

SB051\_L.001

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 EIGHTHY 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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