

SENATE COMMITTEE OF REFERENCE AMENDMENT

Committee on Transportation & Energy.

SB22-051 be amended as follows:

1 Amend printed bill, page 2, strike lines 2 through 20.

2 Strike pages 3 and 4.

3 Page 5, strike lines 1 through 16 and substitute:

4 "SECTION 1. In Colorado Revised Statutes, **add** 39-22-543 and
5 39-22-544 as follows:

6 **39-22-543. Credit against tax - air-source and ground-source**
7 **heat pump systems - heat pump water heaters - tax preference**
8 **performance statement - legislative declaration - definitions - repeal.**

9 (1) (a) THE GENERAL ASSEMBLY HEREBY FINDS AND DECLARES THAT:

10 (I) THE GENERAL ASSEMBLY HAS COMMITTED TO REDUCE
11 GREENHOUSE GASES THROUGH NUMEROUS POLICY AND REGULATORY
12 MEASURES TO MEET THE GOALS ESTABLISHED IN 2019;

13 (II) GREAT QUANTITIES OF EMISSIONS ARE RELEASED IN THE
14 TRADITIONAL PROCESS OF HEATING AND COOLING PRIVATE SECTOR
15 RESIDENTIAL BUILDINGS;

16 (III) THERE IS GREAT POTENTIAL FOR BUSINESSES AND
17 INDIVIDUALS IN THE STATE TO REDUCE GREENHOUSE GAS EMISSIONS
18 GENERATED IN THE HEATING AND COOLING OF RESIDENTIAL BUILDINGS BY
19 INSTALLING AIR-SOURCE AND GROUND-SOURCE HEAT PUMP SYSTEMS OR
20 HEAT PUMP WATER HEATERS, WHICH REDUCE NET GREENHOUSE GAS
21 EMISSIONS;

22 (IV) PROVIDING AN INCOME TAX CREDIT FOR AIR-SOURCE AND
23 GROUND-SOURCE HEAT PUMP SYSTEMS AND HEAT PUMP WATER HEATERS
24 WILL ENCOURAGE BUSINESSES AND INDIVIDUALS TO PURCHASE AND USE
25 THOSE HEAT PUMP SYSTEMS RATHER THAN TRADITIONAL HEATING AND
26 COOLING METHODS; AND

27 (V) THE PURCHASE AND USE OF AIR-SOURCE AND GROUND-SOURCE
28 HEAT PUMP SYSTEMS AND HEAT PUMP WATER HEATERS WILL BENEFIT
29 PUBLIC HEALTH IN THE HEATING AND COOLING OF HOMES AND BUSINESSES,
30 TAKE ADVANTAGE OF EXCESS RENEWABLE ENERGY POWER GENERATION
31 DURING PEAK TIMES, AND MAKE USE OF READILY AVAILABLE EXCESS
32 HEAT.

33 (b) IN ACCORDANCE WITH SECTION 39-21-304 (1), WHICH
34 REQUIRES EACH BILL THAT CREATES A NEW TAX EXPENDITURE TO INCLUDE
35 A TAX PREFERENCE PERFORMANCE STATEMENT AS PART OF A STATUTORY
36 LEGISLATIVE DECLARATION, THE GENERAL ASSEMBLY HEREBY FINDS AND
37 DECLARES THAT THE PURPOSES OF THE TAX EXPENDITURE CREATED IN
38 SUBSECTION (3) OF THIS SECTION ARE TO:

1 (I) INDUCE CERTAIN DESIGNATED BEHAVIOR BY TAXPAYERS,
2 SPECIFICALLY THE PURCHASE AND USE OF AIR-SOURCE AND
3 GROUND-SOURCE HEAT PUMP SYSTEMS AND HEAT PUMP WATER HEATERS;
4 AND
5 (II) CONTRIBUTE TO THE STATE'S EFFORT TO ACHIEVE ITS CLIMATE
6 GOALS.
7 (c) THE GENERAL ASSEMBLY AND THE STATE AUDITOR SHALL
8 MEASURE THE EFFECTIVENESS OF THE TAX CREDITS IN ACHIEVING THE
9 PURPOSES SPECIFIED IN SUBSECTION (1)(b) OF THIS SECTION BASED ON THE
10 NUMBER OF AIR-SOURCE AND GROUND-SOURCE HEAT PUMP SYSTEMS AND
11 THE NUMBER OF HEAT PUMP WATER HEATERS SOLD AND USED IN THE
12 STATE. THE COLORADO ENERGY OFFICE SHALL PROVIDE THE STATE
13 AUDITOR WITH ANY AVAILABLE INFORMATION THAT WOULD ASSIST THE
14 STATE AUDITOR'S MEASUREMENT.
15 (2) AS USED IN THIS SECTION, UNLESS THE CONTEXT OTHERWISE
16 REQUIRES:
17 (a) "AIR-SOURCE HEAT PUMP SYSTEM" HAS THE SAME MEANING
18 SET FORTH IN SECTION 39-26-731 (2)(a).
19 (b) "GROUND-SOURCE HEAT PUMP SYSTEM" HAS THE SAME
20 MEANING SET FORTH IN SECTION 39-26-731 (2)(b).
21 (c) "HEAT PUMP WATER HEATER" HAS THE SAME MEANING SET
22 FORTH IN SECTION 39-26-731 (2)(c).
23 (3)(a) FOR INCOME TAX YEARS BEGINNING ON OR AFTER JANUARY
24 1, 2023, BUT BEFORE JANUARY 1, 2033, ANY TAXPAYER THAT INSTALLS A
25 RESIDENTIAL OR COMMERCIAL AIR-SOURCE HEAT PUMP OR A
26 GROUND-SOURCE HEAT PUMP IS ALLOWED A CREDIT AGAINST THE TAX
27 IMPOSED BY THIS ARTICLE 22 IN AN AMOUNT EQUAL TO TEN PERCENT OF
28 THE PURCHASE PRICE OF THE AIR-SOURCE HEAT PUMP OR GROUND-SOURCE
29 HEAT PUMP.
30 (b) FOR INCOME TAX YEARS BEGINNING ON OR AFTER JANUARY 1,
31 2023, BUT BEFORE JANUARY 1, 2033, ANY TAXPAYER THAT INSTALLS A
32 RESIDENTIAL OR COMMERCIAL HEAT PUMP WATER HEATER IS ALLOWED A
33 CREDIT AGAINST THE TAX IMPOSED BY THIS ARTICLE 22 IN AN AMOUNT
34 EQUAL TO TEN PERCENT OF THE PURCHASE PRICE OF THE HEAT PUMP
35 WATER HEATER.
36 (4) THE AMOUNT OF ANY CREDIT ALLOWED UNDER THIS SECTION
37 THAT EXCEEDS THE TAXPAYER'S INCOME TAXES DUE IS REFUNDED TO THE
38 TAXPAYER.
39 (5) TO BE ELIGIBLE TO CLAIM A TAX CREDIT PURSUANT TO THIS
40 SECTION, A TAXPAYER IS REQUIRED TO SUBMIT EVIDENCE OF THE
41 PURCHASE PRICE OF THE AIR-SOURCE OR GROUND-SOURCE HEAT PUMP OR
42 HEAT PUMP WATER HEATER, AS APPLICABLE, TO THE DEPARTMENT OF
43 REVENUE IN A FORM AND MANNER TO BE DETERMINED BY THE

1 DEPARTMENT.

2 (6) THIS SECTION IS REPEALED, EFFECTIVE JANUARY 1, 2035.

3 **39-22-544. Credit against tax - residential energy storage**
4 **systems - tax preference performance statement - legislative**
5 **declaration - definition - repeal.** (1) (a) IN ACCORDANCE WITH SECTION
6 39-21-304 (1), WHICH REQUIRES EACH BILL THAT CREATES A NEW TAX
7 EXPENDITURE TO INCLUDE A TAX PREFERENCE PERFORMANCE STATEMENT
8 AS PART OF A STATUTORY LEGISLATIVE DECLARATION, THE GENERAL
9 ASSEMBLY HEREBY FINDS AND DECLARES THAT THE PURPOSES OF THE TAX
10 EXPENDITURE CREATED IN SUBSECTION (3) OF THIS SECTION ARE TO:

11 (I) INDUCE CERTAIN DESIGNATED BEHAVIOR BY TAXPAYERS,
12 SPECIFICALLY THE PURCHASE AND INSTALLATION OF RESIDENTIAL ENERGY
13 STORAGE SYSTEMS; AND

14 (II) CONTRIBUTE TO THE STATE'S EFFORT TO ACHIEVE ITS CLIMATE
15 GOALS.

16 (b) THE GENERAL ASSEMBLY AND THE STATE AUDITOR SHALL
17 MEASURE THE EFFECTIVENESS OF THE TAX CREDITS IN ACHIEVING THE
18 PURPOSES SPECIFIED IN SUBSECTION (1)(a) OF THIS SECTION BASED ON THE
19 NUMBER OF RESIDENTIAL ENERGY STORAGE SYSTEMS INSTALLED IN THE
20 STATE. THE COLORADO ENERGY OFFICE SHALL PROVIDE THE STATE
21 AUDITOR WITH ANY AVAILABLE INFORMATION THAT WOULD ASSIST THE
22 STATE AUDITOR'S MEASUREMENT.

23 (2) AS USED IN THIS SECTION, UNLESS THE CONTEXT OTHERWISE
24 REQUIRES, "ENERGY STORAGE SYSTEM" MEANS ANY COMMERCIALY
25 AVAILABLE, CUSTOMER-SITED SYSTEM, INCLUDING BATTERIES AND THE
26 BATTERIES PAIRED WITH ON-SITE GENERATION, THAT IS CAPABLE OF
27 RETAINING, STORING, AND DELIVERING ENERGY BY CHEMICAL, THERMAL,
28 MECHANICAL, OR OTHER MEANS.

29 (3) FOR INCOME TAX YEARS BEGINNING ON OR AFTER JANUARY 1,
30 2023, BUT BEFORE JANUARY 1, 2033, ANY TAXPAYER THAT INSTALLS AN
31 ENERGY STORAGE SYSTEM IN A RESIDENTIAL DWELLING IS ALLOWED A
32 CREDIT AGAINST THE TAX IMPOSED BY THIS ARTICLE 22 IN AN AMOUNT
33 EQUAL TO THREE HUNDRED DOLLARS.

34 (4) THE AMOUNT OF ANY CREDIT ALLOWED UNDER THIS SECTION
35 THAT EXCEEDS THE TAXPAYER'S INCOME TAXES DUE IS REFUNDED TO THE
36 TAXPAYER.

37 (5) TO BE ELIGIBLE TO CLAIM A TAX CREDIT PURSUANT TO THIS
38 SECTION, A TAXPAYER IS REQUIRED TO SUBMIT EVIDENCE OF THE
39 INSTALLATION OF THE INSTILLATION OF AN ENERGY STORAGE SYSTEM IN
40 A RESIDENTIAL DWELLING, TO THE DEPARTMENT OF REVENUE IN A FORM
41 AND MANNER TO BE DETERMINED BY THE DEPARTMENT.

42 (6) THIS SECTION IS REPEALED, EFFECTIVE JANUARY 1, 2035."

- 1 Renumber succeeding sections accordingly.
- 2 Page 8, line 10, strike "**systems**" and substitute "**systems - heat pump**
3 **water heaters**".
- 4 Page 8, line 24, strike "SYSTEMS," and substitute "SYSTEMS AND HEAT
5 PUMP WATER HEATERS,".
- 6 Page 8, line 27, after "SYSTEMS" insert "AND HEAT PUMP WATER
7 HEATERS".
- 8 Page 9, line 5, after "SYSTEMS" insert "AND HEAT PUMP WATER HEATERS".
- 9 Page 9, line 8, strike "REDUCE" and substitute "MAKE USE OF".
- 10 Page 9, line 17, strike "SYSTEMS;" and substitute "SYSTEMS AND HEAT
11 PUMP WATER HEATERS;".
- 12 Page 9, line 23, after "SYSTEMS" insert "AND HEAT PUMP WATER
13 HEATERS".
- 14 Page 10, strike lines 5 through 23 and substitute:
- 15 "(B) HAS A VARIABLE SPEED COMPRESSOR;
16 (C) IS LISTED IN THE AIR-CONDITIONING, HEATING, AND
17 REFRIGERATION INSTITUTE DIRECTORY OF CERTIFIED PRODUCT
18 PERFORMANCE AS A MATCHED SYSTEM; AND
19 (D) IS INSTALLED BY A LICENSED CONTRACTOR, PLUMBER, OR
20 EMPLOYEE OF A GAS UTILITY IN ACCORDANCE WITH THE NATIONAL
21 ELECTRICAL CODE AND THE MANUFACTURER'S SPECIFICATIONS.
22 (II) "AIR-SOURCE HEAT PUMP SYSTEM" MAY INCLUDE A DUAL FUEL
23 SYSTEM SO LONG AS:
24 (A) THE AIR-SOURCE HEAT PUMP IS USED AS THE PRIMARY SOURCE
25 OF A BUILDING'S HEAT AND IS DESIGNED TO SUPPLY AT LEAST EIGHTY
26 PERCENT OF TOTAL ANNUAL HEATING FOR THE BUILDING;
27 (B) THE SYSTEM IS CAPABLE OF DISTRIBUTING PRODUCED HEAT TO
28 ALL CONDITIONED AREAS OF THE BUILDING;
29 (C) THE SYSTEM HAS A FURNACE WITH AN ANNUAL FUEL
30 UTILIZATION EFFICIENCY RATING OF NINETY PERCENT OR HIGHER;
31 (D) ALL PIPING FOR A SPLIT SYSTEM IS INSTALLED BY TECHNICIANS
32 CERTIFIED TO NITC R78 BRAZING PROCEDURE; AND
33 (E) THE SYSTEM IS INSTALLED BY TECHNICIANS THAT ARE TRAINED
34 ON THE SAFE HANDLING OF FLAMMABLE REFRIGERANTS.".

1 Page 11, line 6, strike "MULTI-SPEED OR".

2 Page 11, strike lines 13 through 24 and substitute:

3 "(II) "GROUND-SOURCE HEAT PUMP SYSTEM" MAY INCLUDE A
4 DUAL FUEL SYSTEM SO LONG AS:

5 (A) THE GROUND-SOURCE HEAT PUMP IS USED AS THE PRIMARY
6 SOURCE OF A BUILDING'S HEAT AND IS DESIGNED TO SUPPLY AT LEAST
7 EIGHTHTY PERCENT OF TOTAL ANNUAL HEATING FOR THE BUILDING;

8 (B) THE SYSTEM IS CAPABLE OF DISTRIBUTING PRODUCED HEAT TO
9 ALL CONDITIONED AREAS OF THE BUILDING;

10 (C) THE FURNACE HAS AN ANNUAL FUEL UTILIZATION EFFICIENCY
11 RATING OF NINETY PERCENT OR HIGHER;

12 (D) ALL PIPING FOR A SPLIT SYSTEM IS INSTALLED BY TECHNICIANS
13 CERTIFIED TO NITC R78 BRAZING PROCEDURE; AND

14 (E) THE SYSTEM IS INSTALLED BY TECHNICIANS THAT ARE TRAINED
15 ON THE SAFE HANDLING OF FLAMMABLE REFRIGERANTS.

16 (III) "GROUND-SOURCE HEAT PUMP SYSTEM" INCLUDES
17 MECHANICAL AND ELECTRICAL EQUIPMENT CENTRAL TO THE OPERATION
18 OF A GROUND-SOURCE HEAT PUMP.

19 (IV) "GROUND-SOURCE HEAT PUMP SYSTEM" MAY INCLUDE A
20 HEAT EXCHANGER FOR WATER HEATING.

21 (c) (I) "HEAT PUMP WATER HEATER" MEANS AN ELECTRIC WATER
22 HEATER USING HEAT PUMP TECHNOLOGY TO TRANSFER HEAT FROM THE
23 SURROUNDING AIR TO WATER IN A TANK, AND THAT:

24 (A) IS CERTIFIED PURSUANT TO THE FEDERAL ENVIRONMENTAL
25 PROTECTION AGENCY'S ENERGY STAR PROGRAM; AND

26 (B) INCLUDES A MODULAR DEMAND RESPONSE COMMUNICATIONS
27 PORT.

28 (II) "HEAT PUMP WATER HEATER" MAY INCLUDE:

29 (A) AN ELECTRIC RESISTANCE HEATING ELEMENT; AND

30 (B) MECHANICAL AND ELECTRICAL EQUIPMENT CENTRAL TO THE
31 OPERATION OF A HEAT PUMP WATER HEATER."

32 Page 11, line 26, strike "SYSTEMS AND" and substitute "SYSTEMS,".

33 Page 11, line 27, strike "SYSTEMS" and substitute "SYSTEMS, AND HEAT
34 PUMP WATER HEATERS".

35 Page 12, after line 3 insert:

36 "SECTION 3. In Colorado Revised Statutes, **add** 40-3-119 as
37 follows:

1 **40-3-119. Measurement of use for billing - rules.** ON OR BEFORE
2 JULY 1, 2023, THE COMMISSION SHALL ADOPT RULES AUTHORIZING
3 INVESTOR-OWNED GAS UTILITIES TO MEASURE THE AMOUNT OF USE FOR
4 BILLING PURPOSES IN EITHER BRITISH THERMAL UNITS OR GAS THERMS.".

5 Renumber succeeding sections accordingly.

6 Page 12, strike line 26 and substitute "SYSTEMS, GROUND-SOURCE HEAT
7 PUMP SYSTEMS, AND HEAT PUMP WATER HEATERS SET FORTH IN".

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