E4 4lr1903 CF SB 1023

By: Delegates Boafo, Charkoudian, Foley, Guzzone, Hill, Kaiser, Ruth, Stein, Terrasa, and Wu

Introduced and read first time: February 8, 2024 Assigned to: Environment and Transportation

## A BILL ENTITLED

1	AN ACT concerning
2 3 4	Maryland Building Performance Standards – Fossil Fuel Use, Energy Conservation, and Electric– and Solar–Ready Standards (Better Buildings Act of 2024)
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5	FOR the purpose of requiring the Maryland Department of Labor, on or before certain dates
6	and as part of the Maryland Building Performance Standards, to adopt a
7	requirement that new buildings and significant improvements of buildings and
8	structures meet all water and space heating demands of the building or structure
9	without the use of fossil fuels, energy conservation requirements, and an
10	electric— and solar—ready standard for certain buildings; and generally relating to
11	the Maryland Building Performance Standards.
12	BY repealing and reenacting, with amendments,
13	Article – Public Safety
14	Section 12–503
15	Annotated Code of Maryland
16	(2022 Replacement Volume and 2023 Supplement)
17	BY adding to
18	Article – Public Safety
19	Section 12–503.1
20	Annotated Code of Maryland
21	(2022 Replacement Volume and 2023 Supplement)
22	SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND,
23	That the Laws of Maryland read as follows:
24	Article - Public Safety

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.

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12 - 503.



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- 1 (1) The Department shall adopt by regulation, as the Maryland Building (a) 2 Performance Standards, the International Building Code, including the International 3 Energy Conservation Code, with the modifications incorporated by the Department under subsection (b) of this section. 4 5 The Department shall adopt each subsequent version of the Standards 6 within 18 months after it is issued. 7 (b) (1) Before adopting each version of the Standards, the Department shall: 8 (i) review the International Building Code to determine whether 9 modifications should be incorporated in the Standards; 10 (ii) consider changes to the International Building Code to enhance 11 energy conservation and efficiency; 12 (iii) subject to the provisions of paragraph (2)(ii) of this subsection, 13 adopt modifications to the Standards that allow any innovative approach, design, equipment, or method of construction that can be demonstrated to offer performance that 14 is at least the equivalent to the requirements of: 15 16 1. the International Energy Conservation Code; 17 2. Chapter 13, "Energy Efficiency", of the International Building Code; or 18 19 3. Chapter 11, "Energy Efficiency", of the International 20 Residential Code; 21(iv) accept written comments; 22 (v) consider any comments received; and 23 hold a public hearing on each proposed modification. (vi) 24Except as provided in subparagraph (ii) of this paragraph and [§ (2) (i) 2512-510] §§ 12-503.1 AND 12-510 of this subtitle, the Department may not adopt, as part 26 of the Standards, a modification of a building code requirement that is more stringent than the requirement in the International Building Code. 27
- 28 (ii) The Department may adopt energy conservation requirements 29 that are more stringent than the requirements in the International Energy Conservation 30 Code, but may not adopt energy conservation requirements that are less stringent than the 31 requirements in the International Energy Conservation Code.
  - (c) The Standards apply to each building or structure in the State for which a

- 1 building permit application is received by a local jurisdiction on or after August 1, 1995.
- 2 (d) In addition to the Standards, the Department shall:
- 3 (1) on or before January 1, 2023, adopt by regulation the 2018 4 International Green Construction Code; and
- 5 (2) adopt each subsequent version of the Code within 18 months after it is 6 issued.
- 7 **12–503.1.**
- 8 (A) (1) IN THIS SECTION THE FOLLOWING WORDS HAVE THE MEANINGS 9 INDICATED.
- 10 (2) "ELECTRIC VEHICLE-CAPABLE SPACE" OR "EV-CAPABLE SPACE"
- 11 MEANS A PARKING SPACE PROVIDED WITH ELECTRICAL INFRASTRUCTURE,
- 12 INCLUDING RACEWAYS, CABLES, ENCLOSURES, ELECTRICAL CAPACITY, AND
- 13 ELECTRICAL DISTRIBUTION EQUIPMENT SPACE, NECESSARY FOR CONNECTION TO
- 14 **EVSE**.
- 15 (3) "ELECTRIC VEHICLE-READY SPACE" OR "EV-READY SPACE"
- 16 MEANS A PARKING SPACE PROVIDED WITH:
- 17 (I) A BRANCH CIRCUIT; AND
- 18 (II) 1. AN OUTLET FOR CONNECTION TO EVSE; OR
- 19 2. AN ENCLOSURE FOR CONNECTION TO EVSE.
- 20 (4) (I) "ELECTRIC VEHICLE SUPPLY EQUIPMENT" OR "EVSE"
- 21 MEANS EQUIPMENT FOR PLUG-IN POWER TRANSFER FOR THE PURPOSE OF
- 22 TRANSFERRING ENERGY BETWEEN THE LOCATION'S WIRING AND THE ELECTRIC
- 23 VEHICLE.
- 24 (II) "ELECTRIC VEHICLE SUPPLY EQUIPMENT" OR "EVSE"
- 25 INCLUDES THE UNGROUNDED, GROUNDED, AND EQUIPMENT GROUNDING
- 26 CONDUCTORS AND THE ELECTRIC VEHICLE CONNECTORS, ATTACHMENT PLUGS,
- 27 PERSONAL PROTECTION SYSTEM, AND ALL OTHER FITTINGS, DEVICES, POWER
- 28 OUTLETS, OR APPARATUSES.
- 29 (5) "ELECTRICAL VEHICLE SUPPLY EQUIPMENT INSTALLED SPACE"
- 30 OR "EVSE SPACE" MEANS A PARKING SPACE WITH OPERATIONAL EVSE
- 31 INSTALLED.

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**(**I)

1	(6) "ELECTRIC-READY" MEANS THE MORE STRINGENT OF:
2	(I) ELECTRIC-READY REQUIREMENTS IN THE INTERNATIONAL
3	ENERGY CONSERVATION CODE, INCLUDING RELEVANT APPENDICES; OR
4	(II) HAVING ADEQUATE PANEL CAPACITY, DEDICATED
5	ELECTRIC PANEL SPACE, ELECTRICAL WIRE, ELECTRICAL RECEPTACLES, AND
6	ADEQUATE PHYSICAL SPACE TO ACCOMMODATE FUTURE INSTALLATION OF
7 8	HIGH-EFFICIENCY ELECTRIC APPLIANCES, INCLUDING HEATING, WATER HEATING, COOKING, AND DRYING.
9	(7) (I) "SIGNIFICANT IMPROVEMENT" MEANS ANY REPAIR,
10	RECONSTRUCTION, REHABILITATION, ALTERATION, ADDITION, OR OTHER
11	IMPROVEMENT OF A BUILDING OR STRUCTURE, THE COST OF WHICH EQUALS OR
12	EXCEEDS 50% OF THE REPLACEMENT COST OF THE STRUCTURE BEFORE THE
13	IMPROVEMENT OR REPAIR IS STARTED.
14	(II) "SIGNIFICANT IMPROVEMENT" DOES NOT INCLUDE THE
15	IMPROVEMENT OF A BUILDING:
16	1. REQUIRED TO CORRECT EXISTING HEALTH,
17	SANITARY, OR SAFETY CODE VIOLATIONS IDENTIFIED BY A BUILDING OFFICIAL OR
18	THAT ARE THE MINIMUM NECESSARY TO ENSURE SAFE LIVING CONDITIONS; OR
19	2. BY ALTERATION OF A HISTORIC STRUCTURE
20	PROVIDED THAT THE ALTERATION WILL NOT PRECLUDE THE STRUCTURE'S
21	CONTINUED DESIGNATION AS A HISTORIC STRUCTURE.
22	(8) "SITE ENERGY USE INTENSITY" MEANS 1,000 BRITISH THERMAL
23	UNITS PER SQUARE FOOT PER YEAR EXPECTED OR MODELED TO BE USED AT A
24	BUILDING'S PREMISES, EXCLUSIVE OF:
25	(I) RENEWABLE ENERGY PRODUCED AND ELECTRIC VEHICLE
26	CHARGING PROVIDED AT THE BUILDING'S PREMISES;
27	(II) UNCONDITIONED FLOOR AREA; AND
28	(III) PARKING.
29	(9) "SOLAR-READY" MEANS THE MORE STRINGENT OF:

SOLAR-READY REQUIREMENTS IN THE INTERNATIONAL

- 1 BUILDING CODE OR INTERNATIONAL ENERGY CONSERVATION CODE, INCLUDING
- 2 RELEVANT APPENDICES; AND
- 3 (II) DESIGN, ENGINEERING, AND CONSTRUCTION SO THAT AT
- 4 LEAST 40% OF THE ROOF AREA IS:
- 5 1. FREE FROM OBSTRUCTIONS; AND
- 6 2. CAPABLE OF ACCEPTING THE INSTALLATION OF
- 7 SOLAR PANELS.
- 8 (B) (1) ON OR BEFORE OCTOBER 1, 2025, AS PART OF THE STANDARDS,
- 9 THE DEPARTMENT SHALL ADOPT:
- 10 (I) SUBJECT TO PARAGRAPHS (2) AND (3) OF THIS
- 11 SUBSECTION, A REQUIREMENT THAT NEW BUILDINGS AND SIGNIFICANT
- 12 IMPROVEMENTS OF BUILDINGS AND STRUCTURES MEET ALL WATER AND SPACE
- 13 HEATING DEMANDS OF THE BUILDING OR STRUCTURE WITHOUT THE USE OF FOSSIL
- 14 FUELS;
- 15 (II) AN ELECTRIC-READY STANDARD FOR NEW BUILDINGS THAT
- 16 RECEIVE A WAIVER UNDER PARAGRAPH (3) OF THIS SUBSECTION;
- 17 (III) SUBJECT TO PARAGRAPHS (2) AND (4) OF THIS
- 18 SUBSECTION, A REQUIREMENT THAT NEW BUILDINGS BE SOLAR-READY IF THE
- 19 **BUILDING:**
- 20 1. WILL HAVE 20,000 SQUARE FEET OR MORE OF
- 21 CONTINUOUS ROOF SPACE, EXCLUDING THE PARKING AREA; AND
- 22 2. WILL BE 20 STORIES OR LESS IN HEIGHT ABOVE
- 23 GRADE PLANE; AND
- 24 (IV) SUBJECT TO PARAGRAPH (2) OF THIS SUBSECTION, A
- 25 REQUIREMENT THAT NEW BUILDINGS MEET ELECTRIC VEHICLE CHARGING
- 26 INFRASTRUCTURE REQUIREMENTS, INCLUDING:
- 27 1. NEW ONE- AND TWO-FAMILY DWELLINGS AND
- 28 TOWNHOUSES WITH A DESIGNATED ATTACHED OR DETACHED GARAGE OR OTHER
- 29 ON-SITE PRIVATE PARKING PROVIDED ADJACENT TO THE DWELLING UNIT
- 30 PROVIDED WITH ONE EV-CAPABLE, EV-READY, OR EVSE SPACE PER DWELLING
- 31 **UNIT**;

- 1 2. RESIDENTIAL BUILDINGS OF LESS THAN 4 STORIES IN
- 2 HEIGHT ABOVE GRADE PLANE WITH THREE OR MORE DWELLING UNITS PROVIDED
- 3 WITH EV-CAPABLE, EV-READY, OR EVSE SPACES FOR 40% OF DWELLING UNITS
- 4 OR PARKING SPACES, WHICHEVER IS LESS; AND
- 5 3. ALL OTHER BUILDINGS PROVIDED WITH NOT LESS
- 6 THAN THE FOLLOWING PERCENTAGES OF EV-CAPABLE AND EVSE SPACES
- 7 ACCORDING TO THE INTERNATIONAL BUILDING CODE OCCUPANCY GROUP:
- A. GROUP A WITH 10% EVSE SPACES AND 10%
- 9 EV-CAPABLE SPACES:
- B. GROUPS B, E, I, M, AND S-2 PARKING GARAGES WITH
- 11 15% EVSE SPACES AND 30% EV-CAPABLE SPACES;
- 12 C. GROUPS F, R-3, AND R-4 WITH 2% EVSE SPACES
- 13 AND 5% EV-CAPABLE SPACES;
- D. GROUPS H AND S, EXCLUSIVE OF PARKING GARAGES,
- 15 WITH 1% EVSE SPACES; AND
- E. GROUPS R-1 AND R-2 WITH 20% EVSE SPACES AND
- 17 80% EV-CAPABLE SPACES.
- 18 (2) A BUILDING PERMIT APPLICATION SUBMITTED AND RECEIVED BY
- 19 A LOCAL JURISDICTION ON OR AFTER OCTOBER 1, 2026, SHALL MEET THE
- 20 REQUIREMENTS UNDER PARAGRAPH (1) OF THIS SUBSECTION.
- 21 (3) (I) SUBJECT TO SUBPARAGRAPHS (II) AND (III) OF THIS
- 22 PARAGRAPH, A LOCAL JURISDICTION MAY GRANT A WAIVER FROM THE
- 23 REQUIREMENT UNDER PARAGRAPH(1)(I) OF THIS SUBSECTION FOR:
- 1. EMERGENCY BACK-UP POWER SYSTEMS FOR NEW
- 25 BUILDINGS; AND
- 26 2. NEW BUILDINGS, SIGNIFICANT IMPROVEMENTS, AND
- 27 ADDITIONS SPECIFICALLY DESIGNATED FOR OCCUPANCY BY A COMMERCIAL FOOD
- 28 ESTABLISHMENT, LABORATORY, LAUNDROMAT, HOSPITAL, OR CREMATORIUM.
- 29 (II) 1. A WAIVER GRANTED UNDER SUBPARAGRAPH (I) OF
- 30 THIS PARAGRAPH SHALL BE LIMITED TO BUILDING SYSTEMS AND AREAS THAT
- 31 CANNOT FEASIBLY USE ENERGY GENERATED FROM A SOURCE OTHER THAN FOSSIL
- 32 FUELS.

- 1 2. FINANCIAL CONSIDERATIONS ARE NOT A SUFFICIENT
- 2 BASIS FOR DETERMINING FEASIBILITY UNDER SUBSUBPARAGRAPH 1 OF THIS
- 3 SUBPARAGRAPH.
- 4 (III) A BUILDING THAT IS GRANTED A WAIVER UNDER
- 5 SUBPARAGRAPH (I) OF THIS PARAGRAPH SHALL:
- 1. SEEK TO MINIMIZE EMISSIONS FROM ITS FOSSIL FUEL
- 7 USE;
- 8 2. MAXIMIZE HEALTH, SAFETY, AND FIRE PROTECTION;
- 9 **AND**
- 3. BE REQUIRED TO COMPLY WITH THE
- 11 ELECTRIC-READY STANDARDS ADOPTED UNDER PARAGRAPH (1)(II) OF THIS
- 12 SUBSECTION.
- 13 (IV) TO ENSURE A WAIVER GRANTED UNDER SUBPARAGRAPH (I)
- 14 OF THIS PARAGRAPH IS STILL NECESSARY, THE WAIVER SHALL BE REVIEWED:
- 15 1. EACH TIME THE STANDARDS ARE MODIFIED BY THE
- 16 **DEPARTMENT**; AND
- 2. BY THE LOCAL JURISDICTION THAT GRANTED THE
- 18 WAIVER EACH TIME THE LOCAL JURISDICTION MODIFIES ITS LOCAL AMENDMENTS
- 19 UNDER § 12–504 OF THIS SUBTITLE.
- 20 (4) REGULATIONS ADOPTED UNDER THIS PARAGRAPH MAY
- 21 AUTHORIZE A LOCAL JURISDICTION TO WAIVE THE SOLAR-READY REQUIREMENTS
- 22 FOR A BUILDING ON A SPECIFIC FINDING THAT:
- 23 (I) INCIDENT SOLAR RADIATION AT THE BUILDING SITE IS LESS
- 24 THAN 75% OF INCIDENT SOLAR RADIATION AT AN OPEN SITE; OR
- 25 (II) SHADOW STUDIES INDICATE THAT 25% OF A BUILDING'S
- 26 ROOF AREA WILL BE IN SHADOW.
- 27 (5) NOTHING IN THIS SUBSECTION MAY BE CONSTRUED TO PROHIBIT
- 28 A LOCAL JURISDICTION FROM PROHIBITING THE USE OF FOSSIL FUELS IN
- 29 BUILDINGS OR ADOPTING ENERGY CONSERVATION AND SOLAR ENERGY
- 30 REQUIREMENTS FOR BUILDINGS THAT ARE MORE STRINGENT THAN THE
- 31 REQUIREMENTS ESTABLISHED BY THE DEPARTMENT UNDER THIS SECTION.

- 1 (C) (1) IN THIS SUBSECTION, "COVERED BUILDING" MEANS A COMMERCIAL OR RESIDENTIAL BUILDING WITH A GROSS FLOOR AREA OF 25,000 SQUARE FEET OR MORE, EXCLUDING THE PARKING GARAGE AREA.
- 4 (2) This subsection applies only to new construction.
- 5 **(3)** (I)THE DEPARTMENT SHALL ADOPT, AS PART OF THE 6 STANDARDS, REGULATIONS **ESTABLISHING ENERGY** CONSERVATION 7 REQUIREMENTS WITH THIS FOR COVERED BUILDINGS IN ACCORDANCE SUBSECTION. 8
- 9 (II) THE DEPARTMENT MAY ADOPT REGULATIONS FOR 10 PERIODS AFTER SEPTEMBER 30, 2029, CONCURRENT WITH UPDATES TO THE 11 STANDARDS REQUIRED UNDER § 12–503(A)(2) OF THIS SUBTITLE.
- 12 (III) IN DEVELOPING THE REGULATIONS, THE DEPARTMENT:
- 13 1. A. SUBJECT TO ITEM B OF THIS ITEM, SHALL ESTIMATE SITE ENERGY USE INTENSITY ACHIEVED ACCORDING TO PUBLICATIONS FROM THE UNITED STATES DEPARTMENT OF ENERGY OR ITS CONTRACTORS; AND
- B. MAY SEEK ADVICE FROM THE UNITED STATES
  17 DEPARTMENT OF ENERGY, ITS CONTRACTORS, OR SIMILARLY QUALIFIED PARTIES
  18 TO MAKE THESE ESTIMATES; AND
- 19 2. SUBJECT TO PARAGRAPH (4) OF THIS SUBSECTION, 20 FOR THE PURPOSES OF THE STANDARDS AUTHORIZING COMPLIANCE VIA THE 21ATTAINMENT OF ENERGY EFFICIENCY CREDITS OR ACHIEVEMENT 22PERFORMANCE THRESHOLDS, SHALL CALCULATE AND ADOPT CREDITS AND PERFORMANCE THRESHOLDS IN A MANNER THAT COMPARES SITE ENERGY USE 2324INTENSITY CHANGES FROM ENERGY **EFFICIENCY MEASURES** 25MARYLAND-SPECIFIC AVERAGE BASELINE ACROSS ALL FUEL TYPES, CALCULATED ACCORDING TO THE MOST RECENT, OBJECTIVE, AND COMPREHENSIVE AVAILABLE 26CONSTRUCTION DATA FOR RELEVANT BUILDING TYPES. 27
- 28 (4) CREDITS OR PERFORMANCE THRESHOLDS MAY NOT BE
  29 CALCULATED IN A MANNER THAT AUTHORIZES BUILDINGS OF A CERTAIN FUEL TYPE
  30 TO COMPLY WITH THE STANDARDS WHILE ACHIEVING A HIGHER SITE ENERGY USE
  31 INTENSITY ON AVERAGE THAN BUILDINGS OF A DIFFERENT FUEL TYPE.
- 32 (5) SUBJECT TO PARAGRAPH (8) OF THIS SUBSECTION, THE 33 REGULATIONS SHALL REQUIRE NEW RESIDENTIAL BUILDINGS LESS THAN 4 STORIES

- 1 ABOVE GRADE PLANE TO ACHIEVE, ON AVERAGE: 2 (I)SITE ENERGY USE INTENSITY EQUAL TO OR LESS THAN: 3 1. FOR BUILDING PERMIT APPLICATIONS RECEIVED FROM OCTOBER 1, 2026, THROUGH SEPTEMBER 30, 2029, BOTH INCLUSIVE: 4 5 Α. 40 IN CLIMATE ZONE 5; AND В. 6 32 IN CLIMATE ZONE 4; 2. FOR BUILDING PERMIT APPLICATIONS RECEIVED 7 FROM OCTOBER 1, 2029, THROUGH SEPTEMBER 30, 2032, BOTH INCLUSIVE: 8 9 Α. 30 IN CLIMATE ZONE 5; AND 10 В. 25 IN CLIMATE ZONE 4; AND 3. 11 FOR BUILDING PERMIT APPLICATIONS RECEIVED 12 FROM OCTOBER 1, 2032, THROUGH SEPTEMBER 30, 2035, BOTH INCLUSIVE: 13 Α. 20 IN CLIMATE ZONE 5; AND В. 14 17 IN CLIMATE ZONE 4; AND 15 (II)A NET-ZERO ENERGY BALANCE FOR BUILDING PERMIT 16 APPLICATIONS RECEIVED ON OR AFTER OCTOBER 1, 2035. 17 **(6)** SUBJECT TO PARAGRAPH (7) OF THIS SUBSECTION, THE REGULATIONS SHALL REQUIRE ALL BUILDINGS TO ACHIEVE, ON AVERAGE: 18 19 (I)SITE ENERGY USE INTENSITY EQUAL TO OR LESS THAN: 20 1. 45 IN CLIMATE ZONE 5 AND 38 IN CLIMATE ZONE 4 FOR 21BUILDING PERMIT APPLICATIONS RECEIVED FROM OCTOBER 1, 2026, THROUGH SEPTEMBER 30, 2029, BOTH INCLUSIVE; 2223 2. 39 IN CLIMATE ZONE 5 AND 33 IN CLIMATE ZONE 4 FOR 24BUILDING PERMIT APPLICATIONS RECEIVED FROM OCTOBER 1, 2029, THROUGH
- 3. 30 IN CLIMATE ZONE 5 AND 25 IN CLIMATE ZONE 4 FOR BUILDING PERMIT APPLICATIONS RECEIVED FROM OCTOBER 1, 2032, THROUGH

SEPTEMBER 30, 2032, BOTH INCLUSIVE; AND

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- 1 SEPTEMBER 30, 2035, BOTH INCLUSIVE; AND
- 2 (II) A NET-ZERO ENERGY BALANCE FOR BUILDING PERMIT 3 APPLICATIONS RECEIVED ON OR AFTER OCTOBER 1, 2035.
- 4 (7) (I) A LOCAL JURISDICTION MAY ADOPT ENERGY
- 5 CONSERVATION REQUIREMENTS FOR BUILDINGS THAT ARE MORE STRINGENT THAN
- 6 THE REQUIREMENTS ESTABLISHED BY THE DEPARTMENT UNDER THIS SECTION.
- 7 (II) IF THE LOCAL JURISDICTION WHERE A COVERED BUILDING
- 8 WILL BE LOCATED HAS ADOPTED ENERGY CONSERVATION REQUIREMENTS MORE
- 9 STRINGENT THAN THE REQUIREMENTS ESTABLISHED UNDER THIS SUBSECTION,
- 10 THE BUILDING SHALL BE REQUIRED TO MEET THE MORE STRINGENT
- 11 REQUIREMENTS.
- 12 (8) IF THE VERSION OF THE STANDARDS IN EFFECT AT THE TIME A
- 13 BUILDING PERMIT APPLICATION IS RECEIVED REQUIRE THE BUILDING TO MEET
- 14 ENERGY CONSERVATION REQUIREMENTS THAT ARE MORE STRINGENT THAN THE
- 15 REQUIREMENTS ESTABLISHED UNDER THIS SUBSECTION, THE BUILDING SHALL BE
- 16 REQUIRED TO MEET THE MORE STRINGENT REQUIREMENTS.
- 17 SECTION 2. AND BE IT FURTHER ENACTED. That this Act shall take effect
- 18 October 1, 2024.