State of California California Natural Resources Agency

Memorandum

To: Greenhouse Gas Reduction Fund Program Date: October 26, 2018

From: John Laird
Secretary
California Natural Resources Agency

Drew Bohan
Executive Director
California Energy Commission

Subject: Greenhouse Gas Reduction Fund: California Energy Commission Expenditure Record for Fiscal Years 2017-2018 and 2018-2019 – Renewable Energy for Agriculture Program

This Attestation Memorandum documents that the California Natural Resources Agency and the California Energy Commission completed the attached Expenditure Record on October 26, 2018, for the Renewable Energy for Agricultural Program. The Expenditure Record is consistent with the statutory requirements of Government Code Section 16428.9 and with California Air Resources Board (CARB) *Funding Guidelines for Agencies that Administer California Climate Investments* to support expenditures from the Greenhouse Gas Reduction Fund.

This Attestation Memorandum and Expenditure Record will be submitted to the CARB for public posting on the CARB website at: www.arb.ca.gov/caclimateinvestments.
Questions on this Attestation Memorandum or Expenditure Record may be directed to Geoff Dodson, Geoffrey.Dodson@energy.ca.gov, (916) 654-5171.

Drew Bohan
Executive Director
California Energy Commission

John Laird
Secretary
California Natural Resources Agency

Attachment

Greenhouse Gas Reduction Fund: Expenditure Record

California Energy Commission
Renewable Energy for Agriculture Program (REAP)

Authorizing legislation: Item 3360-101-3228 of the Budget Act of 2017, as amended by Assembly Bill 109 (Ting, Chapter 249, Statutes of 2017) appropriates to California Energy Commission $6,000,000 to support renewable energy projects in the agricultural sector.

Item 3360-101-3228 of the Budget Act of 2018, as amended by Senate Bill 856 (Committee on Budget and Fiscal Review, Chapter 30, Statutes of 2018) appropriates to California Energy Commission an additional $4,000,000 to support renewable energy projects in the agricultural sector.

Element (1) A description of each expenditure proposed to be made by the administering agency pursuant to the appropriation.

❑ Agency that will administer funding	▪ California Energy Commission
❑ Amount of proposed expenditure and appropriation reference	▪ The total expenditure is $10 million for grants, per Item 3360-101-3228 of the Budget Act of 2017 and Item 3360-101-3228 of the Budget Act of 2018 (Chapter 30, Statutes of 2018).
❑ Estimated amount of expenditures for administering agency administrative costs	▪ The total expenditure includes $500,000 for state operations costs. ▪ Administering agency administrative costs are statutorily limited to $500,000 or 5 percent of the program funds.
❑ If applicable, identify laws or regulations that govern how funds will be used	▪ AB 109 established the program and requires funding to support renewable energy projects in the agriculture sector. ▪ AB 1532 (Pérez, Chapter 807, Statutes of 2012), Senate Bill (SB) 535 (De León, Chapter 830, Statutes of 2012), SB 1018 (Budget and Fiscal Review Committee, Chapter 39, Statutes of 2012), SB 862 (Budget and Fiscal Review Committee, Chapter 36, Statutes of 2014), and AB 1550 (Gomez, Chapter 369, Statutes of 2016) provide the general framework for how the auction proceeds will be administered to advance the purposes of AB 32. ▪ SB 856 (Chapter 30, Statutes of 2018) provides additional funding to support renewable energy projects in the agriculture sector.

❑ Continuation of existing expenditure record	▪ This is a new program that does not have an existing expenditure record.
❑ Project type(s)	▪ Renewable energy in agriculture sector
❑ Describe the projects and/or measures that will be eligible for funding	▪ Installation of commercially available on-site renewable energy technologies in agricultural operations that facilitate reductions in greenhouse gas (GHG) emissions and might include solar photovoltaic (PV), wind, biomass, and so forth.
❑ Intended recipients	▪ Agricultural owners or operators
❑ Program structure and process for selecting projects for funding	▪ Competitive solicitation, evaluation, and selection of projects according to program guidelines.

Element (2) A description of how a proposed expenditure will further the regulatory purposes of Division 25.5 (commencing with Section 38500) of the Health and Safety Code, including, but not limited to, the limit established under Part 3 (commencing with Section 38550) and other applicable requirements of law.

❑ How the expenditure is consistent with the investment plan and the scoping plan	▪ AB 1532 (Chapter 807, Statutes of 2012) requires that monies from the fund be appropriated in a manner that is consistent with the three-year investment plan. The *Cap-and-Trade Auction Proceeds Second Investment Plan: Fiscal Years 2016-17 through 2018-19* recommends funding projects that reduce GHG emissions associated with agriculture. The Energy Commission's investments will increase the on-site use of renewable energy, resulting in lower energy costs for the applicant and reduced GHG emissions. Therefore, the expenditures covered by this record are consistent with the investment plan and align with the priorities expressed in the plan. *California's 2017 Climate Change Scoping Plan* identified key strategies and recommendations to continue reducing GHG emissions and achieve the goals and purposes of Assembly Bill 32 (Núñez, Chapter 488, Statutes of 2006) and related statutes. The recommended actions for the natural and working lands sector include continuing to enhance energy efficiency, increasing localized generation, and implementing smart-grid technologies

Element (3) A description of how a proposed expenditure will contribute to achieving and maintaining greenhouse gas emission reductions pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code.

❑ Describe how expenditures will facilitate the achievement of GHG emission reductions in the state	▪ Expenditures will achieve GHG emission reductions by providing grants for the installation of on-site renewable energy technologies on agricultural operations. ▪ The program will reduce GHG emissions by reducing electrical grid demand for agricultural operations by shifting load demand to on-site renewable energy sources. Eligible projects may also directly reduce GHG emissions by replacing equipment that uses diesel or other nonrenewable fuels such as agricultural water pumps or other on-site operations.
❑ Explain when GHG emission reductions and/or co-benefits are expected to occur and how they will be maintained	▪ GHG emissions reductions will begin immediately after the installation of renewable energy technologies. ▪ It is expected that these projects will maintain GHG emission reductions for the life of the installed equipment. The following renewable energy technologies have these approximate lifespans: • Solar PV systems ~ 30 years • Wind turbines ~ 20 years • Battery storage ~ 5-15 years • EV charging ~ 5-10 years

Element (4) A description of how the administering agency considered the applicability and feasibility of other non-greenhouse gas reduction objectives of Division 25.5 (commencing with Section 38500) of the Health and Safety Code.

❑ Expected co-benefits, particularly environmental, economic, public health and safety, and climate resiliency	▪ Adoption of on-site renewable energy technologies will reduce demand for grid electricity. Reduction of grid electricity demand could reduce stress on the electric grid, especially during peak periods, thus enhancing grid resiliency. Projects that involve the replacement of diesel or nonrenewable fuel pumps will also reduce criteria pollutants that could improve local air quality in a region that is known for poor air quality. ▪ Preference will be given to applications that are in disadvantaged communities and/or engage the local community through workforce training or through additional

community investments. These projects would provide economic co-benefits to the local community.

- ❑ How the project will support other objectives of AB 32 and related statutes
  - Complements the state's efforts to improve air quality. Some projects may also reduce toxic air and criteria air pollutants from stationary and mobile sources.
  - Directs public and private investment toward the most disadvantaged communities in California by giving preference to projects in priority populations.
  - Electricity-saving projects could help increase grid flexibility by reducing use during critical peak periods.
  - Provides additional environmental and economic co-benefits for California.
  - Provides an opportunity for agricultural businesses to participate in and benefit from statewide efforts to reduce GHG emissions.

- ❑ Percentage of total funding that will be expended for projects that are located in and benefit priority populations[1] per CARB guidance
  - The Energy Commission has initially established a target to expend at least 35 percent of the total project funds received under this fiscal year appropriation to fund projects that provide benefits to priority populations. We expect this amount to include:
    - 25 percent of projects located within and benefitting disadvantaged communities (CalEnviroScreen 3.0 model).
    - 5 percent of projects within and benefiting AB 1550 low-income communities, (at or below 80 percent of the statewide median income).
    - 5 percent of projects located within and benefiting AB 1550 low-income communities within a half-mile of a disadvantaged community.

- ❑ Describe the benefits to priority populations per CARB guidance
  - These expenditures will result in the installation of renewable energy projects, some of which will be installed in agriculture operations located in disadvantaged and low-income communities. These installations will result in direct energy cost savings and environmental benefits (such as improved air quality through reduction of local air pollution) to agriculture operations in, or near, priority populations.
  - Project proposals will receive preference points if they specify direct benefits to priority populations in accordance with CARB guidance. These proposals can include local

1 Priority populations include residents of (1) census tracts identified as disadvantaged by California Environmental Protection Agency per SB 535, (2) census tracts identified as low-income per AB 1550, or (3) a low-income household per AB 1550. See Section VII.B for more information on the definitions of priority populations.

	workforce development, reinvestment of energy savings, and so forth.
❑ Explain strategies the administering agency will use to maximize benefits to disadvantaged communities	▪ To help maximize benefits to disadvantaged communities, the Energy Commission will include in the solicitation preference points for projects located in and benefiting disadvantaged and low-income communities. The applicant must meaningfully explain how the project will benefit the priority populations.
❑ Explain how the administering agency will avoid potential substantial burdens to disadvantaged communities and low-income communities or, if unknown, explain the process for identifying and avoiding potential substantial burdens	▪ Projects claiming to benefit priority populations must be designed to avoid substantial burdens (for example, displacement of low-income, disadvantaged community residents and businesses or increased exposure to toxics or other health risks).

Element (5) A description of how the administering agency will document the result achieved from the expenditure to comply with Division 25.5 (commencing with Section 35800) of the Health and Safety Code.

❑ How the administering agency will track / report progress to make sure projects are implemented per requirements in statute and CARB guidance	▪ The Energy Commission will develop agreements with each recipient that will include a statement of work and budget. Energy Commission staff will track progress for the Renewable Energy for Agriculture Program through active management of the recipients. This management will include requirements to submit progress reports and invoices with supporting documentation to justify expenditures, verification evaluation accompanied by photographs or on-site verification and evaluation performed by Energy Commission staff, and critical project review meetings, as needed, to ensure the projects are completed and installed according to the approved grant agreement.

❑ Describe the approach that will be used to document GHG emission reductions and/or other benefits before and after project completion.	▪ The Energy Commission will calculate the GHG emission reductions expected and achieved from projects using a CARB quantification method. ▪ To verify the energy savings and GHG emission reductions, all recipients will be required to provide their annual post-project energy consumption for three years after equipment installation. The Energy Commission will report pre- and post-project energy use data and supporting GHG reduction calculations to CARB.
❑ Type of information that will be collected to document results, consistent with CARB guidance	▪ The Energy Commission will collect data on project location, baseline and estimated energy usage, energy costs, type of technologies installed and replaced, expected quantification period, benefits to priority populations and any other data necessary to accurately track the results of the project as described in the grant agreement, and other data as specified in CARB's funding guidelines. ▪ To determine the job creation benefits, the agency will compile data from funding recipients, including number of job-years provided, average wages and benefits, the number of people who completed job training or received industry-recognized certifications, and residence location of job/training recipients. ▪ Once operational, the administering agency will collect information on project outcomes for 10 percent of projects, consistent with CARB guidance.
❑ How the administering agency will report on program status	▪ The Energy Commission will provide regular updates on expenditures, project status, and benefits in reports prepared according to CARB's funding guidelines. At a minimum, the reports will include expenditure amounts, current estimates of GHG emission reductions, quantification of other applicable co-benefits (for example, jobs created, hours of workforce training).