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4lr1904 CF 4lr1903

By: **Senators Brooks, Lewis Young, and Lam** Introduced and read first time: February 2, 2024 Assigned to: Education, Energy, and the Environment

A BILL ENTITLED

1 AN ACT concerning

Maryland Building Performance Standards – Fossil Fuel Use, Energy Conservation, and Electric– and Solar–Ready Standards (Better Buildings Act of 2024)

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 meet all water and space heating demands of the 8 building without the use of fossil fuels, energy conservation requirements, and an 9 electric- and solar-ready standard for certain buildings; and generally relating to 10 the Maryland Building Performance Standards.

- 11 BY repealing and reenacting, with amendments,
- 12 Article Public Safety
- 13 Section 12–503
- 14 Annotated Code of Maryland
- 15 (2022 Replacement Volume and 2023 Supplement)
- 16 BY adding to
- 17 Article Public Safety
- 18 Section 12–503.1
- 19 Annotated Code of Maryland
- 20 (2022 Replacement Volume and 2023 Supplement)
- 21 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND,
- 22 That the Laws of Maryland read as follows:
- 23

Article – Public Safety

- 24 12–503.
- 25 (a) (1) The Department shall adopt by regulation, as the Maryland Building

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW. [Brackets] indicate matter deleted from existing law.



$egin{array}{c} 1 \\ 2 \\ 3 \end{array}$	Performance Standards, the International Building Code, including the International Energy Conservation Code, with the modifications incorporated by the Department under subsection (b) of this section.		
4 5	(2) The within 18 months after	Department shall adopt each subsequent version of the Standards it is issued.	
6	(b) (1) Befo	re adopting each version of the Standards, the Department shall:	
7 8	(i) modifications should be	review the International Building Code to determine whether incorporated in the Standards;	
9 10	(ii) consider changes to the International Building Code to enhance energy conservation and efficiency;		
11 12 13 14	(iii) subject to the provisions of paragraph (2)(ii) of this subsection, adopt modifications to the Standards that allow any innovative approach, design, equipment, or method of construction that can be demonstrated to offer performance that is at least the equivalent to the requirements of:		
15		1. the International Energy Conservation Code;	
$\begin{array}{c} 16 \\ 17 \end{array}$	Building Code; or	2. Chapter 13, "Energy Efficiency", of the International	
18 19	Residential Code;	3. Chapter 11, "Energy Efficiency", of the International	
20	(iv)	accept written comments;	
21	(v)	consider any comments received; and	
22	(vi)	hold a public hearing on each proposed modification.	
23 24 25 26	(2) (i) 12–510] §§ 12–503.1 A of the Standards, a mod the requirement in the 1	Except as provided in subparagraph (ii) of this paragraph and [§ ND 12–510 of this subtitle, the Department may not adopt, as part ification of a building code requirement that is more stringent than International Building Code.	
27 28 29 30	(ii) that are more stringent Code, but may not adopt requirements in the Int	The Department may adopt energy conservation requirements than the requirements in the International Energy Conservation t energy conservation requirements that are less stringent than the ernational Energy Conservation Code.	
$\frac{31}{32}$	(c) The Stand building permit applica	ards apply to each building or structure in the State for which a tion is received by a local jurisdiction on or after August 1, 1995.	

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1	(d)	In addition to the Standards, the Department shall:
$2 \\ 3$	Internation	(1) on or before January 1, 2023, adopt by regulation the 2018 al Green Construction Code; and
45	issued.	(2) adopt each subsequent version of the Code within 18 months after it is
6	12-503.1.	
7 8	(A) INDICATED	(1) IN THIS SECTION THE FOLLOWING WORDS HAVE THE MEANINGS 0.
9 10 11 12 13	MEANS A INCLUDING ELECTRICA EVSE.	(2) "ELECTRIC VEHICLE-CAPABLE SPACE" OR "EV-CAPABLE SPACE" PARKING SPACE PROVIDED WITH ELECTRICAL INFRASTRUCTURE, RACEWAYS, CABLES, ENCLOSURES, ELECTRICAL CAPACITY, AND AL DISTRIBUTION EQUIPMENT SPACE, NECESSARY FOR CONNECTION TO
$\begin{array}{c} 14 \\ 15 \end{array}$	MEANS A PA	(3) "ELECTRIC VEHICLE-READY SPACE" OR "EV-READY SPACE" ARKING SPACE PROVIDED WITH:
16		(I) A BRANCH CIRCUIT; AND
17		(II) 1. AN OUTLET FOR CONNECTION TO EVSE; OR
18		2. AN ENCLOSURE FOR CONNECTION TO EVSE.
19 20 21 22	MEANS EQ TRANSFER VEHICLE.	(4) (I) "ELECTRIC VEHICLE SUPPLY EQUIPMENT" OR "EVSE" QUIPMENT FOR PLUG-IN POWER TRANSFER FOR THE PURPOSE OF RING ENERGY BETWEEN THE LOCATION'S WIRING AND THE ELECTRIC
23 24 25 26 27	INCLUDES CONDUCTO PERSONAL OUTLETS, O	(II) "ELECTRIC VEHICLE SUPPLY EQUIPMENT" OR "EVSE" THE UNGROUNDED, GROUNDED, AND EQUIPMENT GROUNDING DRS AND THE ELECTRIC VEHICLE CONNECTORS, ATTACHMENT PLUGS, PROTECTION SYSTEM, AND ALL OTHER FITTINGS, DEVICES, POWER DR APPARATUSES.
28		(5) "FIECTRICAL VEHICLE SUPPLY FOULPMENT INSTALLED SPACE"

28 (5) "ELECTRICAL VEHICLE SUPPLY EQUIPMENT INSTALLED SPACE" 29 OR "EVSE SPACE" MEANS A PARKING SPACE WITH OPERATIONAL EVSE 30 INSTALLED.

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- (6) "ELECTRIC-READY" MEANS THE MORE STRINGENT OF:

1(I)ELECTRIC-READY REQUIREMENTS IN THE INTERNATIONAL2ENERGY CONSERVATION CODE, INCLUDING RELEVANT APPENDICES; OR

3 (II) HAVING ADEQUATE PANEL CAPACITY, DEDICATED
4 ELECTRIC PANEL SPACE, ELECTRICAL WIRE, ELECTRICAL RECEPTACLES, AND
5 ADEQUATE PHYSICAL SPACE TO ACCOMMODATE FUTURE INSTALLATION OF
6 HIGH-EFFICIENCY ELECTRIC APPLIANCES, INCLUDING HEATING, WATER HEATING,
7 COOKING, AND DRYING.

8 (7) (I) "SIGNIFICANT IMPROVEMENT" MEANS ANY REPAIR, 9 RECONSTRUCTION, REHABILITATION, ALTERATION, ADDITION, OR OTHER 10 IMPROVEMENT OF A BUILDING OR STRUCTURE, THE COST OF WHICH EQUALS OR 11 EXCEEDS 50% OF THE REPLACEMENT COST OF THE STRUCTURE BEFORE THE 12 IMPROVEMENT OR REPAIR IS STARTED.

13(II) "SIGNIFICANT IMPROVEMENT" DOES NOT INCLUDE THE14IMPROVEMENT OF A BUILDING:

151. REQUIRED TO CORRECT EXISTING HEALTH,16SANITARY, OR SAFETY CODE VIOLATIONS IDENTIFIED BY A BUILDING OFFICIAL OR17THAT ARE THE MINIMUM NECESSARY TO ENSURE SAFE LIVING CONDITIONS; OR

182. BY ALTERATION OF A HISTORIC STRUCTURE19PROVIDED THAT THE ALTERATION WILL NOT PRECLUDE THE STRUCTURE'S20CONTINUED DESIGNATION AS A HISTORIC STRUCTURE.

(8) "SITE ENERGY USE INTENSITY" MEANS 1,000 BRITISH THERMAL
UNITS PER SQUARE FOOT PER YEAR EXPECTED OR MODELED TO BE USED AT A
BUILDING'S PREMISES, EXCLUSIVE OF:

24(I)RENEWABLE ENERGY PRODUCED AND ELECTRIC VEHICLE25CHARGING PROVIDED AT THE BUILDING'S PREMISES;

- 26 (II) UNCONDITIONED FLOOR AREA; AND
- 27 (III) PARKING.
- 28 (9) "SOLAR-READY" MEANS THE MORE STRINGENT OF:

(I) SOLAR-READY REQUIREMENTS IN THE INTERNATIONAL
 BUILDING CODE OR INTERNATIONAL ENERGY CONSERVATION CODE, INCLUDING
 RELEVANT APPENDICES; AND

DESIGN, ENGINEERING, AND CONSTRUCTION SO THAT AT 1 **(II)** $\mathbf{2}$ LEAST 40% OF THE ROOF AREA IS: 3 1. **FREE FROM OBSTRUCTIONS; AND** 2. CAPABLE OF ACCEPTING THE INSTALLATION OF 4 $\mathbf{5}$ SOLAR PANELS. **(**B**)** 6 (1) ON OR BEFORE OCTOBER 1, 2025, AS PART OF THE STANDARDS, $\overline{7}$ THE DEPARTMENT SHALL ADOPT: 8 **(I)** SUBJECT TO PARAGRAPHS (2) AND (3) OF THIS SUBSECTION, A REQUIREMENT THAT NEW BUILDINGS MEET ALL WATER AND SPACE 9 10 HEATING DEMANDS OF THE BUILDING WITHOUT THE USE OF FOSSIL FUELS; **(II)** 11 AN ELECTRIC-READY STANDARD FOR NEW BUILDINGS THAT 12**RECEIVE A WAIVER UNDER PARAGRAPH (3) OF THIS SUBSECTION;** 13(III) SUBJECT TO PARAGRAPHS (2) AND (4) OF THIS 14SUBSECTION, A REQUIREMENT THAT NEW BUILDINGS BE SOLAR-READY IF THE 15**BUILDING:** 16 WILL HAVE 20,000 SQUARE FEET OR MORE OF 1. 17CONTINUOUS ROOF SPACE, EXCLUDING THE PARKING AREA; AND 18 2. WILL BE 20 STORIES OR LESS IN HEIGHT ABOVE 19 **GRADE PLANE; AND** 20(IV) SUBJECT TO PARAGRAPH (2) OF THIS SUBSECTION, A 21REQUIREMENT THAT NEW BUILDINGS MEET ELECTRIC VEHICLE CHARGING 22**INFRASTRUCTURE REQUIREMENTS, INCLUDING:** 231. NEW ONE- AND TWO-FAMILY DWELLINGS AND TOWN 24HOUSES WITH A DESIGNATED ATTACHED OR DETACHED GARAGE OR OTHER ON-SITE 25PRIVATE PARKING PROVIDED ADJACENT TO THE DWELLING UNIT PROVIDED WITH ONE EV-CAPABLE, EV-READY, OR EVSE SPACE PER DWELLING UNIT; 26272. **RESIDENTIAL BUILDINGS OF LESS THAN 4 STORIES IN** 28HEIGHT ABOVE GRADE PLANE WITH THREE OR MORE DWELLING UNITS PROVIDED 29WITH EV-CAPABLE, EV-READY, OR EVSE SPACES FOR 40% OF DWELLING UNITS OR PARKING SPACES, WHICHEVER IS LESS; AND 30

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ALL OTHER BUILDINGS PROVIDED WITH NOT LESS 1 3. $\mathbf{2}$ THAN THE FOLLOWING PERCENTAGES OF EV-CAPABLE AND EVSE SPACES 3 ACCORDING TO THE INTERNATIONAL BUILDING CODE OCCUPANCY GROUP: GROUP A WITH 10% EVSE SPACES AND 10% 4 A. $\mathbf{5}$ **EV-CAPABLE SPACES;** 6 **B**. GROUPS B, E, I, M, AND S-2 PARKING GARAGES WITH 7 15% EVSE SPACES AND 30% EV-CAPABLE SPACES; C. GROUPS F, R-3, AND R-4 WITH 2% EVSE SPACES 8 9 AND 5% EV-CAPABLE SPACES; 10 GROUPS H AND S, EXCLUSIVE OF PARKING GARAGES, D. 11 WITH 1% EVSE SPACES; AND Ε. **GROUPS R-1 AND R-2 WITH 20% EVSE SPACES AND** 1213 80% EV-CAPABLE SPACES. 14(2) A BUILDING PERMIT APPLICATION SUBMITTED AND RECEIVED BY A LOCAL JURISDICTION ON OR AFTER OCTOBER 1, 2026, SHALL MEET THE 15**REQUIREMENTS UNDER PARAGRAPH (1) OF THIS SUBSECTION.** 16 17SUBJECT TO SUBPARAGRAPHS (II) AND (III) OF THIS (3) **(I)** PARAGRAPH, A LOCAL JURISDICTION MAY GRANT A WAIVER FROM THE 18 **REQUIREMENT UNDER PARAGRAPH(1)(I) OF THIS SUBSECTION FOR:** 19 201. EMERGENCY BACK-UP POWER SYSTEMS FOR NEW 21**BUILDINGS; AND** 222. NEW BUILDINGS, SIGNIFICANT IMPROVEMENTS, AND 23ADDITIONS SPECIFICALLY DESIGNATED FOR OCCUPANCY BY A COMMERCIAL FOOD 24ESTABLISHMENT, LABORATORY, LAUNDROMAT, HOSPITAL, OR CREMATORIUM. 25**(II)** 1. A WAIVER GRANTED UNDER SUBPARAGRAPH (I) OF THIS PARAGRAPH SHALL BE LIMITED TO BUILDING SYSTEMS AND AREAS THAT 26CANNOT FEASIBLY USE ENERGY GENERATED FROM A SOURCE OTHER THAN FOSSIL 2728FUELS. 292. FINANCIAL CONSIDERATIONS ARE NOT A SUFFICIENT 30 BASIS FOR DETERMINING FEASIBILITY UNDER SUBSUBPARAGRAPH 1 OF THIS

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SUBPARAGRAPH.

1 (III) A BUILDING THAT IS GRANTED A WAIVER UNDER $\mathbf{2}$ SUBPARAGRAPH (I) OF THIS PARAGRAPH SHALL: 3 1. SEEK TO MINIMIZE EMISSIONS FROM ITS FOSSIL FUEL 4 USE; $\mathbf{5}$ 2. MAXIMIZE HEALTH, SAFETY, AND FIRE PROTECTION; 6 AND 7 3. BE REQUIRED ТО COMPLY WITH THE ELECTRIC-READY STANDARDS ADOPTED UNDER PARAGRAPH (1)(II) OF THIS 8 9 SUBSECTION. (IV) TO ENSURE A WAIVER GRANTED UNDER SUBPARAGRAPH (I) 10 11 OF THIS PARAGRAPH IS STILL NECESSARY, THE WAIVER SHALL BE REVIEWED: 121. EACH TIME THE STANDARDS ARE MODIFIED BY THE 13 **DEPARTMENT; AND** 142. BY THE LOCAL JURISDICTION THAT GRANTED THE 15WAIVER EACH TIME THE LOCAL JURISDICTION MODIFIES ITS LOCAL AMENDMENTS 16 UNDER § 12–504 OF THIS SUBTITLE. 17(4) **REGULATIONS ADOPTED UNDER THIS PARAGRAPH MAY** AUTHORIZE A LOCAL JURISDICTION TO WAIVE THE SOLAR-READY REQUIREMENTS 18 FOR A BUILDING ON A SPECIFIC FINDING THAT: 19 20**(I)** INCIDENT SOLAR RADIATION AT THE BUILDING SITE IS LESS 21THAN 75% OF INCIDENT SOLAR RADIATION AT AN OPEN SITE; OR SHADOW STUDIES INDICATE THAT 25% OF A BUILDING'S 22**(II)** 23**ROOF AREA WILL BE IN SHADOW.** 24NOTHING IN THIS SUBSECTION MAY BE CONSTRUED TO PROHIBIT (5) A LOCAL JURISDICTION FROM PROHIBITING THE USE OF FOSSIL FUELS IN 25BUILDINGS OR ADOPTING ENERGY CONSERVATION AND SOLAR ENERGY 26REQUIREMENTS FOR BUILDINGS THAT ARE MORE STRINGENT THAN THE 2728**REQUIREMENTS ESTABLISHED BY THE DEPARTMENT UNDER THIS SECTION.** 29IN THIS SUBSECTION, "COVERED BUILDING" MEANS A **(C)** (1) 30 COMMERCIAL OR RESIDENTIAL BUILDING WITH A GROSS FLOOR AREA OF 25,000 SQUARE FEET OR MORE, EXCLUDING THE PARKING GARAGE AREA. 31

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(2) THIS SUBSECTION APPLIES ONLY TO NEW CONSTRUCTION.

 $\mathbf{2}$ (3) **(I)** THE DEPARTMENT SHALL ADOPT, AS PART OF THE 3 STANDARDS, REGULATIONS ESTABLISHING ENERGY **CONSERVATION** ACCORDANCE 4 REQUIREMENTS FOR COVERED BUILDINGS IN WITH THIS SUBSECTION. 5

6 (II) THE DEPARTMENT MAY ADOPT REGULATIONS FOR 7 PERIODS AFTER SEPTEMBER 30, 2029, CONCURRENT WITH UPDATES TO THE 8 STANDARDS REQUIRED UNDER § 12–503(A)(2) OF THIS SUBTITLE.

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(III) IN DEVELOPING THE REGULATIONS, THE DEPARTMENT:

10 **1. A.** SUBJECT TO ITEM **B** OF THIS ITEM, SHALL 11 ESTIMATE SITE ENERGY USE INTENSITY ACHIEVED ACCORDING TO PUBLICATIONS 12 FROM THE UNITED STATES DEPARTMENT OF ENERGY OR ITS CONTRACTORS; AND

13B. MAY SEEK ADVICE FROM THE UNITED STATES14DEPARTMENT OF ENERGY, ITS CONTRACTORS, OR SIMILARLY QUALIFIED PARTIES15TO MAKE THESE ESTIMATES; AND

2. 16 SUBJECT TO PARAGRAPH (4) OF THIS SUBSECTION, 17FOR THE PURPOSES OF THE STANDARDS AUTHORIZING COMPLIANCE VIA THE ENERGY EFFICIENCY CREDITS OR ACHIEVEMENT 18 ATTAINMENT OF OF 19 PERFORMANCE THRESHOLDS, SHALL CALCULATE AND ADOPT CREDITS AND 20PERFORMANCE THRESHOLDS IN A MANNER THAT COMPARES SITE ENERGY USE 21INTENSITY CHANGES FROM ENERGY EFFICIENCY **MEASURES** TO Α MARYLAND-SPECIFIC AVERAGE BASELINE ACROSS ALL FUEL TYPES, CALCULATED 2223ACCORDING TO THE MOST RECENT, OBJECTIVE, AND COMPREHENSIVE AVAILABLE CONSTRUCTION DATA FOR RELEVANT BUILDING TYPES. 24

(4) CREDITS OR PERFORMANCE THRESHOLDS MAY NOT BE
CALCULATED IN A MANNER THAT AUTHORIZES BUILDINGS OF A CERTAIN FUEL TYPE
TO COMPLY WITH THE STANDARDS WHILE ACHIEVING A HIGHER SITE ENERGY USE
INTENSITY ON AVERAGE THAN BUILDINGS OF A DIFFERENT FUEL TYPE.

29 (5) SUBJECT TO PARAGRAPH (8) OF THIS SUBSECTION, THE 30 REGULATIONS SHALL REQUIRE NEW RESIDENTIAL BUILDINGS LESS THAN 4 STORIES 31 ABOVE GRADE PLANE TO ACHIEVE, ON AVERAGE:

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- (I) SITE ENERGY USE INTENSITY EQUAL TO OR LESS THAN:
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1. FOR BUILDING PERMIT APPLICATIONS RECEIVED

1	FROM OCTOBER 1, 2026, THROUGH SEPTEMBER 30, 2029, BOTH INCLUSIVE:
2	A. 40 IN CLIMATE ZONE 5; AND
3	B. 32 IN CLIMATE ZONE 4;
4 5	2. FOR BUILDING PERMIT APPLICATIONS RECEIVED FROM OCTOBER 1, 2029, THROUGH SEPTEMBER 30, 2032, BOTH INCLUSIVE:
6	A. 30 IN CLIMATE ZONE 5; AND
7	B. 25 IN CLIMATE ZONE 4; AND
8 9	3. FOR BUILDING PERMIT APPLICATIONS RECEIVED FROM OCTOBER 1, 2032, THROUGH SEPTEMBER 30, 2035, BOTH INCLUSIVE:
10	A. 20 IN CLIMATE ZONE 5; AND
11	B. 17 IN CLIMATE ZONE 4; AND
$\begin{array}{c} 12\\ 13 \end{array}$	(II) A NET-ZERO ENERGY BALANCE FOR BUILDING PERMIT APPLICATIONS RECEIVED ON OR AFTER OCTOBER 1, 2035.
$\begin{array}{c} 14 \\ 15 \end{array}$	(6) SUBJECT TO PARAGRAPH (7) OF THIS SUBSECTION, THE REGULATIONS SHALL REQUIRE ALL BUILDINGS TO ACHIEVE, ON AVERAGE:
16	(I) SITE ENERGY USE INTENSITY EQUAL TO OR LESS THAN:
17 18 19	1. 45 IN CLIMATE ZONE 5 AND 38 IN CLIMATE ZONE 4 FOR BUILDING PERMIT APPLICATIONS RECEIVED FROM OCTOBER 1, 2026, THROUGH SEPTEMBER 30, 2029, BOTH INCLUSIVE;
20 21 22	2. 39 IN CLIMATE ZONE 5 AND 33 IN CLIMATE ZONE 4 FOR BUILDING PERMIT APPLICATIONS RECEIVED FROM OCTOBER 1, 2029, THROUGH SEPTEMBER 30, 2032, BOTH INCLUSIVE; AND
$23 \\ 24 \\ 25$	3. 30 IN CLIMATE ZONE 5 AND 25 IN CLIMATE ZONE 4 FOR BUILDING PERMIT APPLICATIONS RECEIVED FROM OCTOBER 1, 2032, THROUGH SEPTEMBER 30, 2035, BOTH INCLUSIVE; AND
$\frac{26}{27}$	(II) A NET-ZERO ENERGY BALANCE FOR BUILDING PERMIT APPLICATIONS RECEIVED ON OR AFTER OCTOBER 1, 2035.

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1(7)(I)ALOCALJURISDICTIONMAYADOPTENERGY2CONSERVATION REQUIREMENTS FOR BUILDINGS THAT ARE MORE STRINGENT THAN3THE REQUIREMENTS ESTABLISHED BY THE DEPARTMENT UNDER THIS SECTION.

4 (II) IF THE LOCAL JURISDICTION WHERE A COVERED BUILDING 5 WILL BE LOCATED HAS ADOPTED ENERGY CONSERVATION REQUIREMENTS MORE 6 STRINGENT THAN THE REQUIREMENTS ESTABLISHED UNDER THIS SUBSECTION, 7 THE BUILDING SHALL BE REQUIRED TO MEET THE MORE STRINGENT 8 REQUIREMENTS.

9 (8) IF THE VERSION OF THE STANDARDS IN EFFECT AT THE TIME A 10 BUILDING PERMIT APPLICATION IS RECEIVED REQUIRE THE BUILDING TO MEET 11 ENERGY CONSERVATION REQUIREMENTS THAT ARE MORE STRINGENT THAN THE 12 REQUIREMENTS ESTABLISHED UNDER THIS SUBSECTION, THE BUILDING SHALL BE 13 REQUIRED TO MEET THE MORE STRINGENT REQUIREMENTS.

14 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect 15 October 1, 2024.