

HOUSE No. 3149

The Commonwealth of Massachusetts

PRESENTED BY:

Daniel Cahill

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 fossil-free fuels pilot programs.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
<i>Daniel Cahill</i>	<i>10th Essex</i>	<i>1/18/2023</i>

HOUSE No. 3149

By Representative Cahill of Lynn, a petition (accompanied by bill, House, No. 3149) of Daniel Cahill for legislation to establish fossil-free fuels pilot programs. Telecommunications, Utilities and Energy.

The Commonwealth of Massachusetts

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

An Act establishing fossil-free fuels pilot programs.

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 99 Chapter 8 is hereby amended by adding the following paragraph:

2 SECTION XX. The department of public utilities may, upon application of a gas
3 company as defined in section 1 of chapter 164 of the General Laws, authorize pilot projects for
4 the development of utility-scale renewable natural gas and/or renewable hydrogen. Such
5 application shall be filed with the department on or before January 1, 2025. The department may,
6 under a pilot, approve recovery of costs for projects situated in the commonwealth that
7 demonstrate the technical and economic potential of renewable natural gas and/or renewable
8 hydrogen sources, systems or technologies capable of substituting for fossil-based natural gas;
9 provided, however, that such substitute renewable natural gas and/or renewable hydrogen
10 sources, systems or technologies, and such replacements or alternative uses, have a reasonable
11 likelihood of facilitating substantial reductions in greenhouse gas emissions that satisfy the
12 mandates of greenhouse gas reductions set forth in chapter 21N of the General Laws. The

13 department shall ensure transparency and validity of the outcomes of the pilot projects through a
14 third-party evaluation and report by the department of energy resources. In determining whether
15 to approve a pilot project, the department shall consider the reasonableness of the size, scope and
16 scale of the pilot project and related budget and the likelihood of the pilot to demonstrate
17 technical and economic benefits, including the social value of greenhouse gas emissions
18 reductions. The department may promulgate rules or regulations to implement this section.

19 For purposes of this section, the following terms are defined as follows:

20 “Renewable natural gas” is defined as pipeline quality gas derived from any combination
21 of biogas, biomass, the methanation of hydrogen and waste carbon dioxide, or the thermal
22 gasification of sustainable feedstocks, where the use of the fuel results in lower lifecycle CO₂-
23 equivalent (“CO₂-e”) emissions than geologic natural gas. CO₂-e is defined as the number of
24 metric tons of CO₂ emissions with the same global warming potential as one metric ton of
25 another greenhouse gas.

26 “Renewable hydrogen” is defined as hydrogen produced with electricity generated from
27 renewable energy systems or from conventional sources where any associated emissions are
28 curtailed or offset by carbon management. Renewable energy systems include those that
29 generate electric or thermal energy through the use of solar thermal, photovoltaics, wind,
30 hydroelectric, geothermal electric, geothermal ground source heat, biogas produced by the
31 anaerobic digestion or fermentation of biodegradable materials, tidal energy, wave energy, ocean
32 thermal and fuel cells that do not utilize a fossil fuel resource.