

Second Regular Session  
Seventy-third General Assembly  
STATE OF COLORADO

INTRODUCED

LLS NO. 22-0566.01 Nicole Myers x4326

SENATE BILL 22-073

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SENATE SPONSORSHIP

**Rankin,** Liston

HOUSE SPONSORSHIP

**McKean,**

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Senate Committees

State, Veterans, & Military Affairs

House Committees

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A BILL FOR AN ACT

101 CONCERNING ALTERNATIVE ENERGY SOURCES, AND, IN CONNECTION  
102 THEREWITH, REQUIRING A FEASIBILITY STUDY FOR THE USE OF  
103 SMALL MODULAR NUCLEAR REACTORS AS A SOURCE OF  
104 CARBON-FREE ENERGY AND FOR RECYCLED ENERGY,  
105 SPECIFYING THE MAXIMUM NAMEPLATE CAPACITY OF A  
106 GENERATION UNIT FOR PUMPED HYDROELECTRICITY.

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Bill Summary

*(Note: This summary applies to this bill as introduced and does not reflect any amendments that may be subsequently adopted. If this bill passes third reading in the house of introduction, a bill summary that applies to the reengrossed version of this bill will be available at <http://leg.colorado.gov>.)*

The bill requires the director of the office of economic

Shading denotes HOUSE amendment. Double underlining denotes SENATE amendment.  
Capital letters or bold & italic numbers indicate new material to be added to existing statute.  
Dashes through the words indicate deletions from existing statute.

development (office) or the director's designee to conduct or cause to be conducted a study (feasibility study) regarding the feasibility of using small modular nuclear reactors as a carbon-free energy source for the state and includes specific items that must be included in the feasibility study.

By July 1, 2024, the director of the office is required to provide a written report to the committees of the senate and house of representatives having jurisdiction over energy matters regarding the findings and conclusions from the feasibility study. The bill appropriates \$500,000 from the general fund to the office for the 2022-23 fiscal year to be used for the purposes of the feasibility study.

In addition, current law defines recycled energy as energy produced by a generation unit with a nameplate capacity of not more than 15 megawatts. For pumped hydroelectricity generation only, the bill specifies that the energy be produced by a generation unit with a nameplate capacity of not more than 400 megawatts.

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1 *Be it enacted by the General Assembly of the State of Colorado:*

2 **SECTION 1.** In Colorado Revised Statutes, **add** 24-48.5-132 as  
3 follows:

4 **24-48.5-132. Feasibility of small modular nuclear reactors as**  
5 **a source of carbon-free energy - study - report - definition - repeal.**

6 (1) AS USED IN THIS SECTION, UNLESS THE CONTEXT OTHERWISE  
7 REQUIRES, "SMALL MODULAR NUCLEAR REACTOR" MEANS A NUCLEAR  
8 REACTOR THAT:

9 (a) HAS A RATED CAPACITY OF NOT MORE THAN THREE HUNDRED  
10 MEGAWATTS OF ELECTRICITY;

11 (b) CAN BE CONSTRUCTED AND OPERATED IN COMBINATION WITH  
12 OTHER SIMILAR REACTORS AT A SINGLE SITE IF ADDITIONAL REACTORS ARE  
13 NECESSARY; AND

14 (c) HAS BEEN LICENSED BY THE UNITED STATES NUCLEAR  
15 REGULATORY COMMISSION AND IS IN COMPLIANCE WITH ALL  
16 REQUIREMENTS AND CONDITIONS IMPOSED BY THE COMMISSION.

1           (2) THE DIRECTOR OF THE OFFICE OF ECONOMIC DEVELOPMENT OR  
2 THE DIRECTOR'S DESIGNEE SHALL CONDUCT OR CAUSE TO BE CONDUCTED  
3 A STUDY REGARDING THE FEASIBILITY OF USING SMALL MODULAR  
4 NUCLEAR REACTORS AS A CARBON-FREE ENERGY SOURCE FOR THE STATE.  
5 THE STUDY MUST INCLUDE:  
6           (a) AN EVALUATION OF CURRENT STATE LAWS AND REGULATIONS  
7 THAT WOULD NEED TO BE AMENDED TO ENABLE THE CONSTRUCTION AND  
8 OPERATION OF SMALL MODULAR NUCLEAR REACTORS;  
9           (b) AN EVALUATION OF THE ECONOMIC FEASIBILITY OF REPLACING  
10 CARBON-BASED ENERGY SOURCES WITH SMALL MODULAR NUCLEAR  
11 REACTORS WHILE ACCOUNTING FOR THE NET PRESENT VALUE OF REVENUE  
12 REQUIREMENTS THAT WOULD RESULT FROM THE RETIREMENT OF  
13 COAL-FIRED PLANTS;  
14           (c) AN EVALUATION OF THE SAFETY OF AND THE WASTE STREAM  
15 RESULTING FROM THE CONSTRUCTION AND OPERATION OF SMALL  
16 MODULAR NUCLEAR REACTORS;  
17           (d) AN EVALUATION OF THE PROPERTY TAX BENEFITS TO  
18 COUNTIES, SCHOOL DISTRICTS, AND SPECIAL TAXING DISTRICTS IN  
19 CONNECTION WITH THE USE OF SMALL MODULAR NUCLEAR REACTORS;  
20           (e) AN ESTIMATE OF THE NUMBER OF JOBS THAT COULD BE  
21 CREATED AND THE OVERALL IMPACT TO LOCAL ECONOMIES IN  
22 CONNECTION WITH THE USE OF SMALL MODULAR NUCLEAR REACTORS;  
23           (f) A COMPARISON OF THE RELIABILITY AND COST OF SMALL  
24 MODULAR NUCLEAR REACTORS AND THE RELIABILITY AND COST OF  
25 NATURAL GAS, WIND, AND SOLAR ENERGY PRODUCTION;  
26           (g) IDENTIFICATION OF LOCAL GOVERNMENT PERMITTING  
27 REQUIREMENTS OR APPROVALS THAT WOULD BE REQUIRED FOR THE

1 OPERATION OF SMALL MODULAR NUCLEAR REACTORS; AND

2 (h) ANY OTHER INFORMATION DEEMED NECESSARY BY THE  
3 DIRECTOR OF THE OFFICE OF ECONOMIC DEVELOPMENT OR THE DIRECTOR'S  
4 DESIGNEE.

5 (3) ON OR BEFORE JULY 1, 2024, THE DIRECTOR OF THE OFFICE OF  
6 ECONOMIC DEVELOPMENT OR THE DIRECTOR'S DESIGNEE SHALL PROVIDE  
7 TO THE COMMITTEES OF THE SENATE AND HOUSE OF REPRESENTATIVES  
8 HAVING JURISDICTION OVER ENERGY MATTERS A WRITTEN REPORT OF THE  
9 FINDINGS AND CONCLUSIONS FROM THE FEASIBILITY STUDY REQUIRED IN  
10 SUBSECTION (2) OF THIS SECTION, INCLUDING ANY CONCLUSIONS OR  
11 RECOMMENDATIONS REGARDING THE POTENTIAL FOR SMALL MODULAR  
12 NUCLEAR REACTORS TO PROVIDE ENERGY IN THE STATE AND ANY  
13 RECOMMENDATIONS FOR ADMINISTRATIVE OR LEGISLATIVE ACTION TO  
14 PROMOTE THEIR USE.

15 (4) FOR THE 2022-23 STATE FISCAL YEAR, THE GENERAL  
16 ASSEMBLY SHALL APPROPRIATE FIVE HUNDRED THOUSAND DOLLARS FROM  
17 THE GENERAL FUND TO THE OFFICE OF ECONOMIC DEVELOPMENT FOR THE  
18 PURPOSES OF THIS SECTION.

19 (5) THIS SECTION IS REPEALED, EFFECTIVE JULY 1, 2025.

20 **SECTION 2.** In Colorado Revised Statutes, 40-2-124, **amend**  
21 (1)(a)(VI)(A) as follows:

22 **40-2-124. Renewable energy standards - qualifying retail and**  
23 **wholesale utilities - net metering - rules - legislative declaration -**  
24 **definitions.** (1) Each provider of retail electric service in the state of  
25 Colorado, other than municipally owned utilities that serve forty thousand  
26 customers or fewer, is a qualifying retail utility. Each qualifying retail  
27 utility, with the exception of cooperative electric associations that have

1 voted to exempt themselves from commission jurisdiction pursuant to  
2 section 40-9.5-104 and municipally owned utilities, is subject to the rules  
3 established under this article 2 by the commission. No additional  
4 regulatory authority is provided to the commission other than that  
5 specifically contained in this section. In accordance with article 4 of title  
6 24, the commission shall revise or clarify existing rules to establish the  
7 following:

8 (a) Definitions of eligible energy resources that can be used to  
9 meet the standards. "Eligible energy resources" means recycled energy,  
10 renewable energy resources, and renewable energy storage. In addition,  
11 resources using coal mine methane and synthetic gas produced by  
12 pyrolysis of waste materials are eligible energy resources if the  
13 commission determines that the electricity generated by those resources  
14 is greenhouse gas neutral. The commission shall determine, following an  
15 evidentiary hearing, the extent to which such electric generation  
16 technologies utilized in an optional pricing program may be used to  
17 comply with this standard. A fuel cell using hydrogen derived from an  
18 eligible energy resource is also an eligible electric generation technology.  
19 Fossil and nuclear fuels and their derivatives are not eligible energy  
20 resources. As used in this section:

21 (VI) (A) "Recycled energy" means energy produced by a  
22 generation unit with a nameplate capacity of not more than fifteen  
23 megawatts, OR FOR PUMPED HYDROELECTRICITY GENERATION, PRODUCED  
24 BY A GENERATION UNIT WITH A NAMEPLATE CAPACITY OF NOT MORE THAN  
25 FOUR HUNDRED MEGAWATTS, that either converts the otherwise lost  
26 energy from the heat from exhaust stacks or pipes to electricity and does  
27 not combust additional fossil fuel or is pumped hydroelectricity

1 generation that does not combust fossil fuel to pump water; is not located  
2 on a natural waterway; includes measures to prevent fish mortality in the  
3 facility; does not impact any decreed in-stream flow; and does not cause  
4 any violation of state water quality standards when operated.

5 **SECTION 3. Safety clause.** The general assembly hereby finds,  
6 determines, and declares that this act is necessary for the immediate  
7 preservation of the public peace, health, or safety.