

# HOUSE BILL 23-1281

BY REPRESENTATIVE(S) Titone and Vigil, Amabile, Bird, Boesenecker, Dickson, Froelich, Herod, Jodeh, Joseph, Kipp, Lindsay, Mauro, McCormick, Michaelson Jenet, Sharbini, Snyder, Story, Valdez, Weinberg, Woodrow, McCluskie;

also SENATOR(S) Cutter and Priola, Buckner, Jaquez Lewis, Kolker, Marchman.

CONCERNING MEASURES TO ADVANCE THE USE OF CLEAN HYDROGEN IN THE STATE, AND, IN CONNECTION THEREWITH, MAKING AN APPROPRIATION.

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

**SECTION 1. Legislative declaration.** (1) The general assembly finds and declares that:

- (a) In 2019, Colorado adopted the following goals for the statewide reduction of greenhouse gas pollution from a 2005 baseline:
- (I) Reducing greenhouse gas pollution by more than twenty-six percent by 2025;

Capital letters or bold & italic numbers indicate new material added to existing law; dashes through words or numbers indicate deletions from existing law and such material is not part of the act.

- (II) Reducing greenhouse gas pollution by more than fifty percent by 2030; and
- (III) Reducing greenhouse gas pollution by more than ninety percent by 2050;
- (b) The Colorado Greenhouse Gas Pollution Reduction Roadmap, published by the Colorado energy office and dated January 14, 2021, recognizes that:
- (I) Achieving the state's greenhouse gas pollution reduction goals from 2030 to 2050 will require further technical innovation and economies of scale to bring costs down for deployment of innovative technologies both for emission reductions of end uses and to generate energy through innovative methods such as clean hydrogen; and
- (II) Clean hydrogen may be an important resource to lower greenhouse gas emissions from sectors that are harder to decarbonize, such as heavy-duty transportation and heavy industry;
- (c) The federal government enacted the "Inflation Reduction Act of 2022", Pub.L. 117-169, which recognizes the importance of clean energy production in the fight against climate change and creates important incentives that make investments in clean hydrogen more affordable and attainable;
- (d) To support diversification of the state's energy production and create well-paid clean energy jobs, Colorado has joined three other regional states in a partnership to pursue funding from the United States department of energy for a regional hydrogen hub;
- (e) As Colorado diversifies and decarbonizes its energy economy with clean energy sources, clean hydrogen may play an important role in the resilience of the state's electric grid and for dispatchable electricity generation that complements the use of wind and solar resources, while also helping achieve Governor Polis's goal of one hundred percent renewable electricity generation in the state by 2040; and
- (f) The inclusion of clean hydrogen as an element in decarbonization pathways should include comprehensive assessments of clean hydrogen in

comparison to alternatives, including consideration of life cycle emissions, costs, impacts on communities, including disproportionately impacted communities, and environmental impacts on water, air, land, and biodiversity.

- (2) The general assembly therefore declares that state law should:
- (a) Provide for various methods to advance the use of clean hydrogen in the state;
- (b) Allow for agencies of the state and users of clean hydrogen in the state to coordinate with each other to take advantage of available federal funding and tax credits; and
- (c) Ensure that the use of clean hydrogen in the state is in alignment with the state's greenhouse gas emission reduction and environmental justice goals.
- **SECTION 2.** In Colorado Revised Statutes, add 40-2-138 as follows:
- 40-2-138. Projects for the production of clean hydrogen proceeding hydrogen hub projects rules definitions. (1) AS USED IN THIS SECTION, UNLESS THE CONTEXT OTHERWISE REQUIRES:
  - (a) "CLEAN HYDROGEN" MEANS:
  - (I) GREEN HYDROGEN, AS DEFINED IN SECTION 40-3.2-108 (2)(i); OR
- (II) HYDROGEN THAT IS PRODUCED THROUGH A PROCESS THAT RESULTS IN LIFECYCLE GREENHOUSE GAS EMISSIONS RATES THAT ARE WITHIN THE LIFECYCLE GREENHOUSE GAS EMISSIONS RATE RANGES SET FORTH IN 26 U.S.C. SECS. 45V (b)(2)(C) AND 45V (b)(2)(D), AS AMENDED.
- (b) (I) "CLEAN HYDROGEN PROJECT" MEANS A PROJECT THAT RESULTS IN THE PRODUCTION OF CLEAN HYDROGEN BY AN INVESTOR-OWNED UTILITY.
- (II) "CLEAN HYDROGEN PROJECT" MAY INCLUDE PIPELINES, ELECTROLYZERS, ENVIRONMENTAL CONTROLS, MONITORING EQUIPMENT,

DEDICATED RENEWABLE ENERGY SOURCES FOR ELECTROLYSIS, THE PURCHASE OF CLEAN HYDROGEN FROM THIRD PARTIES, AND AN UPGRADE TO A TURBINE AT AN ELECTRIC GENERATING STATION IF THAT UPGRADE IS PART OF A STATE OR FEDERAL APPLICATION FOR A REGIONAL CLEAN HYDROGEN HUB UNDER 42 U.S.C. SEC. 16161a.

- (c) "CUMULATIVE IMPACTS" MEANS THE INCREMENTAL EFFECTS OF A CLEAN HYDROGEN PROJECT ON THE ENVIRONMENT, INCLUDING EFFECTS ON AIR QUALITY, WATER QUALITY, WATER RESOURCE AVAILABILITY, CLIMATE, AND PUBLIC HEALTH, THAT A CLEAN HYDROGEN PROJECT HAS WHEN ADDED TO THE IMPACTS FROM OTHER PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE DEVELOPMENT OF ANY TYPE ON THE RELEVANT AREA, INCLUDING AN AIRSHED OR WATERSHED, AS DETERMINED BY RULE BY THE COMMISSION, OR ON A DISPROPORTIONATELY IMPACTED COMMUNITY.
- (d) "DISPROPORTIONATELY IMPACTED COMMUNITY" HAS THE MEANING SET FORTH IN SECTION 24-4-109 (2)(b)(II).
- (e) (I) "HARD TO DECARBONIZE END USE" MEANS INDUSTRIAL USES THAT INCLUDE:
- (A) THE GENERATION OF HEAT OF AT LEAST ONE HUNDRED FIFTY DEGREES CELSIUS FOR INDUSTRIAL PURPOSES; AND
- (B) ADDITION AS FEEDSTOCK FOR INDUSTRIAL PURPOSES, INCLUDING MANUFACTURE OF STEEL, AMMONIA, FERTILIZER, AND CHEMICALS.
- (II) "HARD TO DECARBONIZE END USE" DOES NOT INCLUDE THE DIRECT USE OF HYDROGEN FOR RESIDENTIAL OR COMMERCIAL HEATING.
- (f) "Hydrogen hub project" means a project that is part of an application for federal funding by a partnership of regulated utilities, private partners, and companies and may include state or federal government agencies in collaboration with other states that is designed to utilize available federal funds and tax credits, which may include the production, transport, and use of clean hydrogen.
- (g) "LIFECYCLE GREENHOUSE GAS EMISSIONS RATE" MEANS LIFECYCLE GREENHOUSE GAS EMISSIONS, AS DEFINED IN 26 U.S.C. SEC. 45V

- (c)(1)(A), AS AMENDED, MEASURED IN ACCORDANCE WITH ANY APPLICABLE FEDERAL INTERNAL REVENUE SERVICE REGULATIONS OR GUIDANCE.
- (h) "OFFICE" MEANS THE COLORADO ENERGY OFFICE CREATED IN SECTION 24-38.5-101.
- (i) "QUALIFIED USE" MEANS THE USE OF CLEAN HYDROGEN IN THE STATE FOR:
  - (I) HARD TO DECARBONIZE END USES;
- (II) THE OPERATION OF A HEAVY-DUTY MOTOR VEHICLE, AS DEFINED IN SECTION 25-7.5-102 (11); AND
  - (III) AVIATION.
- (2) THE COMMISSION SHALL INITIATE AN INVESTIGATORY PROCEEDING, NO LATER THAN SEPTEMBER 1, 2023, TO CONSIDER:
- (a) The potential for clean hydrogen projects operated by investor-owned utilities subject to regulation by the commission to contribute to meeting the greenhouse gas emission reduction goals described in section 25-7-102 (2)(g), including lifecycle greenhouse gas emissions rates, with a preference for qualified uses;
- (b) THE IMPACT OF CLEAN HYDROGEN PROJECTS ON THE EMISSION OF AIR POLLUTANTS OTHER THAN GREENHOUSE GASES AND HUMAN HEALTH;
  - (c) POTENTIAL MARKETS FOR CLEAN HYDROGEN IN COLORADO;
- (d) THE IMPACT OF CLEAN HYDROGEN PRODUCTION ON WATER QUALITY AND QUANTITY IN COLORADO;
- (e) THE POTENTIAL IMPACTS OF PIPELINE LEAKAGE AND BEST PRACTICES FOR MITIGATION;
- (f) THE POTENTIAL FOR THE DEVELOPMENT OF CLEAN HYDROGEN TO HELP CREATE OR SUSTAIN JOBS IN COLORADO, INCLUDING UTILITY JOBS;

- (g) THE COST, CAPABILITIES, AND MARKET AVAILABILITY OF CLEAN HYDROGEN TECHNOLOGIES, INCLUDING PIPELINE INVESTMENTS;
- (h) THE APPROPRIATE ROLES FOR INVESTOR-OWNED UTILITIES IN THE PRODUCTION, SALE, OR USE OF CLEAN HYDROGEN, INCLUDING CONSIDERING WHETHER COSTS MAY BE RECOVERED FROM RATEPAYERS:
- (i) THE POTENTIAL IMPACT OF INVESTOR-OWNED UTILITY INVESTMENTS IN A CLEAN HYDROGEN PROJECT ON RATEPAYERS, INCLUDING ON BILLS, RATES, AND RATE STABILITY, AND OPTIONS FOR AVOIDING POTENTIAL CROSS-SUBSIDIZATION AND COST SHIFTING ACROSS RATE CLASSES;
- (j) PRINCIPLES AND REQUIREMENTS FOR ANY TARIFFS FOR THE SALE OF CLEAN HYDROGEN TO THIRD PARTIES, INCLUDING PRINCIPLES AND REQUIREMENTS TO ENSURE THAT COSTS ARISING FROM THE DEVELOPMENT, PRODUCTION, TRANSPORT, AND DELIVERY OF THE CLEAN HYDROGEN UNDER THOSE TARIFFS ARE NOT BORNE BY CUSTOMERS WHO DO NOT TAKE SERVICE FROM THOSE TARIFFS;
- (k) THE PROCESS AND DATA NECESSARY AND AVAILABLE TO IMPLEMENT A REQUIREMENT FOR THE ADOPTION OF METHODS FOR:
- (I) THE MEASUREMENT OF LIFECYCLE GREENHOUSE GAS EMISSIONS RATES, INCLUDING FOR HOURLY MATCHING OF ELECTRICITY USED;
- (II) THE TRACKING OF THE DEPLOYMENT OF NEW RENEWABLE ENERGY RESOURCES OR USE OF CURTAILED RENEWABLE ENERGY TO MEET ELECTRICITY REQUIREMENTS FOR PRODUCTION OF CLEAN HYDROGEN IN THE SAME LOAD BALANCING AREA; AND
- (III) THE COMMISSION TO DETERMINE WHEN AT LEAST TWO HUNDRED MEGAWATTS OF ELECTROLYZERS ARE OPERATIONAL IN THE STATE;
- (1) THE PROCESS AND DATA NECESSARY FOR AN INVESTOR-OWNED UTILITY TO CONDUCT A CUMULATIVE IMPACT ANALYSIS OF A CLEAN HYDROGEN PROJECT AND ANY PROCESS NECESSARY TO AVOID ADVERSE CUMULATIVE IMPACTS ON DISPROPORTIONATELY IMPACTED COMMUNITIES, IF ANY, WHICH MAY INCLUDE THE COMMISSION CONSIDERING:

- (I) THE TIME FRAME OVER WHICH A CUMULATIVE IMPACT ANALYSIS SHOULD BE CONDUCTED;
- (II) The Geographical scope of a cumulative impact analysis; and
- (III) WHETHER THE CUMULATIVE IMPACT ANALYSIS SHOULD BE COMPARED TO ALTERNATIVE PROJECTS;
- (m) REQUIREMENTS FOR ANY APPLICATION FOR A CLEAN HYDROGEN PROJECT, IN ADDITION TO THE REQUIREMENTS DESCRIBED IN SUBSECTION (3)(a)(VI) OF THIS SECTION AND SUBJECT TO SUBSECTIONS (4) AND (5) OF THIS SECTION;
- (n) ANY DATA OR INFORMATION NECESSARY OR AVAILABLE TO EVALUATE A CLEAN HYDROGEN PROJECT AGAINST ALTERNATIVE PROJECTS, INCLUDING HOW TO MEASURE, TRACK, AND REPORT LIFECYCLE GREENHOUSE GAS EMISSIONS RATES, CUMULATIVE IMPACTS, AND THE CUMULATIVE IMPACTS AND INDIVIDUAL IMPACTS ON JOBS, LOCAL ECONOMIC BENEFITS, AND WATER USE BY CLEAN HYDROGEN PROJECTS UNDER THE COMMISSION'S JURISDICTION;
- (o) OPPORTUNITIES TO ENCOURAGE NON-UTILITY PRODUCTION OF CLEAN HYDROGEN IN COLORADO, INCLUDING OPPORTUNITIES FOR AN INVESTOR-OWNED UTILITY TO PROPOSE A TARIFF FOR THE SALE OF RENEWABLE ENERGY THAT WOULD OTHERWISE BE CURTAILED; AND
- (p) ANY OTHER RELEVANT ISSUES THAT THE COMMISSION DETERMINES ARE NECESSARY TO CONSIDER.
- (3) (a) No Later than December 1,2024, unless the office files a notice with the commission stating that the federal department of energy has extended or otherwise altered the deadline regarding funding for a hydrogen hub project, the commission shall adopt rules that:
- (I) UNLESS THE COMMISSION DETERMINES THAT INVESTOR-OWNED UTILITIES SHOULD NOT DEVELOP CLEAN HYDROGEN PROJECTS FOR COST RECOVERY FROM RATEPAYERS, ESTABLISH REQUIREMENTS FOR THE PRESENTATION OF A CLEAN HYDROGEN PROJECT TO THE COMMISSION FOR

### THE COMMISSION'S APPROVAL;

- (II) ESTABLISH REQUIREMENTS FOR LIFECYCLE GREENHOUSE GAS EMISSIONS RATE ACCOUNTING FOR CLEAN HYDROGEN PROJECTS;
- (III) ADDRESS THE APPROPRIATE ROLE OF INVESTOR-OWNED UTILITIES IN THE PRODUCTION, SALE, AND USE OF CLEAN HYDROGEN, INCLUDING WHETHER AND HOW COSTS MAY BE RECOVERED FROM RATEPAYERS AND APPROPRIATE TREATMENT OF REVENUES FROM CLEAN HYDROGEN SALES;
- (IV) ADDRESS HOW INVESTOR-OWNED UTILITIES MAY USE COMPETITIVE SOLICITATIONS IN A CLEAN HYDROGEN PROJECT AND ANY LIMITATIONS FOR THE USE OF COMPETITIVE SOLICITATIONS TO DEVELOP THE CLEAN HYDROGEN PROJECT;
- (V) ESTABLISH A REQUIREMENT THAT ANY PLANNED OR POTENTIAL USE FOR THE CLEAN HYDROGEN IN BUILDINGS OR GAS DISTRIBUTION SYSTEMS OF AN INVESTOR-OWNED UTILITY BE PROPOSED TO AND APPROVED BY THE COMMISSION THROUGH A CLEAN HEAT PLAN, AS DEFINED IN SECTION 40-3.2-108 (2)(b); AND
- (VI) ADDRESS WHAT IS REQUIRED IN AN APPLICATION BY AN INVESTOR-OWNED UTILITY FOR A CLEAN HYDROGEN PROJECT, SUBJECT TO SUBSECTIONS (4) AND (5) OF THIS SECTION, INCLUDING:
- (A) A COMPARISON OF A CLEAN HYDROGEN PROJECT TO ALTERNATIVE PROJECTS, INCLUDING AN ANALYSIS OF THE COSTS AND BENEFITS OF THE CLEAN HYDROGEN PROJECT COMPARED TO ALTERNATIVE PROJECTS;
- (B) A DESCRIPTION OF HOW THE INVESTOR-OWNED UTILITY WILL MEASURE AND TRACK THE ANNUAL AND CUMULATIVE LIFECYCLE GREENHOUSE GAS EMISSIONS RATES AND THE EMISSION OF OTHER AIR POLLUTANTS IN ACCORDANCE WITH THE RULES ADOPTED PURSUANT TO SUBSECTION (3)(a)(II) OF THIS SECTION;
- (C) A DESCRIPTION OF HOW THE INVESTOR-OWNED UTILITY WILL: MINIMIZE THE LIFECYCLE GREENHOUSE GAS EMISSIONS RATES OF THE CLEAN HYDROGEN PROJECT; CONDUCT LEAK DETECTION THROUGHOUT THE LIFE OF

THE CLEAN HYDROGEN PROJECT; AND CONDUCT A CUMULATIVE IMPACT ANALYSIS OF THE CLEAN HYDROGEN PROJECT;

- (D) AN ASSESSMENT OF THE ANNUAL WATER VOLUME THAT WILL BE USED IN THE CLEAN HYDROGEN PROJECT, INCLUDING THE SOURCE OF WATER TO BE USED;
- (E) A DESCRIPTION OF ANY PLANNED USES, INCLUDING POTENTIAL END USES BY THE INVESTOR-OWNED UTILITY'S CUSTOMERS, OF THE CLEAN HYDROGEN PRODUCED THROUGH THE CLEAN HYDROGEN PROJECT, WITH A PREFERENCE FOR QUALIFIED USES;
- (F) A DESCRIPTION OF ANY PLANNED SALES OF CLEAN HYDROGEN TO NON-UTILITY CUSTOMERS, WITH A PREFERENCE FOR QUALIFIED USES;
- (G) A DESCRIPTION OF THE PROPOSED METHOD OF COST RECOVERY FOR THE CLEAN HYDROGEN PROJECT, INCLUDING INFORMATION REGARDING WHICH RATE CLASSES WILL COVER THE COSTS OF THE CLEAN HYDROGEN PROJECT;
- (H) A DESCRIPTION OF THE TOTAL REVENUE REQUIREMENT FOR THE CLEAN HYDROGEN PROJECT;
- (I) A DESCRIPTION OF THE RATE AND BILL IMPACTS OF THE CLEAN HYDROGEN PROJECT;
- (J) A DESCRIPTION OF ANY TARIFFS FOR THE SALE OF CLEAN HYDROGEN PRODUCED BY THE CLEAN HYDROGEN PROJECT;
- (K) A PROPOSAL FOR THE ALLOCATION OF REVENUES RECEIVED FROM THE SALE OF CLEAN HYDROGEN PRODUCED BY THE CLEAN HYDROGEN PROJECT TO NON-UTILITY CUSTOMERS AMONG CUSTOMERS AND THE INVESTOR-OWNED UTILITY, INCLUDING WHICH PARTY BEARS THE RISK THAT THE AMOUNT OF REVENUE ANTICIPATED FROM THE CLEAN HYDROGEN PROJECT IS NOT ULTIMATELY RECEIVED;
  - (L) A CUMULATIVE IMPACT ANALYSIS FRAMEWORK; AND
- (M) If the investor-owned utility plans to use a competitive solicitation process as part of the clean hydrogen project, a

DESCRIPTION OF HOW THE PLANNED COMPETITIVE SOLICITATION PROCESS WILL BE USED AND IN WHAT CIRCUMSTANCES THE PROCESS WILL BE USED.

- (b) (I) THE RULES ADOPTED BY THE COMMISSION PURSUANT TO SUBSECTION (3)(a)(II) OF THIS SECTION MUST INCLUDE REQUIREMENTS FOR:
- (A) THE MATCHING OF ELECTROLYZER ENERGY CONSUMPTION WITH ELECTRICITY PRODUCTION ON AN HOURLY BASIS, IF THE TECHNOLOGY IS AVAILABLE;
- (B) IDENTIFYING THE APPLICABLE ENERGY SOURCE, IF THE INVESTOR-OWNED UTILITY IS REPORTING THE ENERGY SOURCE AS RESULTING IN ZERO EMISSIONS FOR CLEAN HYDROGEN PRODUCTION AND DEMONSTRATING THAT THE ELECTRICITY USED TO PRODUCE CLEAN HYDROGEN COMES FROM RENEWABLE ENERGY THAT WOULD OTHERWISE HAVE BEEN CURTAILED OR NOT DELIVERED TO LOAD OR FROM NEW ZERO CARBON GENERATION THAT BEGAN PRODUCTION NO MORE THAN THIRTY-SIX MONTHS BEFORE THE START OF THE OPERATIONS OF THE ELECTROLYZER; AND
- (C) THE DELIVERABILITY OF RENEWABLE ENERGY USED BY THE ELECTROLYZER INTO THE SAME LOAD BALANCING AREA AS THE ELECTROLYZER.
- (II) THE COMMISSION SHALL MAKE THE RULES ADOPTED BY THE COMMISSION PURSUANT TO SUBSECTION (3)(a)(II) OF THIS SECTION EFFECTIVE NO LATER THAN JANUARY 1, 2028, OR NO LATER THAN ONE YEAR AFTER THE DEPLOYMENT OF HYDROGEN ELECTROLYZERS IN THE STATE EXCEEDS TWO HUNDRED MEGAWATTS, WHICHEVER IS EARLIER.
- (c) (I) IN DEVELOPING THE RULES PURSUANT TO SUBSECTION (3)(a) OF THIS SECTION, THE COMMISSION SHALL CONSIDER THE POTENTIAL FOR FEDERAL FUNDING FOR CLEAN HYDROGEN PROJECTS AND THAT CLEAN HYDROGEN PROJECTS IMPLEMENTED BY INVESTOR-OWNED UTILITIES MAY BE NECESSARY TO SECURE FEDERAL FUNDING.
- (II) IN DEVELOPING THE RULES PURSUANT TO SUBSECTION (3)(a)(II) OF THIS SECTION, THE COMMISSION SHALL CONSIDER WHAT INFORMATION AND MARKET MECHANISMS ARE NECESSARY AND AVAILABLE FOR HYDROGEN PRODUCERS TO COMPLY WITH THE RULES. IF THE FEDERAL INTERNAL

REVENUE SERVICE ISSUES GUIDANCE THAT MEETS OR EXCEEDS THE RULES, THE COMMISSION SHALL ADOPT RULES THAT COMPLY WITH THE GUIDANCE.

- (d) If the office files the notice described in subsection (3)(a) OF THIS SECTION WITH THE COMMISSION, THE COMMISSION SHALL COORDINATE WITH THE OFFICE TO DETERMINE AN APPROPRIATE DATE FOR THE ADOPTION OF THE RULES DESCRIBED IN SUBSECTION (3)(a) OF THIS SECTION.
- (4) (a) The commission shall allow an investor-owned utility to present to the commission a stand-alone application for a clean hydrogen project for which an investor-owned utility has applied for federal funding as part of a hydrogen hub project at any time before June 1, 2024, unless the office files a notice with the commission stating that the federal department of energy has extended or otherwise altered the deadline regarding funding for a hydrogen hub project. The application may only address elements of a hydrogen hub project that are not located in the Denver metropolitan area.
- (b) The application process described in subsection (4)(a) of this section must be consistent with the requirements of subsection (3) of this section. An investor-owned utility seeking approval of a clean hydrogen project pursuant to subsection (4)(a) of this section shall also demonstrate that a time-sensitive review of the investor-owned utility's application is necessary based on the timing requirements for obtaining necessary funding, not including tax credits, from, or a partnership with, a federal or state agency for the acquisition of necessary facilities and that the funding or partnership cannot be accomplished through any pending or future electric resource planning process.
- (c) If the funding or partnership described in subsection (4)(b) of this section, including any associated contracts, awards, or timing requirements, allows for competitive solicitations as part of the development of the clean hydrogen project, the commission may direct the investor-owned utility to issue a solicitation to acquire the necessary projects or facilities for the clean hydrogen project. The commission shall review any approved competitive solicitation process and bids received prior

TO THE INVESTOR-OWNED UTILITY'S ACQUISITION OF THE NECESSARY FACILITIES FOR THE CLEAN HYDROGEN PROJECT. AN INVESTOR-OWNED UTILITY THAT FILED THE CLEAN HYDROGEN PROJECT APPLICATION PURSUANT TO SUBSECTION (4)(a) OF THIS SECTION MAY SUBMIT A BID IN RESPONSE TO A SOLICITATION PURSUANT TO THIS SUBSECTION (4)(c).

- (5) (a) IN REVIEWING, APPROVING, DENYING, OR AMENDING AN APPLICATION PURSUANT TO THIS SECTION, THE COMMISSION SHALL CONSIDER, AT A MINIMUM:
- (I) WHETHER IT IS IN THE PUBLIC INTEREST FOR AN INVESTOR-OWNED UTILITY TO INVEST IN THE ELEMENTS OF THE CLEAN HYDROGEN PROJECT AS SET FORTH IN THE APPLICATION;
- (II) The potential contribution of the clean hydrogen project in meeting the greenhouse gas emission reduction goals described in section 25-7-102 (2)(g), including lifecycle greenhouse gas emissions rates;
- (III) THE IMPACTS OF THE CLEAN HYDROGEN PROJECT COMPARED TO ALTERNATIVE PROJECTS, INCLUDING:
  - (A) RATE AND BILL IMPACTS;
  - (B) THE IMPACTS ON RATE STABILITY; AND
- (C) ANY OTHER IMPACTS IDENTIFIED BY THE COMMISSION PURSUANT TO THIS SUBSECTION (5)(a);
  - (IV) THE USE OF COMPETITIVE SOLICITATIONS, IF ANY;
- (V) IF THE CLEAN HYDROGEN PROJECT CONTEMPLATES THE SALE OF CLEAN HYDROGEN, THE POTENTIAL FOR CROSS-SUBSIDIZATION AND COST SHIFTING ACROSS RATE CLASSES;
- (VI) THE IMPACTS OF THE CLEAN HYDROGEN PROJECT ON THE UTILITY WORKFORCE IN THE STATE, INCLUDING THE USE OF "BEST VALUE" EMPLOYMENT METRICS PURSUANT TO SECTION 40-2-129;
  - (VII) THE IMPACTS OF THE CLEAN HYDROGEN PROJECT ON A

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### COMMUNITY'S TAX BASE AND REVENUES;

- (VIII) THE USES OF THE CLEAN HYDROGEN PRODUCED BY THE CLEAN HYDROGEN PROJECT, WITH A PREFERENCE FOR QUALIFIED USES;
- (IX) THE PUBLIC HEALTH AND SAFETY IMPACTS OF THE CLEAN HYDROGEN PROJECT; AND
- (X) THE AVAILABILITY OF FEDERAL FUNDING FOR THE CLEAN HYDROGEN PROJECT.
- (b) THE COMMISSION SHALL REVIEW ANY CLEAN HYDROGEN PROJECT APPLICATION SUBMITTED PURSUANT TO THIS SECTION IN ACCORDANCE WITH ANY APPLICABLE ELECTRIC RESOURCE PLANNING RULES.
- (c) In reviewing, approving, denying, or amending an application pursuant to this section, if the clean hydrogen project is proposed to be sited in an area that would affect a disproportionately impacted community, the commission shall weigh the applicant's cumulative impacts analysis and determine whether, on balance, the clean hydrogen project will have a positive effect on the disproportionately impacted community. Any proposal that will have net negative cumulative impacts on any disproportionately impacted community must be denied. The commission's determination must include a plain language summary of its determination.
- (6) NOTWITHSTANDING ANY PROVISION OF THIS SECTION TO THE CONTRARY, AN INVESTOR-OWNED UTILITY SHALL PROVIDE NOTICE TO THE COMMISSION OF ANY APPLICATION FOR FEDERAL FUNDING AS PART OF A HYDROGEN HUB PROJECT, INCLUDING:
  - (a) ANY HYDROGEN HUB PROJECT MILESTONES;
- (b) A DESCRIPTION OF ANY DEADLINES FOR SUBMISSION OF MATERIALS TO SUPPORT THE APPLICATION, INCLUDING WHETHER ANY ADDITIONAL FILINGS WILL BE REQUIRED; AND
- (c) TO THE EXTENT KNOWN OR CONSISTENT WITH ANY REQUIREMENTS OR LIMITATIONS OF THE FEDERAL DEPARTMENT OF ENERGY

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OR ANY RELATED JOINT MEMORANDUMS OF UNDERSTANDING OR OTHER CONTRACTS ENTERED INTO BY THE INVESTOR-OWNED UTILITY AND THE STATE, INFORMATION REGARDING WHEN FUNDING AWARDS WILL BE DETERMINED.

- (7) (a) AN INVESTOR-OWNED UTILITY THAT OPERATES A CLEAN HYDROGEN PROJECT APPROVED PURSUANT TO THIS SECTION SHALL SUBMIT TO THE COMMISSION AN ANNUAL REPORT THAT SHOWS:
- (I) THE LIFECYCLE GREENHOUSE GAS EMISSIONS RATES FROM THE CLEAN HYDROGEN PROJECT;
- (II) THE GREENHOUSE GAS EMISSIONS FROM THE CLEAN HYDROGEN PROJECT;
- (III) ANY EMISSION OF OTHER AIR POLLUTANTS FROM THE CLEAN HYDROGEN PROJECT;
  - (IV) THE WATER USE OF THE CLEAN HYDROGEN PROJECT;
- (V) PRODUCTION VOLUMES AND SALES OF HYDROGEN, INCLUDING TYPES OF CUSTOMERS AND USES;
- (VI) PROJECT DEVELOPMENT AND COST UPDATES FOR PROJECTS WITH COST RECOVERY FROM RATEPAYERS; AND
- (VII) NET CUMULATIVE IMPACT UPDATES FOR PROJECTS LOCATED IN DISPROPORTIONATELY IMPACTED COMMUNITIES.
- (b) If the clean hydrogen project includes the production and the use or consumption of clean hydrogen by the investor-owned utility, the investor-owned utility shall report the lifecycle greenhouse gas emissions rates of the clean hydrogen project separately by each production facility and use.
- (c) THE ANNUAL REPORT MUST INCLUDE INFORMATION THAT ALLOWS THE OFFICE TO MAKE THE VERIFICATIONS REQUIRED PURSUANT TO SECTION 39-22-557 (4)(a)(II).

SECTION 3. In Colorado Revised Statutes, add 39-22-557 as

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#### follows:

- 39-22-557. Clean hydrogen tax credit qualified uses tax preference performance statement definitions legislative declaration repeal. (1) (a) IN ACCORDANCE WITH SECTION 39-21-304 (1), WHICH REQUIRES EACH BILL THAT CREATES A NEW TAX EXPENDITURE TO INCLUDE A TAX PREFERENCE PERFORMANCE STATEMENT AS PART OF A STATUTORY LEGISLATIVE DECLARATION, THE GENERAL ASSEMBLY FINDS AND DECLARES THAT THE PURPOSE OF THE TAX CREDIT PROVIDED IN THIS SECTION IS TO INDUCE CERTAIN DESIGNATED BEHAVIOR BY TAXPAYERS. SPECIFICALLY, THE TAX EXPENDITURE IS INTENDED TO PROVIDE TAX RELIEF FOR CERTAIN BUSINESSES OR INDIVIDUALS FOR PURPOSES OF ENCOURAGING THEM TO ENGAGE IN CERTAIN QUALIFIED USES OF CLEAN HYDROGEN.
- (b) THE GENERAL ASSEMBLY AND THE STATE AUDITOR SHALL MEASURE THE EFFECTIVENESS OF THE CREDIT IN ACHIEVING THE PURPOSE SPECIFIED IN SUBSECTION (1)(a) OF THIS SECTION BASED ON THE INFORMATION REQUIRED TO BE MAINTAINED BY AND REPORTED TO THE STATE AUDITOR BY THE OFFICE PURSUANT TO SUBSECTION (4)(b) OF THIS SECTION.
- (2) As used in this section, unless the context otherwise requires:
- (a) "Clean hydrogen" has the meaning set forth in section 40-2-138 (1)(a).
  - (b) "DEPARTMENT" MEANS THE DEPARTMENT OF REVENUE.
- (c) "HARD TO DECARBONIZE END USE" HAS THE MEANING SET FORTH IN SECTION 40-2-138 (1)(e).
- (d) "Lifecycle greenhouse gas emissions rate" means lifecycle greenhouse gas emissions, as defined in  $26\,\mathrm{U.S.C.}$  sec.  $45\,\mathrm{V}$  (c)(1)(A), as amended, measured in accordance with any applicable federal internal revenue service regulations or guidance, subject to the rules adopted by the public utilities commission pursuant to section 40-2-138 (3)(a)(I).
  - (e) "Office" means the Colorado energy office created in

SECTION 24-38.5-101.

- (f) "QUALIFIED USE" HAS THE MEANING SET FORTH IN SECTION 40-2-138 (1)(i).
- (g) "TAXPAYER" MEANS A PERSON SUBJECT TO TAX PURSUANT TO THIS ARTICLE 22 OR A PERSON OR POLITICAL SUBDIVISION OF THE STATE THAT IS EXEMPT FROM TAX PURSUANT TO SECTION 39-22-112 (1).
- (h) "TIER ONE GREENHOUSE GAS EMISSIONS RATE" MEANS A QUALIFIED USE OF HYDROGEN THAT RESULTS IN LIFECYCLE GREENHOUSE GAS EMISSIONS RATES THAT ARE WITHIN THE RANGE SET FORTH IN 26 U.S.C. sec. 45V (b)(2)(D), as amended.
- (i) "TIER TWO GREENHOUSE GAS EMISSIONS RATE" MEANS A QUALIFIED USE OF HYDROGEN THAT RESULTS IN LIFECYCLE GREENHOUSE GAS EMISSIONS RATES THAT ARE WITHIN THE RANGE SET FORTH IN 26 U.S.C. sec. 45V (b)(2)(C), as amended.
- (3) (a) Subject to the limitations set forth in subsection (3)(b) of this section, for income tax years commencing on or after January 1, 2024, but before January 1, 2033, a taxpayer is allowed a credit against the income taxes imposed by this article 22 in an amount equal to:
- (I) ONE DOLLAR PER KILOGRAM OF CLEAN HYDROGEN USED FOR A QUALIFIED USE THAT RESULTS IN A TIER ONE GREENHOUSE GAS EMISSIONS RATE IN THE INCOME TAX YEAR; OR
- (II) THIRTY-THREE CENTS PER KILOGRAM OF CLEAN HYDROGEN USED FOR A QUALIFIED USE THAT RESULTS IN A TIER TWO GREENHOUSE GAS EMISSIONS RATE IN THE INCOME TAX YEAR.
- (b) IN ORDER TO CLAIM THE CREDIT, THE TAXPAYER MUST ANNUALLY APPLY FOR AND RECEIVE A TAX CREDIT CERTIFICATE FROM THE OFFICE PURSUANT TO SUBSECTION (4) OF THIS SECTION. IF THE OFFICE DETERMINES THAT AN APPLICANT IS NOT ENTITLED TO A TAX CREDIT CERTIFICATE UNDER THIS SECTION, THE OFFICE SHALL NOTIFY THE APPLICANT OF ITS DISAPPROVAL IN WRITING.

- (c) (I) FOR INCOME TAX YEARS COMMENCING ON AND AFTER JANUARY 1, 2024, BUT BEFORE JANUARY 1, 2026, AND NOT BEFORE THE PUBLIC UTILITIES COMMISSION ADOPTS RULES PURSUANT TO SECTION 40-2-138 (3)(a)(I), THE OFFICE SHALL NOT ISSUE A TAX CREDIT CERTIFICATE TO A TAXPAYER INDICATING ELIGIBILITY FOR A TAX CREDIT FOR AN AMOUNT EXCEEDING ONE MILLION DOLLARS IN A TAX YEAR.
- (II) FOR INCOME TAX YEARS COMMENCING ON AND AFTER JANUARY 1, 2026, BUT BEFORE JANUARY 1, 2029, THE OFFICE SHALL NOT ISSUE A TAX CREDIT CERTIFICATE TO A TAXPAYER INDICATING ELIGIBILITY FOR A TAX CREDIT FOR AN AMOUNT EXCEEDING FIVE HUNDRED THOUSAND DOLLARS IN A TAX YEAR.
- (III) FOR INCOME TAX YEARS COMMENCING ON AND AFTER JANUARY 1, 2029, BUT BEFORE JANUARY 1, 2033, THE OFFICE SHALL NOT ISSUE A TAX CREDIT CERTIFICATE TO A TAXPAYER INDICATING ELIGIBILITY FOR A TAX CREDIT FOR AN AMOUNT EXCEEDING TWO HUNDRED FIFTY THOUSAND DOLLARS IN A TAX YEAR.
- (4) (a) (I) A TAXPAYER SHALL SUBMIT AN APPLICATION TO THE OFFICE FOR A TAX CREDIT CERTIFICATE TO CLAIM THE CREDIT ALLOWED BY THIS SECTION ON A FORM AND IN A MANNER PRESCRIBED BY THE OFFICE. THE APPLICATION MUST INCLUDE INFORMATION TO ALLOW THE OFFICE TO MAKE A DETERMINATION THAT THE USE IS A QUALIFIED USE AND THAT THE HYDROGEN USED MEETS THE DEFINITION OF CLEAN HYDROGEN PURSUANT TO SUBSECTION (2)(a) OF THIS SECTION AND TO VERIFY THE AMOUNT FOR WHICH THE TAX CREDIT CERTIFICATE IS APPLIED. A TAXPAYER IS ENTITLED TO RECEIVE ONE TAX CREDIT CERTIFICATE PER INCOME TAX YEAR.
- (II) THE APPLICATION DESCRIBED IN SUBSECTION (4)(a)(I) OF THIS SECTION MUST ALSO INCLUDE VERIFICATION FROM THE HYDROGEN PRODUCER PASSED TO THE USER AT THE POINT OF SALE THAT THE HYDROGEN USED MEETS THE DEFINITION OF CLEAN HYDROGEN PURSUANT TO SUBSECTION (2)(a) OF THIS SECTION.
- (b) (I) The office shall maintain a database of any information determined necessary by the office to evaluate the effectiveness of the income tax credit allowed in this section in meeting the purpose set forth in subsection (1)(a) of this section and shall provide such information, and any other information

THAT MAY BE NEEDED, IF AVAILABLE, TO THE STATE AUDITOR AS PART OF THE STATE AUDITOR'S EVALUATION OF THIS TAX EXPENDITURE REQUIRED BY SECTION 39-21-305.

(II) THE OFFICE SHALL, IN A SUFFICIENTLY TIMELY MANNER TO ALLOW THE DEPARTMENT TO PROCESS RETURNS CLAIMING THE INCOME TAX CREDIT ALLOWED IN THIS SECTION, PROVIDE THE DEPARTMENT WITH AN ELECTRONIC REPORT FOR THE PRECEDING TAX YEAR LISTING EACH TAXPAYER TO WHICH THE OFFICE ISSUED A TAX CREDIT CERTIFICATE AND THAT INCLUDES THE FOLLOWING INFORMATION:

## (A) THE TAXPAYER'S NAME;

- (B) THE AMOUNT OF THE INCOME TAX CREDIT THAT THE CERTIFICATE INDICATES THE TAXPAYER IS ELIGIBLE TO CLAIM; AND
- (C) THE TAXPAYER'S SOCIAL SECURITY NUMBER OR THE TAXPAYER'S COLORADO ACCOUNT NUMBER AND FEDERAL EMPLOYER IDENTIFICATION NUMBER.
- (III) THE OFFICE SHALL DEVELOP STANDARDS FOR THE QUALIFIED USES FOR WHICH AN INCOME TAX CREDIT UNDER THIS SECTION IS ALLOWED. THE OFFICE SHALL POST THE STANDARDS ON THE OFFICE'S WEBSITE.
- (5) IN ORDER TO CLAIM THE CREDIT AUTHORIZED BY THIS SECTION, A TAXPAYER SHALL FILE THE TAX CREDIT CERTIFICATE WITH THE TAXPAYER'S STATE INCOME TAX RETURN, AND, IF THE TAXPAYER IS EXEMPT FROM TAX PURSUANT TO SECTION 39-22-112 (1), THE TAXPAYER SHALL FILE A RETURN PURSUANT TO SECTION 39-22-601 (7)(b). THE AMOUNT OF THE CREDIT THAT THE TAXPAYER MAY CLAIM PURSUANT TO THIS SECTION IS THE AMOUNT STATED ON THE TAX CREDIT CERTIFICATE.
- (6) IF AN INCOME TAX CREDIT AUTHORIZED IN THIS SECTION EXCEEDS THE INCOME TAX DUE ON THE INCOME OF THE TAXPAYER FOR THE TAXABLE YEAR, THE EXCESS CREDIT MAY NOT BE CARRIED FORWARD AND MUST BE REFUNDED TO THE TAXPAYER.
  - (7) This section is repealed, effective December 31, 2036.

**SECTION 4.** Appropriation. (1) For the 2023-24 state fiscal year,

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\$360,758 is appropriated to the department of reguatory agencies for use by the public utilities commission. This appropriation is from the public utilities commission fixed utility fund created in section 40-2-114 (1)(b)(II), C.R.S. To implement this act, the department may use this appropriation as follows:

- (a) \$241,532 for use by the public utilites commission for personal services, which amount is based on an assumption that the commission will require an additional 3.0 FTE;
- (b) \$24,060 for use by the public utilities commission for operating expenses; and
  - (c) \$95,166 for legal services.
- (2) For the 2023-24 state fiscal year, \$95,166 is appropriated to the department of law. This appropriation is from reappropriated funds received from the department of regulatory agencies under subsection (1)(c) of this section and is based on an assumption that the department of law will require an additional 0.5 FTE. To implement this act, the department of law may use this appropriation to provide legal services for the department of regulatory agencies.
- (3) For the 2023-24 state fiscal year, \$12,861 is appropriated to the department of revenue for use by taxation services. This appropriation is from the general fund. To implement this act, the division may use this appropriation for the purchase of document management services.
- (4) For the 2023-24 state fiscal year, \$12,861 is appropriated to the department of personnel. This appropriation is from reappropriated funds received from the department of revenue under subsection (3) of this section. To implement this act, the department of personnel may use this appropriation to provide document management services for the department of revenue.
- **SECTION 5.** Act subject to petition effective date. This act takes effect at 12:01 a.m. on the day following the expiration of the ninety-day period after final adjournment of the general assembly; except that, if a referendum petition is filed pursuant to section 1 (3) of article V of the state constitution against this act or an item, section, or part of this act

within such period, then the act, item, section, or part will not take effect unless approved by the people at the general election to be held in November 2024 and, in such case, will take effect on the date of the official declaration of the vote thereon by the governor.

Julie McCluskie

SPEAKER OF THE HOUSE OF REPRESENTATIVES

Steve Fenberg PRESIDENT OF THE SENATE

Robin Jones

CHIEF CLERK OF THE HOUSE

OF REPRESENTATIVES

Circle & Markwell

Cindi L. Markwell SECRETARY OF THE SENATE

APPROVED /

Date and Time

Jared S. Polis

GOVERNOR OF THE STATE OF COLORADO