

HOUSE BILL 665

P1, F1

0lr3022

By: **Delegates Barve and Stein**

Introduced and read first time: January 29, 2020

Assigned to: Appropriations

A BILL ENTITLED

1 AN ACT concerning

2 **Public School Construction and State Buildings – Use of Geothermal Energy**

3 FOR the purpose of prohibiting the Interagency Commission on School Construction from
4 approving the construction of a public school unless a geothermal energy system will
5 be installed in the school building; requiring the State to install a geothermal energy
6 system in each State building constructed by the State; altering certain
7 requirements for certain standards established by the Department of General
8 Services in cooperation with the Maryland Energy Administration; defining a certain
9 term; and generally relating to the use of geothermal energy in public school
10 construction and State buildings.

11 BY adding to

12 Article – Education

13 Section 5–324

14 Annotated Code of Maryland

15 (2018 Replacement Volume and 2019 Supplement)

16 BY adding to

17 Article – State Finance and Procurement

18 Section 4–410.1

19 Annotated Code of Maryland

20 (2015 Replacement Volume and 2019 Supplement)

21 BY repealing and reenacting, with amendments,

22 Article – State Finance and Procurement

23 Section 4–808

24 Annotated Code of Maryland

25 (2015 Replacement Volume and 2019 Supplement)

26 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND,
27 That the Laws of Maryland read as follows:

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



Article - Education

one of the renewable energy systems considered to be

5-324.

THE INTERAGENCY COMMISSION MAY NOT APPROVE THE CONSTRUCTION OF A PUBLIC SCHOOL UNLESS A ~~GEO THERMAL ENERGY~~ SYSTEM WILL BE INSTALLED IN THE SCHOOL BUILDING.

Ground Source Heat Pump

Article - State Finance and Procurement

4-410.1.

(A) IN THIS SECTION, "STATE BUILDING" MEANS:

(1) A BUILDING CONSTRUCTED BY OR FOR THE STATE FOR OCCUPANCY BY A STATE AGENCY OR DEPARTMENT; OR

(2) A BUILDING CONSTRUCTED FOR WHICH MORE THAN 50% OF THE MONEY FOR THE CONSTRUCTION CAME FROM STATE FUNDS.

conduct energy analysis to vet renewable energy strategies for all new buildings. Ground source heat pumps shall be one of the systems considered. Renewable shall be installed

(B) THE STATE SHALL ~~INSTALL A GEO THERMAL ENERGY SYSTEMS~~ IN EACH STATE BUILDING CONSTRUCTED BY THE STATE, or 3rd party entity constructing a building for state use

4-808.

(a) To determine life-cycle costs, the Department, in cooperation with the Maryland Energy Administration, shall establish standards that require at least:

(1) an evaluation, BASED ON A 50-YEAR PERIOD, of:

(i) the amount and type of glass used in the building and the directions of exposure;

(ii) the effect of insulation incorporated into the design of the building;

(iii) the effect of the use of active and passive solar energy systems;

ground source heat pump

(IV) THE EFFECT OF THE USE OF A ~~GEO THERMAL ENERGY SYSTEM~~; and alternate renewable energy systems to determine the most practical and cost effective system.

[(iv)] (V) if wind or solar energy is used, the orientation and integration of the building with respect to its site; and

1 [(v)] (VI) the variable occupancy and operating conditions of the
2 building and its parts;

3 (2) an energy consumption **AND SYSTEMS REPLACEMENT** analysis,
4 **BASED ON A 50-YEAR PERIOD** of each major piece of equipment in any of the following
5 systems serving the building:

6 (i) the cooling system;

7 (ii) the heating system;

8 (iii) the hot water system;

9 (iv) the lighting system;

10 (v) the ventilation system; and

11 (vi) any other major energy-using system; and

12 (3) a comparison of possible alternative energy systems:

13 (i) that would use the most plentiful and available energy resources
14 in combinations that would result in maximum energy efficiency, both in the building and
15 at the source; and

16 (ii) with respect to the projected annual energy consumption of the
17 major energy-using equipment of each system over the life of the building.

18 (b) To evaluate life-cycle costs, the Department shall:

19 (1) adopt and uniformly apply a definition of the "life of the building"; and

20 (2) provide defining criteria for the definition adopted.

21 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect
22 October 1, 2020.