



# Senate

General Assembly

**File No. 245**

February Session, 2022

Substitute Senate Bill No. 292

*Senate, March 31, 2022*

The Committee on Housing reported through SEN. LOPES of the 6th Dist., Chairperson of the Committee on the part of the Senate, that the substitute bill ought to pass.

***AN ACT CONCERNING HEATING EFFICIENCY IN NEW CONSTRUCTION AND MAJOR ALTERATIONS OF RESIDENTIAL BUILDINGS.***

Be it enacted by the Senate and House of Representatives in General Assembly convened:

1 Section 1. Section 29-256a of the general statutes is repealed and the  
2 following is substituted in lieu thereof (*Effective October 1, 2022*):

3 (a) The State Building Inspector and the Codes and Standards  
4 Committee shall revise the State Building Code to require that  
5 commercial and residential buildings and building elements be  
6 designed to provide optimum cost-effective energy efficiency over the  
7 useful life of the building and to incorporate the 2012 International  
8 Energy Conservation Code, not later than eighteen months after the  
9 publication of said code. The provisions of this section shall not be  
10 construed to impose any new requirement for any renovation or  
11 construction of a state building that is subject to the requirements of  
12 section 16a-38k, regardless of whether such building has been granted  
13 an exemption under said section.

14 (b) Notwithstanding subsection (a) of this section, on and after July 1,  
15 2010, the State Building Inspector and the Codes and Standards  
16 Committee, in consultation with the Commissioner of Administrative  
17 Services, shall revise the State Building Code to include provisions  
18 requiring certain buildings of or over a specified minimum size, that  
19 qualify as a new construction or a major alteration of a residential or  
20 nonresidential building, to meet or exceed optimum cost-effective  
21 building construction standards concerning the thermal envelope or  
22 mechanical systems, including, but not limited to, indoor air quality and  
23 water conservation, and the lighting and electrical systems of the  
24 building. Such provisions shall reference nationally accepted green  
25 building rating systems, including, but not limited to, the Leadership in  
26 Energy and Environmental Design rating system, the Green Globes  
27 USA design program, as established by the Green Building Initiative,  
28 the National Green Building Standard, as established by the National  
29 Association of Home Builders, or an equivalent rating system approved  
30 by the State Building Inspector and the Codes and Standards  
31 Committee. Such requirements shall include a method for  
32 demonstrating compliance at the time of application for a certificate of  
33 occupancy, including, but not limited to, private third-party  
34 certification or verification of compliance with the relevant portions of  
35 such rating systems, including, but not limited to, the energy and  
36 environmental portions.

37 (c) The State Building Inspector and the Codes and Standards  
38 Committee shall, in the revision of the State Building Code to  
39 incorporate the 2024 International Energy Conservation Code and  
40 subsequent versions, prohibit the use of any electric resistance or fossil  
41 fuel combustion system as the primary source of heating, ventilation  
42 and air conditioning or water heating in new residential construction or  
43 in major alterations of residential buildings.

44 Sec. 2 (NEW) (*Effective October 1, 2022*) (a) The Department of Energy  
45 and Environmental Protection shall, within available appropriations,  
46 develop a program for the training and education of engineers, builders,  
47 contractors or superintendents of construction doing business in this

48 state on the mechanics and application of thermal space and water  
 49 heating systems other than electric resistance or fossil fuel combustion  
 50 systems, including, but not limited to, air source heat pumps, ground  
 51 source heat pumps, solar thermal water or space heating systems or on-  
 52 demand electric water heaters.

53 (b) The Commissioner of Energy and Environmental Protection may  
 54 apply for any federal or private funds or contributions available for  
 55 training and education of persons eligible to receive training under  
 56 subsection (a) of this section.

This act shall take effect as follows and shall amend the following sections:		
Section 1	October 1, 2022	29-256a
Sec. 2	October 1, 2022	New section

**Statement of Legislative Commissioners:**

In Section 1(c), a reference to the State Building Code was added for accuracy and statutory consistency.

**HSG**      *Joint Favorable Subst. -LCO*

*The following Fiscal Impact Statement and Bill Analysis are prepared for the benefit of the members of the General Assembly, solely for purposes of information, summarization and explanation and do not represent the intent of the General Assembly or either chamber thereof for any purpose. In general, fiscal impacts are based upon a variety of informational sources, including the analyst's professional knowledge. Whenever applicable, agency data is consulted as part of the analysis, however final products do not necessarily reflect an assessment from any specific department.*

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### **OFA Fiscal Note**

**State Impact:** None

**Municipal Impact:** None

### **Explanation**

The bill requires the building inspector to prohibit certain heating and cooling systems in new residential constructions or major residential alterations when revising the state building code. There is no fiscal impact for the state building inspector to revise residential building codes.

The bill also requires the Department of Energy and Environmental Protection (DEEP) to, within available appropriations, develop a program to train and educate people on the mechanics and application of certain thermal space and water heating systems. Also, the bill allows DEEP to apply for available federal or private funding to support the program.

These requirements are not expected to result in a fiscal impact to the state, municipalities or ratepayers, as DEEP currently performs some of this work in conjunction with the Energy Efficiency Board through the Conservation and Load Management (CL&M) Program. Further, DEEP is anticipated to pursue all relevant Infrastructure Investment and Jobs Act (IIJA) funding that may be available to supplement these programs.

The C&LM currently includes funding for efficient residential new construction projects, including specific offerings for all-electric new construction. In 2022, the Residential New Construction program has a budget of over \$6 million, supported by a variety of funding sources,

including: (1) a six-mill Conservation Adjustment Mechanism (CAM) on electric bills; (2) contributions from gas customers (on firm rates) through the natural gas CAM; (3) and proceeds from the Regional Greenhouse Gas Initiative (RGGI); (4) and the Independent System Operator-New England's Forward Capacity Market.

Additionally, the Residential New Construction program currently provides rebates based on a home's overall efficiency, with bonuses available for all-electric homes or homes that meet a high efficiency standard. The presence of a heat pump in a new construction project helps to maximize the possible rebate. The C&LM Plan also includes programs for training and workforce development. In 2022, the budget for these programs is over \$1.3 million.

#### Ratepayer Impact Statement

The bill mandates installation of heat pumps in future residential construction or major alterations. Heat pumps are used for both heating and cooling. The mandate primarily would shift certain residential heating from oil or gas furnaces to heat pumps, which are run on electricity. Electricity usage would thereby increase, resulting in greater costs for electricity during times when heating is needed.

#### ***The Out Years***

***State Impact:*** None

***Municipal Impact:*** None

**OLR Bill Analysis****SB 292*****AN ACT CONCERNING HEATING EFFICIENCY IN NEW CONSTRUCTION AND MAJOR ALTERATIONS OF RESIDENTIAL BUILDINGS.*****SUMMARY**

This bill requires the state building inspector and the Codes and Standards Committee, when revising the state building code (see BACKGROUND) to incorporate the 2024 International Energy Conservation Code (IECC) and subsequent versions, to prohibit certain heating and cooling systems in new residential constructions or major residential alterations. (It does not define "major residential alterations.") This prohibition applies to the use of any electric resistance or fossil fuel combustion system as the primary source of heating, ventilation and air conditioning, or water heating.

The bill also requires the Department of Energy and Environmental Protection (DEEP) to, within available appropriations, develop a program to train and educate eligible people on the mechanics and application of thermal space and water heating systems other than electric resistance or fossil fuel combustion systems (e.g., air source and ground source heat pumps, solar thermal water or space heating systems, and on-demand electric water heaters). The program will serve engineers, builders, contractors, and construction superintendents doing business in Connecticut. The bill allows the DEEP commissioner to apply for available federal or private funding to support the program.

EFFECTIVE DATE: October 1, 2022

**BACKGROUND*****State Building Code***

State law requires the state building inspector and the Codes and

Standards Committee, with the approval of the Department of Administrative Services commissioner, to adopt and administer a state building code based on a nationally recognized model building code to regulate the design, construction, and use of buildings or structures (CGS § 29-252). The current state building code adopts a number of the International Code Council's model codes, including the IECC.

**COMMITTEE ACTION**

Housing Committee

Joint Favorable

Yea 10 Nay 5 (03/15/2022)