

Committee: Finance

Testimony on: HB0806 Building Standards and Emissions Reductions – High Performance, State, and Local Government Buildings, State Operations, and Eligible Projects

Submitted by: Donald M. Goldberg, Executive Director

Position: Favorable with Amendments

Hearing Date: February 28, 2022

Climate Law & Policy Project strongly supports all the provisions of House Bill 806 except its exclusion of public schools as covered buildings under State Finance and Procurement Article, § 3-602.3. We also urge the this Committee and the House to include a requirement that new schools, at a minimum, be net-zero ready with a waiver for infeasibility or high cost. We have attached a proposed amendment of Education Article, § 5-312 to create this requirement.

Public schools are leaders in the field of net-zero energy buildings. Many schools around the country now operate efficiently, entirely without the use of fossil fuels for space and water heating. Three net-zero energy schools have been built in Maryland at little or no additional cost, including solar arrays, and have proven to be extremely popular with students, parents, teachers, and school officials.

Net-zero and net-zero-ready schools offer tremendous advantages to school districts and students. They are cheaper to operate, often are less expensive to build, and features like daylighting are shown to improve student learning.

Here we provide construction costs for Maryland’s three new NZE schools and the energy performance of Wilde Lake Middle School. It is actually net negative — it produces more energy than it uses. (Due to COVID-19, one-year performance data for Holabird Academy and Graceland Park/O’Donnell is not yet available.) Wilde Lake has an energy use intensity (EUI) of 13.7 kBtu per square foot per year. For comparison, Montgomery County Public Schools have an average EUI of 54 kBtu per sf/yr.

According to the Interagency Commission on School Construction, Maryland average school construction costs with site preparation from 2015 to 2021 have ranged from \$261 to \$405 per square foot.¹

Bid Year	\$ per sq. ft. without site preparation	\$ per sq. ft with site preparation
2021	\$341	\$405
2020	\$329	\$392
2019	\$318	\$378
2018	\$302	\$360
2017	\$293	\$349
2016	\$282	\$336
2015	\$233	\$261

¹ https://iac.mdschoolconstruction.org/?page_id=4633

Wilde Lake Middle School, Columbia (\$320 per square foot with site preparation & solar panels)

- Net-Zero LEED Platinum
- Completion date: August 2017
- Bid year: 2015
- Construction cost, including site preparation and solar panels: \$34,000,000
- Gross square feet: 106,221
- Energy produced during performance period: 821,618 kWh
- Energy use during performance period: 428,301 kWh
- Net Energy Use: -393,317 kWh (net-negative)
- Energy Use Intensity: 13.7 kBtu/sf/yr

Graceland Park / O'Donnell Heights Elementary/Middle School, Baltimore (\$358 per square foot, with site preparation & solar panels)

- Net-Zero LEED Platinum
- Completion date: September 2020
- Bid year: 2018
- Construction cost, including site and solar panels: \$33,752,000
- Gross square feet: 94,070
- Energy performance not yet determined due to COVID-19

Holabird Academy, Baltimore (\$364 per square foot with site preparation & solar panels)

- Net-Zero LEED Platinum
- Completion date: September 2020
- Bid year: 2018
- Construction cost, including site and solar panels: \$34,330,500
- Gross square feet: 94,070
- Energy performance not yet determined due to COVID-19

Proposed Amendment

Article — Education, § 5-312.

(a) In this section, “high performance building” has the meaning stated in § 3–602.1 of the State Finance and Procurement Article.

[(b)] IN THIS SECTION, “NET–ZERO READY” MEANS NET–ZERO ENERGY WITHOUT INSTALLED SOLAR PANELS BUT READY FOR INSTALLATION.

(b) This section applies to the construction of new schools that have not initiated a Request For Proposal for the selection of an architectural and engineering consultant on or before July 1, 2009.

(c) (1) [Except] **SUBJECT TO PARAGRAPH (2) OF THIS SUBSECTION, AND EXCEPT** as provided in subsection (d) of this section, a new school that receives State public school construction funds shall be constructed to be a high performance building.

(2) (I) **EXCEPT AS PROVIDED IN SUBPARAGRAPH (II) OF THIS PARAGRAPH, THE NET-ZERO ENERGY REQUIREMENTS THAT APPLY FOR A BUILDING TO MEET THE DEFINITION OF A "HIGH PERFORMANCE BUILDING" UNDER § 3-602.1 OF THE STATE FINANCE AND PROCUREMENT ARTICLE DO NOT APPLY TO PUBLIC SCHOOL BUILDINGS.**

(II) **SUBJECT TO THE AVAILABILITY OF FUNDING FROM THE NET-ZERO SCHOOL GRANT FUND ESTABLISHED UNDER § 9-2010 OF THE STATE GOVERNMENT ARTICLE, AT LEAST ONE OF THE SCHOOLS CONSTRUCTED IN EACH LOCAL SCHOOL SYSTEM FROM JULY 1, 2023, THROUGH JUNE 30, 2033, INCLUSIVE, SHALL BE CONSTRUCTED TO MEET NET-ZERO ENERGY REQUIREMENTS.**

(III) **A NEW SCHOOL THAT RECEIVES STATE PUBLIC SCHOOL CONSTRUCTION FUNDS THAT IS NOT CONSTRUCTED TO MEET NET-ZERO ENERGY REQUIREMENTS SHALL BE CONSTRUCTED TO MEET NET-ZERO READY REQUIREMENTS.**

(d) (1) The Interagency Commission shall establish a process to allow a school system to obtain a waiver from complying with subsection (c) of this section.

(2) The waiver process shall:

(i) Include a review by the Interagency Commission to determine if the construction of a high performance building is not practicable; and

(ii) Require the approval of a waiver by the Interagency Commission.

(3) **THE INTERAGENCY COMMISSION SHALL WAIVE THE REQUIREMENTS OF SUBSECTION (C)(2)(II) OF THIS SUBSECTION IF THE INTERAGENCY COMMISSION DETERMINES THAT:**

(I) **THE CONSTRUCTION OF A NET-ZERO ENERGY SCHOOL BUILDING IS NOT PRACTICABLE BECAUSE OF SPATIAL LIMITATIONS AT THE BUILDING SITE; OR**

(II) **WHEN TAKING INTO CONSIDERATION THE AVAILABILITY OF STATE COST SHARE FUNDS AND GRANTS FROM THE NET-ZERO SCHOOL GRANT FUND ESTABLISHED UNDER § 9-2010 OF THE STATE GOVERNMENT ARTICLE, THE COST TO THE LOCAL JURISDICTION OF CONSTRUCTING A NET-ZERO ENERGY SCHOOL BUILDING WOULD EXCEED THE COST OF CONSTRUCTING A TRADITIONAL, HIGH PERFORMANCE SCHOOL BUILDING.**

(4) **THE INTERAGENCY COMMISSION SHALL WAIVE THE REQUIREMENTS OF SUBSECTION (C)(2)(III) OF THIS SUBSECTION IF THE**

INTERAGENCY COMMISSION DETERMINES THAT:

(I) THE CONSTRUCTION OF A NET-ZERO READY SCHOOL BUILDING IS NOT PRACTICABLE BECAUSE OF SPATIAL LIMITATIONS AT THE BUILDING SITE; OR

(II) WHEN TAKING INTO CONSIDERATION THE AVAILABILITY OF STATE COST SHARE FUNDS, THE COST TO THE LOCAL JURISDICTION OF CONSTRUCTING A NET-ZERO READY SCHOOL BUILDING WOULD EXCEED THE COST OF CONSTRUCTING A TRADITIONAL, HIGH PERFORMANCE SCHOOL BUILDING.

(e) For fiscal years 2010 through 2014 only, the State shall pay 50% of the local share of the extra costs, identified and approved by the Interagency Commission, that are incurred in constructing a new school to meet the high performance building requirements of this section.

(f) **(1)** The Interagency Commission shall adopt regulations to implement the requirements of this section.

(2) IN IMPLEMENTING NET-ZERO ENERGY REQUIREMENTS FOR SCHOOL BUILDINGS, THE INTERAGENCY COMMISSION SHALL CONSULT WITH THE CLIMATE TRANSITION AND CLEAN ENERGY HUB ESTABLISHED UNDER § 9-2011 OF THE STATE GOVERNMENT ARTICLE.