

SENATE COMMITTEE OF REFERENCE REPORT

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Chair of Committee

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Date

February 8, 2022

Committee on Transportation & Energy.

After consideration on the merits, the Committee recommends the following:

SB22-051 be amended as follows, and as so amended, be referred to the Committee on Finance with favorable recommendation:

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

1 (V) THE PURCHASE AND USE OF AIR-SOURCE AND GROUND-SOURCE  
2 HEAT PUMP SYSTEMS AND HEAT PUMP WATER HEATERS WILL BENEFIT  
3 PUBLIC HEALTH IN THE HEATING AND COOLING OF HOMES AND BUSINESSES,  
4 TAKE ADVANTAGE OF EXCESS RENEWABLE ENERGY POWER GENERATION  
5 DURING PEAK TIMES, AND MAKE USE OF READILY AVAILABLE EXCESS  
6 HEAT.

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

13 (I) INDUCE CERTAIN DESIGNATED BEHAVIOR BY TAXPAYERS,  
14 SPECIFICALLY THE PURCHASE AND USE OF AIR-SOURCE AND  
15 GROUND-SOURCE HEAT PUMP SYSTEMS AND HEAT PUMP WATER HEATERS;  
16 AND

17 (II) CONTRIBUTE TO THE STATE'S EFFORT TO ACHIEVE ITS CLIMATE  
18 GOALS.

19 (c) THE GENERAL ASSEMBLY AND THE STATE AUDITOR SHALL  
20 MEASURE THE EFFECTIVENESS OF THE TAX CREDITS IN ACHIEVING THE  
21 PURPOSES SPECIFIED IN SUBSECTION (1)(b) OF THIS SECTION BASED ON THE  
22 NUMBER OF AIR-SOURCE AND GROUND-SOURCE HEAT PUMP SYSTEMS AND  
23 THE NUMBER OF HEAT PUMP WATER HEATERS SOLD AND USED IN THE  
24 STATE. THE COLORADO ENERGY OFFICE SHALL PROVIDE THE STATE  
25 AUDITOR WITH ANY AVAILABLE INFORMATION THAT WOULD ASSIST THE  
26 STATE AUDITOR'S MEASUREMENT.

27 (2) AS USED IN THIS SECTION, UNLESS THE CONTEXT OTHERWISE  
28 REQUIRES:

29 (a) "AIR-SOURCE HEAT PUMP SYSTEM" HAS THE SAME MEANING  
30 SET FORTH IN SECTION 39-26-731 (2)(a).

31 (b) "GROUND-SOURCE HEAT PUMP SYSTEM" HAS THE SAME  
32 MEANING SET FORTH IN SECTION 39-26-731 (2)(b).

33 (c) "HEAT PUMP WATER HEATER" HAS THE SAME MEANING SET  
34 FORTH IN SECTION 39-26-731 (2)(c).

35 (3)(a) FOR INCOME TAX YEARS BEGINNING ON OR AFTER JANUARY  
36 1, 2023, BUT BEFORE JANUARY 1, 2033, ANY TAXPAYER THAT INSTALLS A  
37 RESIDENTIAL OR COMMERCIAL AIR-SOURCE HEAT PUMP OR A  
38 GROUND-SOURCE HEAT PUMP IS ALLOWED A CREDIT AGAINST THE TAX  
39 IMPOSED BY THIS ARTICLE 22 IN AN AMOUNT EQUAL TO TEN PERCENT OF  
40 THE PURCHASE PRICE OF THE AIR-SOURCE HEAT PUMP OR GROUND-SOURCE  
41 HEAT PUMP.

42 (b) FOR INCOME TAX YEARS BEGINNING ON OR AFTER JANUARY 1,  
43 2023, BUT BEFORE JANUARY 1, 2033, ANY TAXPAYER THAT INSTALLS A

1 RESIDENTIAL OR COMMERCIAL HEAT PUMP WATER HEATER IS ALLOWED A  
2 CREDIT AGAINST THE TAX IMPOSED BY THIS ARTICLE 22 IN AN AMOUNT  
3 EQUAL TO TEN PERCENT OF THE PURCHASE PRICE OF THE HEAT PUMP  
4 WATER HEATER.

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

8 (5) TO BE ELIGIBLE TO CLAIM A TAX CREDIT PURSUANT TO THIS  
9 SECTION, A TAXPAYER IS REQUIRED TO SUBMIT EVIDENCE OF THE  
10 PURCHASE PRICE OF THE AIR-SOURCE OR GROUND-SOURCE HEAT PUMP OR  
11 HEAT PUMP WATER HEATER, AS APPLICABLE, TO THE DEPARTMENT OF  
12 REVENUE IN A FORM AND MANNER TO BE DETERMINED BY THE  
13 DEPARTMENT.

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

15 **39-22-544. Credit against tax - residential energy storage**  
16 **systems - tax preference performance statement - legislative**  
17 **declaration - definition - repeal.** (1) (a) IN ACCORDANCE WITH SECTION  
18 39-21-304 (1), WHICH REQUIRES EACH BILL THAT CREATES A NEW TAX  
19 EXPENDITURE TO INCLUDE A TAX PREFERENCE PERFORMANCE STATEMENT  
20 AS PART OF A STATUTORY LEGISLATIVE DECLARATION, THE GENERAL  
21 ASSEMBLY HEREBY FINDS AND DECLARES THAT THE PURPOSES OF THE TAX  
22 EXPENDITURE CREATED IN SUBSECTION (3) OF THIS SECTION ARE TO:

23 (I) INDUCE CERTAIN DESIGNATED BEHAVIOR BY TAXPAYERS,  
24 SPECIFICALLY THE PURCHASE AND INSTALLATION OF RESIDENTIAL ENERGY  
25 STORAGE SYSTEMS; AND

26 (II) CONTRIBUTE TO THE STATE'S EFFORT TO ACHIEVE ITS CLIMATE  
27 GOALS.

28 (b) THE GENERAL ASSEMBLY AND THE STATE AUDITOR SHALL  
29 MEASURE THE EFFECTIVENESS OF THE TAX CREDITS IN ACHIEVING THE  
30 PURPOSES SPECIFIED IN SUBSECTION (1)(a) OF THIS SECTION BASED ON THE  
31 NUMBER OF RESIDENTIAL ENERGY STORAGE SYSTEMS INSTALLED IN THE  
32 STATE. THE COLORADO ENERGY OFFICE SHALL PROVIDE THE STATE  
33 AUDITOR WITH ANY AVAILABLE INFORMATION THAT WOULD ASSIST THE  
34 STATE AUDITOR'S MEASUREMENT.

35 (2) AS USED IN THIS SECTION, UNLESS THE CONTEXT OTHERWISE  
36 REQUIRES, "ENERGY STORAGE SYSTEM" MEANS ANY COMMERCIALY  
37 AVAILABLE, CUSTOMER-SITED SYSTEM, INCLUDING BATTERIES AND THE  
38 BATTERIES PAIRED WITH ON-SITE GENERATION, THAT IS CAPABLE OF  
39 RETAINING, STORING, AND DELIVERING ENERGY BY CHEMICAL, THERMAL,  
40 MECHANICAL, OR OTHER MEANS.

41 (3) FOR INCOME TAX YEARS BEGINNING ON OR AFTER JANUARY 1,  
42 2023, BUT BEFORE JANUARY 1, 2033, ANY TAXPAYER THAT INSTALLS AN  
43 ENERGY STORAGE SYSTEM IN A RESIDENTIAL DWELLING IS ALLOWED A

1 CREDIT AGAINST THE TAX IMPOSED BY THIS ARTICLE 22 IN AN AMOUNT  
2 EQUAL TO TEN PERCENT OF THE PURCHASE PRICE OF THE ENERGY STORAGE  
3 SYSTEM.

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

7 (5) TO BE ELIGIBLE TO CLAIM A TAX CREDIT PURSUANT TO THIS  
8 SECTION, A TAXPAYER IS REQUIRED TO SUBMIT EVIDENCE OF THE  
9 INSTALLATION OF THE INSTILLATION OF AN ENERGY STORAGE SYSTEM IN  
10 A RESIDENTIAL DWELLING, TO THE DEPARTMENT OF REVENUE IN A FORM  
11 AND MANNER TO BE DETERMINED BY THE DEPARTMENT.

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

13 Renumber succeeding sections accordingly.

14 Page 8, line 10, strike "**systems**" and substitute "**systems - heat pump**  
15 **water heaters**".

16 Page 8, line 24, strike "SYSTEMS," and substitute "SYSTEMS AND HEAT  
17 PUMP WATER HEATERS,".

18 Page 8, line 27, after "SYSTEMS" insert "AND HEAT PUMP WATER  
19 HEATERS".

20 Page 9, line 5, after "SYSTEMS" insert "AND HEAT PUMP WATER HEATERS".

21 Page 9, line 8, strike "REDUCE" and substitute "MAKE USE OF".

22 Page 9, line 17, strike "SYSTEMS;" and substitute "SYSTEMS AND HEAT  
23 PUMP WATER HEATERS;".

24 Page 9, line 23, after "SYSTEMS" insert "AND HEAT PUMP WATER  
25 HEATERS".

26 Page 10, strike lines 5 through 23 and substitute:

27 (B) HAS A VARIABLE SPEED COMPRESSOR;

28 (C) IS LISTED IN THE AIR-CONDITIONING, HEATING, AND  
29 REFRIGERATION INSTITUTE DIRECTORY OF CERTIFIED PRODUCT  
30 PERFORMANCE AS A MATCHED SYSTEM; AND

31 (D) IS INSTALLED BY A LICENSED CONTRACTOR, PLUMBER, OR  
32 EMPLOYEE OF A GAS UTILITY IN ACCORDANCE WITH THE NATIONAL  
33 ELECTRICAL CODE AND THE MANUFACTURER'S SPECIFICATIONS.

1 (II) "AIR-SOURCE HEAT PUMP SYSTEM" MAY INCLUDE A DUAL FUEL  
2 SYSTEM SO LONG AS:  
3 (A) THE AIR-SOURCE HEAT PUMP IS USED AS THE PRIMARY SOURCE  
4 OF A BUILDING'S HEAT AND IS DESIGNED TO SUPPLY AT LEAST EIGHTY  
5 PERCENT OF TOTAL ANNUAL HEATING FOR THE BUILDING;  
6 (B) THE SYSTEM IS CAPABLE OF DISTRIBUTING PRODUCED HEAT TO  
7 ALL CONDITIONED AREAS OF THE BUILDING;  
8 (C) THE SYSTEM HAS A FURNACE WITH AN ANNUAL FUEL  
9 UTILIZATION EFFICIENCY RATING OF NINETY PERCENT OR HIGHER;  
10 (D) ALL PIPING FOR A SPLIT SYSTEM IS INSTALLED BY TECHNICIANS  
11 CERTIFIED TO NITC R78 BRAZING PROCEDURE; AND  
12 (E) THE SYSTEM IS INSTALLED BY TECHNICIANS THAT ARE TRAINED  
13 ON THE SAFE HANDLING OF FLAMMABLE REFRIGERANTS."

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

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

16 (II) "GROUND-SOURCE HEAT PUMP SYSTEM" MAY INCLUDE A  
17 DUAL FUEL SYSTEM SO LONG AS:  
18 (A) THE GROUND-SOURCE HEAT PUMP IS USED AS THE PRIMARY  
19 SOURCE OF A BUILDING'S HEAT AND IS DESIGNED TO SUPPLY AT LEAST  
20 EIGHTY PERCENT OF TOTAL ANNUAL HEATING FOR THE BUILDING;  
21 (B) THE SYSTEM IS CAPABLE OF DISTRIBUTING PRODUCED HEAT TO  
22 ALL CONDITIONED AREAS OF THE BUILDING;  
23 (C) THE FURNACE HAS AN ANNUAL FUEL UTILIZATION EFFICIENCY  
24 RATING OF NINETY PERCENT OR HIGHER;  
25 (D) ALL PIPING FOR A SPLIT SYSTEM IS INSTALLED BY TECHNICIANS  
26 CERTIFIED TO NITC R78 BRAZING PROCEDURE; AND  
27 (E) THE SYSTEM IS INSTALLED BY TECHNICIANS THAT ARE TRAINED  
28 ON THE SAFE HANDLING OF FLAMMABLE REFRIGERANTS.  
29 (III) "GROUND-SOURCE HEAT PUMP SYSTEM" INCLUDES  
30 MECHANICAL AND ELECTRICAL EQUIPMENT CENTRAL TO THE OPERATION  
31 OF A GROUND-SOURCE HEAT PUMP.  
32 (IV) "GROUND-SOURCE HEAT PUMP SYSTEM" MAY INCLUDE A  
33 HEAT EXCHANGER FOR WATER HEATING.  
34 (c) (I) "HEAT PUMP WATER HEATER" MEANS AN ELECTRIC WATER  
35 HEATER USING HEAT PUMP TECHNOLOGY TO TRANSFER HEAT FROM THE  
36 SURROUNDING AIR TO WATER IN A TANK, AND THAT:  
37 (A) IS CERTIFIED PURSUANT TO THE FEDERAL ENVIRONMENTAL  
38 PROTECTION AGENCY'S ENERGY STAR PROGRAM; AND  
39 (B) INCLUDES A MODULAR DEMAND RESPONSE COMMUNICATIONS  
40 PORT.

1 (II) "HEAT PUMP WATER HEATER" MAY INCLUDE:  
2 (A) AN ELECTRIC RESISTANCE HEATING ELEMENT; AND  
3 (B) MECHANICAL AND ELECTRICAL EQUIPMENT CENTRAL TO THE  
4 OPERATION OF A HEAT PUMP WATER HEATER."

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

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

8 Page 12, after line 3 insert:

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

11 **40-3-119. Measurement of use for billing - rules.** ON OR BEFORE  
12 JULY 1, 2023, THE COMMISSION SHALL ADOPT RULES AUTHORIZING  
13 INVESTOR-OWNED GAS UTILITIES TO MEASURE THE AMOUNT OF USE FOR  
14 BILLING PURPOSES IN EITHER BRITISH THERMAL UNITS OR GAS THERMS."

15 Renumber succeeding sections accordingly.

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

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