neighborhoods. Telecommunications, Utilities and Energy.

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[SIMILAR MATTER FILED IN PREVIOUS SESSION  
SEE HOUSE, NO. 3278 OF 2021-2022.]

## The Commonwealth of Massachusetts

\_\_\_\_\_  
In the One Hundred and Ninety-Third General Court  
(2023-2024)  
\_\_\_\_\_

An Act establishing solar neighborhoods.

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

1           Chapter 25A of the General Laws, as appearing in the 2022 Official Edition, is hereby  
2 amended by inserting after section 18 the following section:-

3           Section 19. Solar neighborhoods act.

4           (a) As used in this section the following words shall have the following meanings unless  
5 the context clearly requires otherwise:-

6           “Battery storage system,” a system allowing electricity to be stored in and discharged  
7 from batteries.

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

9 “Green roof,” a layer of vegetation planted over the roof of a building.

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

12 “New building”, any newly constructed residential or commercial building that requires a  
13 building permit to proceed.

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

16 “Solar energy system”, any solar photovoltaic system that is installed on site and uses  
17 solar energy to provide all or a portion of the electrical needs of a residential or commercial  
18 building.

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

21 “Substitute renewable energy system”, a renewable energy generating source, as defined  
22 in section 11F of chapter 25A, that is not a solar photovoltaic system, is installed on site, and  
23 provides all or a portion of the electrical needs of a residential or commercial building.

24 (b) The department, in consultation with the state board of building regulations and  
25 standards, shall develop and promulgate amendments to the base energy code, stretch energy  
26 code, and specialized stretch energy code established under section 6 of chapter 25A and  
27 sections 93 through 100 of chapter 143 requiring new buildings to be built with solar energy  
28 systems.

(c) Detached one- and two-family dwellings and multiple single-family dwellings or townhouses regulated under the provisions of the residential code shall have a solar energy system producing sufficient electricity on an annual basis to meet at least 80 percent of the estimated average annual electricity use of dwellings of a similar size. The department may reduce the required minimum generating capacity of solar energy systems for these 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.

(d) Multi-family dwellings and commercial buildings up to six stories in height shall have a solar energy system and battery storage system of a minimum capacity established by the department, which may be based on the size of the roof and effective solar area, building type and occupancy, estimated average annual electricity use of similar buildings, or other factors.

(e) The department may require other categories of new buildings to have a solar energy system or battery storage system, and set requirements for the minimum generating capacity of the solar energy system installed on those buildings.

(f) The department shall estimate the average annual electricity use for the categories of buildings described in this section and revise its determination at least every three years, taking into account changes in electricity use due to energy efficiency improvements, electric vehicle charging, electric heating and cooling technologies, and other factors.

(g) In promulgating these regulations, the department may include provisions to ensure that new buildings can accommodate solar energy systems on their rooftops, including but not limited to requirements for static load roof strength, placement of rooftop equipment, sizing and provision of extra electrical panels, provision of space for a solar energy system DC-AC inverter

in the utility room or on an outside wall, roof orientation and angle, roof types that are compatible with a solar installation mounting strategy that will require minimal or no roof penetrations, and conduits for wiring from roofs to electric panels.

(h) The department shall establish criteria under which developers can seek an exemption from the requirements of this section. Such criteria may include insufficient rooftop solar energy generating potential, the installation of a substitute renewable energy system or solar hot water heater at the time of construction, the installation of a solar energy system over a parking lot or elsewhere on the property, and participation in a community solar project. The department may allow exemptions from the requirements of this section for affordable housing developments, after consulting with affordable housing developers and operators, community development corporations, organizations that represent affordable housing residents, and other stakeholders.

(i) The provisions of the building code adopted under this section shall allow the installation of a green roof in conjunction with a rooftop solar energy system.

(j) A building permit for a new building shall not be granted without a showing that the building complies with the requirements of this section.

(k) Any person who fails to comply with or otherwise violates this section 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.

(l) The department shall promulgate regulations within 1 year of the passage of this act to enforce this section. All future editions of the base energy code, stretch energy code, and specialized stretch energy code shall include provisions meeting the requirements of this section.