

**First Regular Session
Seventy-fourth General Assembly
STATE OF COLORADO**

PREAMENDED

*This Unofficial Version Includes Committee
Amendments Not Yet Adopted on Second Reading*

LLS NO. 23-0514.01 Jennifer Berman x3286

SENATE BILL 23-092

SENATE SPONSORSHIP

Simpson and Hansen, Bridges, Buckner, Coleman, Cutter, Exum, Fenberg, Fields, Gonzales, Hinrichsen, Jaquez Lewis, Marchman, Mullica, Pelton B., Pelton R., Priola, Roberts, Will, Winter F.

HOUSE SPONSORSHIP

McCormick and Soper,

Senate Committees

Agriculture & Natural Resources
Appropriations

House Committees

Agriculture, Water & Natural Resources
Appropriations

A BILL FOR AN ACT

101 **CONCERNING OPPORTUNITIES FOR VOLUNTARY EMISSION REDUCTIONS**
102 **IN AGRICULTURE, AND, IN CONNECTION THEREWITH, MAKING AN**
103 **APPROPRIATION.**

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>.)

In support of the use of agrivoltaics, which is the integration of solar energy generation facilities with agricultural activities, **section 2** of the bill authorizes the agricultural drought and climate resilience office (office) to award grants for new or ongoing demonstration or research projects that demonstrate or study the use of agrivoltaics. On or before

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

SENATE
3rd Reading Unamended
April 24, 2023

SENATE
Amended 2nd Reading
April 21, 2023

October 1, 2023, the office is required to convene a stakeholder group to advise on whether the office should impose any operational requirements for agrivoltaic projects that apply for grants.

Section 4 authorizes the Colorado water conservation board (board) to finance a project to study the feasibility of using aquavoltaics, which are solar energy generation facilities placed over, or floating on, irrigation canals or reservoirs.

Section 1 requires the director of the division of parks and wildlife to consult on the impacts on wildlife of:

- Any research projects for which the office awards money to study the use of agrivoltaics; and
- The project that the board finances to study the feasibility of using aquavoltaics in the state.

Section 5 amends the statutory definition of "solar energy facility", used in determining the valuation of public utilities for property tax purposes, to include agrivoltaics and aquavoltaics.

Section 3 requires the commissioner of agriculture or the commissioner's designee (commissioner), in consultation with the Colorado energy office, the air quality control commission, and an institution of higher education with expertise in climate change mitigation, adaptation benefits, and other environmental benefits related to agricultural research, to examine greenhouse gas reduction and carbon sequestration opportunities in the agricultural sector, including the use of dry digesters and the potential for creating and offering a certified greenhouse gas offset program and credit instruments in the agricultural sector.

Section 3 requires the commissioner to submit a progress report on the study to the general assembly on or before October 1, 2024, and a final report, including any recommendations, on or before October 1, 2025.

Section 3 also authorizes the commissioner to adopt rules to implement the recommendations, but requires that any greenhouse gas offset program or other greenhouse gas reduction and carbon sequestration program or mechanism established in rule not mandate participation by agricultural producers.

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

2 **SECTION 1.** In Colorado Revised Statutes, 33-1-110, **add** (9) as
3 follows:

4 **33-1-110. Duties of the director of the division - habitat**
5 **partnership council, program, committee - created - duties.** (9) THE

1 DIRECTOR OR THE DIRECTOR'S DESIGNEE SHALL PROVIDE CONSULTATION
2 REGARDING THE IMPACTS OF THE FOLLOWING RESEARCH PROJECTS ON
3 WILDLIFE:

4 (a) RESEARCH PROJECTS FOR WHICH THE AGRICULTURAL DROUGHT
5 AND CLIMATE RESILIENCE OFFICE AWARDS MONEY TO STUDY THE USE OF
6 AGRIVOLTAICS PURSUANT TO SECTION 35-1-114; AND

7 (b) A FEASIBILITY STUDY THROUGH WHICH THE COLORADO WATER
8 CONSERVATION BOARD, CREATED IN SECTION 37-60-102, STUDIES THE USE
9 OF AQUAVOLTAICS PURSUANT TO SECTION 37-60-115 (12).

10 **SECTION 2.** In Colorado Revised Statutes, 35-1-114, **amend**
11 (1)(c)(II), (2), and (3); and **add** (4) and (5) as follows:

12 **35-1-114. Agricultural drought and climate resilience office -**
13 **creation - grants for agrivoltaic demonstration and research projects**
14 **- rules - definitions. (1) Legislative declaration. The general assembly**
15 **hereby:**

16 (c) Declares that:

17 (II) The agricultural drought and climate resilience office can best
18 address and mitigate agricultural climate-related issues on a wide scale by
19 providing support to and assisting bona fide agricultural producers in
20 implementing practices that minimize the impacts of climate change.

21 (2) Office created. (a) (I) There is hereby created in the
22 department the agricultural drought and climate resilience office. ~~referred~~
23 ~~to in this section as the "office"~~. The office may provide voluntary
24 technical assistance, nonregulatory programs, and incentives, INCLUDING
25 GRANTS, that increase the ability to anticipate, prepare for, mitigate, adapt
26 to, and respond to hazardous events, trends, or disturbances related to
27 drought or the climate.

1 (II) IN AWARDING GRANTS IN ACCORDANCE WITH THE
2 COMMISSIONER'S RULES ADOPTED PURSUANT TO SUBSECTION (3) OF THIS
3 SECTION, THE OFFICE SHALL GIVE STRONG CONSIDERATION TO GRANT
4 APPLICATIONS THAT PROPOSE USING GRANT MONEY TO CONDUCT A NEW
5 OR ONGOING DEMONSTRATION OR RESEARCH PROJECT AS A MEANS TO
6 STUDY THE POTENTIAL, BENEFITS, AND TRADEOFFS OF AGRIVOLTAICS IN
7 THE STATE. ANY AGRIVOLTAIC STUDY AWARDED A GRANT PURSUANT TO
8 THIS SUBSECTION (2)(a)(II) MUST INCLUDE FINDINGS ON THE ADDITIONAL
9 COSTS, INCLUDING THE ADDITIONAL CAPITAL AND ONGOING MAINTENANCE
10 COSTS, FOR THE USE OF AGRIVOLTAICS AS COMPARED TO TRADITIONAL
11 PHOTOVOLTAICS. THE ADDITIONAL COSTS MUST BE QUANTIFIED ON BOTH
12 A DOLLAR-PER-MEGAWATT AND A DOLLAR-PER-MEGAWATT-HOUR BASIS.

13 (b) The office shall advise the commissioner, the Colorado
14 agricultural value-added development board created in section 35-75-203,
15 other state agencies, and the governor on the impact to agriculture of
16 drought and climate policies and programs.

17 (c) The commissioner shall appoint the head of the office.

18 (3) (a) **Rules.** The commissioner may promulgate rules necessary
19 for the administration of the office's assistance, programs, and incentives,
20 including grants, CONSISTENT WITH THIS SUBSECTION (3). Before
21 promulgating the rules, the commissioner shall convene a stakeholder
22 group, including representatives of organizations whose membership
23 consists of agricultural producers engaged in the production of the top ten
24 agricultural commodities produced in Colorado, and members of the state
25 conservation board created in section 35-70-103 (1)(a), AND
26 REPRESENTATIVES OF THE SOLAR ENERGY DEVELOPMENT INDUSTRY. The
27 stakeholder group shall advise the commissioner as to the needs of the

1 agriculture industry to respond to and mitigate the impacts of climate
2 change on agricultural production For the purpose of this section, "bona
3 fide agricultural producer" means an agricultural producer that receives
4 a majority of the producer's annual income from agriculture, an
5 agricultural producer that spends more than one thousand forty hours per
6 year engaged in agricultural production, or a Colorado business that
7 processes agricultural products AND SOLUTIONS FROM THE SOLAR ENERGY
8 DEVELOPMENT INDUSTRY ON PROVIDING FEASIBLE SOLUTIONS FOR
9 PRODUCING ELECTRICITY ON AGRICULTURAL LANDS WHILE CONTRIBUTING
10 ECOLOGICAL AND AGRICULTURAL BENEFITS.

11 (b) **Assistance, programs, and incentives.** (I) Except for a
12 program, ASSISTANCE, INCENTIVE, or support administered by the office
13 to address immediate needs as a result of disaster, including wildfire and
14 drought, or a program that was in existence on January 1, 2021,

15 (a) a program, ASSISTANCE, INCENTIVE, OR SUPPORT administered
16 by the office must be designed to benefit bona fide agricultural producers
17 actively engaged in agriculture INCLUDE NEW OR ONGOING
18 DEMONSTRATION OR RESEARCH PROJECTS TO DEMONSTRATE OR STUDY
19 THE USE OF AGRIVOLTAICS TO:

20 (A) HELP PREPARE FOR AND MITIGATE THE IMPACTS THAT CLIMATE
21 CHANGE OR DROUGHT HAVE ON AGRICULTURE;

22 (B) REDUCE ENERGY COSTS IN AGRICULTURE;

23 (C) IMPROVE THE ECONOMIC RESILIENCE OF AGRICULTURAL
24 PRODUCERS;

25 (D) MINIMIZE NEGATIVE ENVIRONMENTAL IMPACTS OF
26 PHOTOVOLTAIC ENERGY PRODUCTION FACILITIES ON SOIL HEALTH, NATIVE
27 VEGETATION, STATE AND FEDERAL LISTED SPECIES, WILDLIFE MIGRATION

1 CORRIDORS, AND THE SPECIES, HABITATS, AND ECOSYSTEMS THAT ARE OF
2 THE GREATEST CONSERVATION NEED; AND

3 (E) PROVIDE OTHER STATEWIDE ENVIRONMENTAL BENEFITS, AS
4 IDENTIFIED BY THE OFFICE.

5 (II) Grants awarded by the office must pay for implementation of
6 practices to address and mitigate the impacts of climate change or drought
7 ON AGRICULTURE or to provide direct adaptation support for impacted
8 agricultural communities, including mental health resources, conflict
9 resolution assistance, and risk-management guidance. A grant award may
10 pay no more than five percent of administrative expenses incurred by a
11 bona fide AN agricultural producer to implement the practices.

12 ~~(b)~~ (III) The department shall, at least thirty days before opening
13 the grant application process, make available, on its website, information
14 related to the grant program available to bona fide agricultural producers.

15 ~~(c)~~ (IV) A grant authorized pursuant to this section must receive
16 final approval by the commission before a final award can be issued. ~~and~~

17 ~~(d)~~ (V) The department shall post on its website all applications
18 for grant awards. Within fifteen days after awarding a grant, the
19 department shall post on its website the name of the individual or entity
20 receiving a grant, the amount of the grant awarded, the project or projects
21 to be funded by the grant, and the duration of the grant award.

22 ==

23 (4) Task force. (a) ON OR BEFORE SEPTEMBER 1, 2023, THE
24 OFFICE SHALL CONVENE AN AGRIVOLTAICS TASK FORCE TO CONDUCT A
25 STUDY IN CONSULTATION WITH THE DEPARTMENT, THE COLORADO
26 ENERGY OFFICE CREATED IN SECTION 24-38.5-101 (1), AND THE DIVISION
27 OF PARKS AND WILDLIFE IN THE DEPARTMENT OF NATURAL RESOURCES

1 CREATED IN SECTION 33-9-104 (1) TO EVALUATE THE OPPORTUNITIES AND
2 CHALLENGES ASSOCIATED WITH AGRIVOLTAICS IN THE STATE, INCLUDING:

3 (I) THE TECHNICAL, OPERATIONAL, ENVIRONMENTAL, OR
4 FINANCIAL BARRIERS TO AN EXPANSION OF THE ADOPTION OF
5 AGRIVOLTAICS IN THE STATE; AND

6 (II) POTENTIAL STATE-LEVEL POLICIES AND PROGRAMS TO
7 MINIMIZE THE BARRIERS.

8 (b) THE TASK FORCE MUST INCLUDE ONE OR MORE
9 REPRESENTATIVES OF EACH OF THE FOLLOWING:

10 (I) AGRICULTURAL PRODUCERS AND AGRICULTURAL
11 ASSOCIATIONS;

12 (II) UTILITIES;

13 (III) DEVELOPERS, OWNERS, OPERATORS, OR OTHER BUSINESSES
14 CRITICAL TO THE CREATION OR MANAGEMENT OF SOLAR ENERGY
15 FACILITIES;

16 (IV) A RESEARCH INSTITUTION OR NATIONAL LAB, LOCATED IN THE
17 STATE, THAT HAS AGRIVOLTAIC EXPERIENCE;

18 (V) ENVIRONMENTAL ADVOCACY ORGANIZATIONS IN THE STATE;
19 AND

20 (VI) INDEPENDENT POWER PRODUCERS.

21 (c) ON OR BEFORE FEBRUARY 15, 2024, THE TASK FORCE SHALL
22 PRESENT THE RESULTS OF THE STUDY, INCLUDING ANY
23 RECOMMENDATIONS FOR LEGISLATION, TO THE JOINT COMMITTEE OF THE
24 HOUSE OF REPRESENTATIVES AGRICULTURE, WATER, AND NATURAL
25 RESOURCES COMMITTEE AND THE SENATE AGRICULTURE AND NATURAL
26 RESOURCES COMMITTEE, OR THEIR SUCCESSOR COMMITTEES.

27 (5) AS USED IN THIS SECTION, UNLESS THE CONTEXT OTHERWISE

1 REQUIRES:

2 (a) "AGRIVOLTAICS" MEANS ONE OR MORE SOLAR ENERGY
3 GENERATION FACILITIES DIRECTLY INTEGRATED WITH AGRICULTURAL
4 ACTIVITIES, INCLUDING CROP PRODUCTION, GRAZING, ANIMAL
5 HUSBANDRY, APIARIES, COVER CROPPING TO IMPROVE SOIL HEALTH OR
6 INSECT HABITAT BENEFITS OR CARBON SEQUESTRATION, OR PRODUCTION
7 OF AGRICULTURAL COMMODITIES FOR SALE IN THE RETAIL OR WHOLESALE
8 MARKET.

9 == ==
10 (b) "OFFICE" MEANS THE AGRICULTURAL DROUGHT AND CLIMATE
11 RESILIENCE OFFICE CREATED IN SUBSECTION (2) OF THIS SECTION.

12 **SECTION 3.** In Colorado Revised Statutes, **add 35-1-119** as
13 follows:

14 **35-1-119. Study of greenhouse gas reduction and carbon**
15 **sequestration opportunities in agriculture and agricultural land**
16 **management - definitions - reporting - rules.** (1) (a) (I) IN
17 ACCORDANCE WITH SUBSECTION (1)(a)(II) OF THIS SECTION, THE
18 COMMISSIONER OR THE COMMISSIONER'S DESIGNEE SHALL CONDUCT A
19 STUDY TO EXAMINE GREENHOUSE GAS REDUCTION AND CARBON
20 SEQUESTRATION OPPORTUNITIES IN THE AGRICULTURAL SECTOR AND IN
21 AGRICULTURAL LAND MANAGEMENT IN THE STATE, INCLUDING:

22 (A) SOIL HEALTH MANAGEMENT PRACTICES, INCLUDING COVER
23 CROPPING, MANURE MANAGEMENT, SOIL AMENDMENTS, ROTATIONAL
24 GRAZING, RANGELAND MANAGEMENT, LOW- AND NO-TILL PRACTICES, AND
25 HEDGE GROWS;

26 (B) THE USE OF DRY DIGESTERS; AND

27 (C) AN INVESTIGATION INTO THE POTENTIAL FOR CREATING AND

1 OFFERING A CERTIFIED GREENHOUSE GAS OFFSET PROGRAM AND CREDIT
2 INSTRUMENTS TO PROVIDE FUNGIBLE GREENHOUSE GAS OFFSETS FOR
3 AGRICULTURAL PRODUCERS AND IN AGRICULTURAL LAND MANAGEMENT.

4 (II) THE COMMISSIONER OR COMMISSIONER'S DESIGNEE SHALL
5 CONDUCT THE STUDY IN CONSULTATION WITH THE COLORADO ENERGY
6 OFFICE CREATED IN SECTION 24-38.5-101, THE AIR QUALITY CONTROL
7 COMMISSION CREATED IN SECTION 25-7-104 (1), THE NATURAL AND
8 WORKING LANDS TASK FORCE CONVENED BY THE DEPARTMENT OF
9 NATURAL RESOURCES, THE COLORADO STATE FOREST SERVICE, AND AN
10 INSTITUTION OF HIGHER EDUCATION WITH EXPERTISE IN CLIMATE CHANGE
11 MITIGATION, ADAPTATION BENEFITS, AND OTHER ENVIRONMENTAL
12 BENEFITS RELATED TO AGRICULTURAL RESEARCH.

13 (b) (I) ANY CERTIFIED GREENHOUSE GAS OFFSET PROGRAM AND
14 CREDIT INSTRUMENTS OFFERED MUST REFLECT REAL, ADDITIONAL,
15 QUANTIFIABLE, PERMANENT, VERIFIABLE, AND ENFORCEABLE REDUCTIONS
16 IN GREENHOUSE GAS EMISSIONS THAT ARE EQUIVALENT TO THE OFFSETS
17 PROVIDED AND MUST NOT REQUIRE AGRICULTURAL PRODUCERS'
18 PARTICIPATION.

19 (II) GREENHOUSE GAS OFFSETS DEVELOPED FOR AGRICULTURAL
20 PRODUCERS AND IN AGRICULTURAL LAND MANAGEMENT IN ACCORDANCE
21 WITH THIS SECTION:

22 (A) MAY BE INCORPORATED INTO THE AIR QUALITY CONTROL
23 COMMISSION'S RULES, INCLUDING RULES ADOPTED UNDER SECTION
24 25-7-105 (1)(e), AND, SPECIFICALLY, RULES CONCERNING COORDINATION
25 WITH OTHER JURISDICTIONS PURSUANT TO THE AUTHORITY GRANTED IN,
26 AND THE CONSIDERATIONS REQUIRED UNDER, SECTION 25-7-105 (1)(e)(V);

27 (B) MAY BE USED AS COMPLIANCE INSTRUMENTS BY A SOURCE

1 REGULATED UNDER ARTICLE 7 OF TITLE 25, WITH EMISSION REDUCTION
2 OBLIGATIONS ESTABLISHED BY THE AIR QUALITY CONTROL COMMISSION
3 THAT ENSURE THAT THE ANNUAL, OVERALL, ABSOLUTE EMISSIONS FROM
4 THE SOURCE, SECTOR, OR GROUP OF SOURCES DECLINE CONSISTENT WITH
5 THE STATEWIDE GREENHOUSE GAS EMISSION REDUCTION GOALS SET FORTH
6 IN SECTION 25-7-102 (2)(g); EXCEPT THAT, IF THE SOURCE IS LOCATED IN
7 A DISPROPORTIONATELY IMPACTED COMMUNITY, THE COMMISSION SHALL
8 ESTABLISH BY RULE AN ANNUAL, ABSOLUTE EMISSION REDUCTION
9 OBLIGATION SPECIFIC TO THE SOURCE.

10 (C) MUST NOT BE AVAILABLE AS AN INSTRUMENT FOR EMISSIONS
11 REDUCTION COMPLIANCE UNDER SECTION 25-7-105 (1)(e)(V) UNLESS THE
12 COMMISSION HAS ADOPTED RULES ESTABLISHING AN ANNUAL, ABSOLUTE
13 EMISSION REDUCTION OBLIGATION FOR THE RELEVANT SECTOR THAT IS
14 CONSISTENT WITH THE STATEWIDE GREENHOUSE GAS EMISSION REDUCTION
15 GOALS.

16 (c) THE STUDY MUST IDENTIFY POLICY MECHANISMS TO AVOID THE
17 IMPACTS THAT THE USE OF GREENHOUSE GAS OFFSETS BY REGULATED
18 SOURCES COULD HAVE ON DISPROPORTIONATELY IMPACTED COMMUNITIES.

19 (2) THE COMMISSIONER OR THE COMMISSIONER'S DESIGNEE SHALL
20 SUBMIT TO THE GENERAL ASSEMBLY:

21 (a) A REPORT SUMMARIZING THE PROGRESS ON THE STUDY ON OR
22 BEFORE OCTOBER 1, 2024; AND

23 (b) A FINAL REPORT ON THE STUDY ON OR BEFORE OCTOBER 1,
24 2025. THE FINAL REPORT MUST INCLUDE ANY LEGISLATIVE, REGULATORY,
25 OR OTHER RECOMMENDATIONS FOR DESIGNING AND IMPLEMENTING
26 GREENHOUSE GAS REDUCTION AND CARBON SEQUESTRATION
27 OPPORTUNITIES FOR THE AGRICULTURAL SECTOR AND IN AGRICULTURAL

1 LAND MANAGEMENT IN THE STATE.

2 (3) (a) (I) UPON CONCLUSION OF THE STUDY, WITH REGARD TO ANY
3 RECOMMENDATIONS IN THE STUDY THAT DO NOT REQUIRE LEGISLATIVE
4 CHANGES, THE COMMISSIONER, IN CONSULTATION WITH THE COLORADO
5 ENERGY OFFICE AND THE AIR QUALITY CONTROL COMMISSION, MAY ADOPT
6 RULES TO IMPLEMENT THE RECOMMENDATIONS.

7 (II) ANY RULES ADOPTED PURSUANT TO THIS SUBSECTION (3)(a)
8 MUST NOT MANDATE PARTICIPATION BY AGRICULTURAL PRODUCERS IN
9 ANY GREENHOUSE GAS OFFSET PROGRAM OR ANY OTHER GREENHOUSE GAS
10 REDUCTION AND CARBON SEQUESTRATION PROGRAMS OR MECHANISMS
11 DEVELOPED IN RULE, BUT THE RULES MAY PROVIDE INCENTIVES TO
12 AGRICULTURAL PRODUCERS FOR THEIR VOLUNTARY PARTICIPATION IN ANY
13 PROGRAM OR MECHANISM DEVELOPED IN RULE PURSUANT TO THIS
14 SUBSECTION (3)(a).

15 (b) IF THE COMMISSIONER ADOPTS RULES PURSUANT TO
16 SUBSECTION (3)(a) OF THIS SECTION, THE DEPARTMENT SHALL INCLUDE A
17 SUMMARY OF THE RULES AS PART OF THE DEPARTMENT'S REGULATORY
18 AGENDA THAT IT FILES PURSUANT TO SECTION 2-7-203 (4) AND THAT IS
19 INCLUDED IN THE DEPARTMENT'S "SMART ACT" PRESENTATION THAT
20 IMMEDIATELY FOLLOWS THE ADOPTION OF THE RULES.

21 (4) NOTHING IN THIS SECTION REQUIRES THE AIR QUALITY
22 CONTROL COMMISSION TO ADOPT RULES FOR GREENHOUSE GAS EMISSION
23 OFFSETS OR CREDIT MECHANISMS OR TO ACCEPT ANY GREENHOUSE GAS
24 EMISSION OFFSETS OR CREDIT MECHANISMS AS COMPLIANCE INSTRUMENTS
25 FOR EMISSION REDUCTION COMPLIANCE OR VERIFICATION.

26 (5) AS USED IN THIS SECTION, UNLESS THE CONTEXT OTHERWISE
27 REQUIRES:

1 (a) "ANAEROBIC DIGESTER" MEANS A SEALED, OXYGEN-FREE TANK
2 INTO WHICH FEEDSTOCK, SUCH AS FOOD WASTE, ANIMAL MANURE, OR
3 WASTEWATER SLUDGE, IS PLACED FOR ANAEROBIC DIGESTION BY
4 MICROORGANISMS. AN ANAEROBIC DIGESTER CAN BE USED AS A MEANS OF
5 WASTE DISPOSAL OR ENERGY PRODUCTION.

6 (b) "DISPROPORTIONATELY IMPACTED COMMUNITIES" HAS THE
7 MEANING SET FORTH IN SECTION 24-4-109 (2)(b)(II).

8 (c) "DRY DIGESTER" MEANS AN ANAEROBIC DIGESTER THAT
9 PROCESSES FEEDSTOCK WITH A LOW MOISTURE CONTENT.

10 **SECTION 4.** In Colorado Revised Statutes, 37-60-115, **add** (12)
11 as follows:

12 **37-60-115. Water studies - rules - reports - definitions - repeal.**

13 (12) (a) Study. (I) THE BOARD, IN CONSULTATION WITH THE STATE
14 ENGINEER, THE COLORADO ENERGY OFFICE, AND THE INSTITUTE, SHALL
15 CONDUCT A STUDY TO DETERMINE THE FEASIBILITY OF THE USE OF
16 AQUAVOLTAICS AS A MEANS OF INCREASING THE BENEFICIAL
17 CONSUMPTIVE USE OF STATE WATERS BY REDUCING EVAPORATION FROM,
18 AND LOWERING TEMPERATURES OF, IRRIGATION CANALS AND RESERVOIRS
19 UPON WHICH AQUAVOLTAIC INFRASTRUCTURE IS PLACED. IN STUDYING
20 THE FEASIBILITY OF USING AQUAVOLTAICS, THE BOARD SHALL ENSURE
21 THAT ANY AQUAVOLTAIC INFRASTRUCTURE USED IN THE STUDY DOES NOT
22 INTERFERE WITH INSTREAM FLOWS, AS DESCRIBED IN SECTION 37-92-102
23 (3), OR WITH WATER RIGHTS OWNERS' ABILITY TO DIVERT WATER FOR
24 BENEFICIAL USE.

25 (II) THE BOARD MAY CONTRACT WITH THE INSTITUTE, A THIRD
26 PARTY, OR BOTH, TO DESIGN, CARRY OUT, AND ANALYZE THE RESULTS OF
27 THE STUDY REQUIRED IN THIS SUBSECTION (12)(a). IF THE BOARD DEEMS

1 APPROPRIATE, THE STUDY MUST BE CONDUCTED IN CONSIDERATION OF
2 AND RELIANCE ON RELEVANT STUDIES COMPLETED IN THE STATE AND
3 NATIONALLY.

4 (b) Report. ON OR BEFORE JANUARY 1, 2025, THE BOARD SHALL
5 SUBMIT A REPORT OF THE FINDINGS AND CONCLUSIONS OF THE STUDY TO
6 THE HOUSE OF REPRESENTATIVES AGRICULTURE, WATER, AND NATURAL
7 RESOURCES COMMITTEE AND THE SENATE AGRICULTURE AND NATURAL
8 RESOURCES COMMITTEE, OR THEIR SUCCESSOR COMMITTEES.

9 (c) AS USED IN THIS SUBSECTION (12), UNLESS THE CONTEXT
10 OTHERWISE REQUIRES:

11 (I) "AQUAVOLTAICS" MEANS ONE OR MORE SOLAR ENERGY
12 GENERATION FACILITIES PLACED OVER, OR FLOATING ON, IRRIGATION
13 CANALS OR RESERVOIRS IN THE STATE.

14 (II) "BENEFICIAL USE" HAS THE MEANING SET FORTH IN SECTION
15 37-92-103 (4).

16 (III) "DIVERT" HAS THE MEANING SET FORTH IN SECTION
17 37-92-103 (7).

18 (IV) "INSTITUTE" MEANS THE COLORADO WATER INSTITUTE
19 CREATED IN SECTION 23-31-801.

20 (V) "WATER RIGHT" HAS THE MEANING SET FORTH IN SECTION
21 37-92-103 (12).

22 (VI) "WATERS OF THE STATE" HAS THE MEANING SET FORTH IN
23 SECTION 37-92-103 (13).

24 SECTION 5. In Colorado Revised Statutes, 39-3-122, add (3)
25 and (4) as follows:

26 39-3-122. Agricultural equipment used in production of
27 agricultural products - CEA facilities - exemption - definition. (3) ON

1 AND AFTER JANUARY 1, 2024, BUT BEFORE JANUARY 2, 2029, PERSONAL
2 PROPERTY IS EXEMPTED FROM THE LEVY AND COLLECTION OF PROPERTY
3 TAX IF THE PROPERTY IS MACHINERY OR EQUIPMENT THAT IS PART OF A
4 SOLAR ENERGY GENERATING SYSTEM THAT IS USED FOR AGRIVOLTAICS,
5 AND IF THE PROPERTY:

6 (a) INCORPORATES NOVEL DESIGNS, TECHNOLOGIES, OR
7 CONFIGURATIONS THAT SIGNIFICANTLY EXPAND THE POTENTIAL FOR
8 AGRICULTURAL ACTIVITIES, INCLUDING BY:

9 (I) ELEVATING THE BOTTOM EDGE HEIGHT OF THE PANELS AT
10 LEAST SIX FEET ABOVE THE GROUND;

11 (II) UTILIZING TRANSLUCENT PANELS OR PANELS WITH TUBULAR
12 OR OTHER INNOVATIVE PANEL GEOMETRY THAT SUPPORTS AGRIVOLTAICS;

13 (III) INCORPORATING ALTERNATIVE SOLAR TRACKING ALGORITHMS
14 THAT ARE TAILORED TO OPTIMIZE VEGETATIVE GROWTH;

15 (IV) INCORPORATING EXTENDED ROW OR PANEL SPACING IN A
16 MANNER THAT ENABLES AGRICULTURAL ACTIVITIES;

17 (V) INCORPORATING MODIFIED WIRE MANAGEMENT SYSTEMS THAT
18 SUPPORT LIVESTOCK, INCLUDING RAISING, LOWERING, OR BURYING
19 WIRING;

20 (VI) INCORPORATING INNOVATIVE PHOTOVOLTAIC RACKING
21 STRUCTURES, INCLUDING TENSIONED WIRE RACKING SYSTEMS,
22 SUSPENSION-BASED SYSTEMS, OR OTHER DYNAMIC PHOTOVOLTAIC
23 RACKING SYSTEMS OR ARRANGEMENTS;

24 (VII) INCORPORATING AGRICULTURAL INFRASTRUCTURE THAT IS
25 TYPICALLY FOUND ON A FARM OR RANCH OPERATION, SUCH AS
26 AGRICULTURAL FENCES, WATER SOURCES AND DISTRIBUTION, WATER
27 TROUGHS AND TANKS, CORRALS, LIVESTOCK PENS, OR PRODUCE HANDLING

1 EQUIPMENT; AND
2 (VIII) INCORPORATING AGRICULTURAL STRUCTURES THAT ARE
3 TYPICALLY FOUND ON AN AGRICULTURAL OPERATION, SUCH AS A TRACTOR
4 SHED, BARN, OR STRUCTURES FOR EQUIPMENT STORAGE, PRODUCE
5 WASHING, STORAGE, PROCESSING, OR CHILLING AND PACKAGING.
6 (b) IS CONSTRUCTED IN A MANNER THAT MINIMIZES SOIL
7 COMPACTION UNDERNEATH AND IN BETWEEN PANELS; AND
8 (c) IS CONSTRUCTED TO INCORPORATE DESIGN STRATEGIES THAT
9 ARE PLANNED WITH THE INTENT TO MINIMIZE THE NEGATIVE
10 ENVIRONMENTAL IMPACT OF PHOTOVOLTAIC ENERGY PRODUCTION
11 FACILITIES ON ECOSYSTEMS, NATIVE VEGETATION, STATE AND FEDERALLY
12 LISTED SPECIES, WILDLIFE MIGRATION CORRIDORS, AND THE SPECIES,
13 HABITATS, AND ECOSYSTEMS OF GREATEST CONSERVATION NEED.
14 (4) AS USED IN THIS SECTION, "AGRIVOLTAICS" HAS THE MEANING
15 SET FORTH IN SECTION 35-1-114 (5)(a).

16 **SECTION 6.** In Colorado Revised Statutes, 39-4-101, **amend**
17 (3.5) as follows:

18 **39-4-101. Definitions.** As used in this article 4, unless the context
19 otherwise requires:

20 (3.5) (a) "Solar energy facility" means a new facility first placed
21 in production on or after January 1, 2009, that uses real and personal
22 property, including ~~but not limited to~~ one or more solar energy devices,
23 as defined in section 38-32.5-100.3 (2), leaseholds, and easements, to
24 generate and, EXCEPT AS PROVIDED IN SUBSECTION (3.5)(b) OF THIS
25 SECTION, deliver to the interconnection meter any source of electrical,
26 thermal, or mechanical energy in excess of two megawatts by harnessing
27 the radiant energy of the sun, including any connected device for which

1 the primary purpose is to store energy, and that is not primarily designed
2 to supply electricity for consumption on site.

3 (b) "SOLAR ENERGY FACILITY" INCLUDES FACILITIES FOR
4 AGRIVOLTAICS, AS DEFINED IN SECTION 35-1-114 (5)(a), AND FOR
5 AQUAVOLTAICS, AS DEFINED IN SECTION 37-60-115 (12)(c)(I), THAT
6 DELIVER TO THE INTERCONNECTION METER ELECTRICAL ENERGY IN EXCESS
7 OF FIVE HUNDRED KILOWATTS

8 **SECTION 7. In Colorado Revised Statutes, 39-27-102.5, add**
9 **(11) as follows:**

10 **39-27-102.5. Exemptions on tax imposed - ex-tax purchases -**
11 **definitions - repeal. (11) (a) AS USED IN THIS SUBSECTION (11), UNLESS**
12 **THE CONTEXT OTHERWISE REQUIRES:**

13 **(I) "BIODIESEL" MEANS A FUEL COMPRISED OF MONO-ALKYL**
14 **ESTERS OF LONG-CHAIN FATTY ACIDS GENERALLY DERIVED FROM**
15 **VEGETABLE OILS OR ANIMAL FATS, DESIGNATED AS B100, AND MEETS THE**
16 **REQUIREMENTS OF ASTM D6751, WHICH IS THE "STANDARD**
17 **SPECIFICATION FOR BIODIESEL FUEL BLEND STOCK (B100) FOR MIDDLE**
18 **DISTILLATE FUELS".**

19 **(II) "RENEWABLE DIESEL" MEANS A HYDROCARBON DIESEL**
20 **VEHICLE FUEL PRODUCED FROM NONPETROLEUM RENEWABLE RESOURCES**
21 **SUCH AS VEGETABLE OILS, INCLUDING SOY, CORN, AND CANOLA, ANIMAL**
22 **OR POULTRY FAT, USED COOKING OIL, MUNICIPAL SOLID WASTE, AND**
23 **WASTEWATER SLUDGE AND OILS. "RENEWABLE DIESEL" MEETS OR**
24 **EXCEEDS ALL MINIMUM STANDARDS SET FORTH IN ASTM D975, WHICH IS**
25 **THE "STANDARD SPECIFICATION FOR DIESEL FUEL". "RENEWABLE DIESEL"**
26 **IS NOT BIODIESEL.**

27 **(b) (I) ON AND AFTER JANUARY 1, 2024, THROUGH DECEMBER 31,**

1 2029, BIODIESEL AND RENEWABLE DIESEL BLENDS IN AMOUNTS OF FIVE
2 PERCENT (B5) BIODIESEL OR RENEWABLE DIESEL OR GREATER ARE EXEMPT
3 FROM THE EXCISE TAX IMPOSED PURSUANT TO THIS PART 1. IN THE CASE
4 OF A BLENDED SPECIAL FUEL THAT CONTAINS BIODIESEL OR RENEWABLE
5 DIESEL, THE TAX IMPOSED UNDER SECTION 39-27-102 (1)(a)(II)(B) IS
6 REDUCED BY THE PROPORTION THAT THE GALLONS OF BIODIESEL OR
7 RENEWABLE DIESEL BEAR TO THE TOTAL GALLONS OF BLENDED SPECIAL
8 FUEL.

9 (II) A LICENSED FUEL DISTRIBUTOR THAT IS RESPONSIBLE FOR
10 PAYING STATE EXCISE TAX ON THE UNDERLYING DIESEL PORTION OF THE
11 FUEL IS ELIGIBLE FOR THE TAX EXEMPTION SET FORTH IN THIS SUBSECTION
12 (11)(b)

13 (c) (I) THE VOLUME OF BIODIESEL OR RENEWABLE DIESEL MUST BE
14 IDENTIFIED ON A SALES INVOICE FOR EACH SALES TRANSACTION AND MUST
15 CONTINUE TO BE IDENTIFIED ON EACH SALES INVOICE UNTIL THE BLENDED
16 BIODIESEL OR BLENDED RENEWABLE DIESEL FUEL PRODUCT IS SOLD TO THE
17 END USER.

18 (II) A SALES INVOICE MUST:

19 (A) IDENTIFY A BIODIESEL, RENEWABLE DIESEL, BIODIESEL BLEND,
20 OR RENEWABLE DIESEL BLEND BY A COMMONLY ACCEPTED COMMERCIAL
21 OR INDUSTRY NAME FOR THE BLENDED SPECIAL FUEL PRODUCT BEING
22 SOLD, SUCH AS B100 FOR BIODIESEL OR B20 FOR A BIODIESEL BLEND THAT
23 CONTAINS EIGHTY PERCENT TAXABLE PETROLEUM-BASED DIESEL FUEL
24 AND TWENTY PERCENT BIODIESEL;

25 (B) LIST THE VOLUME IN GALLONS, ROUNDED TO THE NEAREST
26 WHOLE GALLON, OR THE PERCENTAGE, ROUNDED TO THE NEAREST WHOLE
27 PERCENTAGE, OF THE BIODIESEL OR RENEWABLE DIESEL OR TAXABLE

1 PETROLEUM-BASED DIESEL FUEL CONTAINED IN THE BLENDED SPECIAL
2 FUEL PRODUCT.

3 (C) INCLUDE THE AMOUNT OF TAX PER GALLON THAT APPLIES TO
4 THE BIODIESEL BLEND OR RENEWABLE DIESEL BLEND.

5 (d) (I) A BLENDER MUST PROVIDE TO A PURCHASER OF BIODIESEL,
6 RENEWABLE DIESEL, BLENDED BIODIESEL, OR BLENDED RENEWABLE
7 DIESEL A CERTIFICATE, INVOICE, BILL OF SALE, OR OTHER WRITTEN
8 STATEMENT THAT PROVIDES THE INFORMATION REQUIRED PURSUANT TO
9 SUBSECTION (11)(c)(II) OF THIS SECTION AND THE FOLLOWING
10 ADDITIONAL INFORMATION:

11 (A) THE NAME OF THE SELLER;

12 (B) THE NAME OF THE PURCHASER; AND

13 (C) THE DATE OF TRANSFER OF THE BLENDED SPECIAL FUEL
14 PRODUCT.

15 (II) ANY PERSON CLAIMING THE TAX EXEMPTION PURSUANT TO
16 SUBSECTION (11)(b) OF THIS SECTION MUST MAINTAINS THE
17 CERTIFICATION RECORDS REGARDING THE BIODIESEL, RENEWABLE DIESEL,
18 BLENDED BIODIESEL, OR BLENDED RENEWABLE DIESEL FUEL PRODUCT FOR
19 AT LEAST FOUR YEARS.

20 (e) ON OR BEFORE SEPTEMBER 15, 2024, AND ON OR BEFORE
21 SEPTEMBER 15 FOR EACH YEAR THEREAFTER THROUGH 2029, THE
22 DEPARTMENT SHALL REPORT TO THE STATE TREASURER ON THE AMOUNT
23 OF SPECIAL FUEL TAX REVENUE LOST DUE TO THE TAX EXEMPTION SET
24 FORTH IN THIS SUBSECTION (11) IN THE PREVIOUS STATE FISCAL YEAR.

25 (f) THIS SUBSECTION (11) IS REPEALED, EFFECTIVE SEPTEMBER 1,
26 2030.

27 **SECTION 8.** In Colorado Revised Statutes, 24-75-219, **add** (7)(i)

1 as follows:

2 **24-75-219. Transfers - transportation - capital construction -**
3 **definitions - repeal.** (7) In addition to any other transfers required by
4 this section:

5 (i) (I) ON OCTOBER 1, 2024, AND ON OCTOBER 1 OF EACH YEAR
6 THEREAFTER THROUGH 2029, THE STATE TREASURER SHALL TRANSFER
7 FROM THE GENERAL FUND TO THE HIGHWAY USERS TAX FUND, CREATED IN
8 SECTION 43-4-201, THE AMOUNT OF MONEY THAT THE DEPARTMENT OF
9 REVENUE REPORTS TO THE STATE TREASURER PURSUANT TO SECTION
10 39-27-102.5 (11)(e).

11 (II) THIS SUBSECTION (7)(i) IS REPEALED, EFFECTIVE SEPTEMBER
12 1, 2030.

13 **SECTION 9.** In Colorado Revised Statutes, 43-4-205, amend
14 (6.7) as follows:

15 **43-4-205. Allocation of fund.** (6.7) Money transferred from the
16 general fund to the highway users tax fund pursuant to section 24-75-219
17 (5)(b.5) AND (7)(i) must be allocated and expended in accordance with the
18 formula specified in subsection (6)(b) of this section.

19 **SECTION 10.** In Colorado Revised Statutes, 43-4-217, amend
20 (6)(a) as follows:

21 **43-4-217. Additional funding - road usage fees - rules -**
22 **legislative declaration - definitions.** (6) (a) A distributor is not required
23 to pay the road usage fee imposed by subsection (3) or (4) of this section
24 or the bridge and tunnel impact fee imposed as authorized by section
25 43-4-805 (5)(g.5), if the distributor would otherwise be liable for the
26 excise tax on the gasoline or special fuel subject to the fee but is allowed
27 to sell the gasoline or special fuel without payment of the applicable

1 excise tax pursuant to ~~section 39-27-102 (1)(b)(II) or section 39-27-102.5~~
2 ~~(2)(b) SECTION 39-27-102.5.~~

3 **SECTION 11. Appropriation.** (1) For the 2023-24 state fiscal
4 year, \$4,516,267 General Fund is appropriated to the department of
5 agriculture for use by the commissioner's office and administrative
6 services. To implement this act, the office may use this appropriation as
7 follows:

8 (a) \$412,680 for personal services, which amount is based on an
9 assumption that the office will require an additional 1.0 FTE;

10 (b) \$186,665 for operating expenses;

11 (c) \$3,862,422 for agrivoltaics grants; and

12 (e) \$54,500 for the task force.

13 (2) Any money appropriated in subsection 1 of this section not
14 expended prior to July 1, 2024, is further appropriated to the office for the
15 same purpose until expended or June 30, 2026, whichever comes first.

16 (3) For the 2023-24 state fiscal year, \$30,322 General Fund is
17 appropriated to the department of revenue. To implement this act, the
18 department may use this appropriation as follows:

19 (a) \$7,392 for use by taxations services for personal services; and

20 (b) \$22,930 for tax administration IT system (GenTax) support.

21 **SECTION 12. Act subject to petition - effective date.** This act
22 takes effect at 12:01 a.m. on the day following the expiration of the
23 ninety-day period after final adjournment of the general assembly; except
24 that, if a referendum petition is filed pursuant to section 1 (3) of article V
25 of the state constitution against this act or an item, section, or part of this
26 act within such period, then the act, item, section, or part will not take
27 effect unless approved by the people at the general election to be held in

- 1 November 2024 and, in such case, will take effect on the date of the
- 2 official declaration of the vote thereon by the governor.