Memorandum

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 Year 2018-2019 - Low Carbon Fuel Production Program

This Attestation Memorandum documents that the California Natural Resources Agency and the California Energy Commission completed the attached Expenditure Record on December 12, 2018, for the Low Carbon Fuel Production Program. The Expenditure Record is consistent with the statutory requirements of Government Code Section 16428.9 and with the 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 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 Joji Castillo at 916-653-6471, jojo.castillo@energy.ca.gov

Drew Bohan Executive Director California Energy Commission

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John Laird Secretary California Natural Resources Agency

Attachment

Date: December 12, 2018

Greenhouse Gas Reduction Fund: Expenditure Record

California Energy Commission Low Carbon Fuel Production Program

Authorizing legislation: Item 3360-001-3228 of the Budget Act of 2018, as amended by SB 856 (Chapter 30, Statutes of 2018) appropriates to the California Energy Commission \$12,500,000 to support low-carbon fuel production.

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 \$12.5 million, per Section 16 Item 3360-001-3228 of the Budget Act of 2018 (Chapter 30, Statutes of 2018).
 Estimated amount of expenditures for administering agency administrative costs 	-	The total expenditure may include up to 5 percent of program funds for administrative costs.
If applicable, identify laws or regulations that govern how funds will be used	•	Assembly Bill (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 further the purposes of AB 32. AB 398 (Garcia, Chapter 135, Statutes of 2017) identifies legislative priorities for allocating auction revenue proceeds to include but not be limited to low carbon transportation alternatives and reduce short-lived climate pollutants. The Budget Act of 2018, as amended by SB 856 provides direction on the types of projects that should be funded. AB 118 (Nùñez, Chapter 750, Statutes of 2007) established the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP) to develop and deploy innovative technologies that transform California's fuel and vehicle types to help attain the state's climate change policies. AB 8 (Perea,

	Chapter 401, Statutes of 2013) re-authorized the ARFVTP through January 1, 2024.
Continuation of existing Expenditure Record	 This is a new program that does not have an existing Expenditure Record.
Project type(s)	 New or expanded renewable ultra-low carbon transportation fuel production at commercial-scale advanced fuel production facilities.
Describe the projects and/or measures that will be eligible for funding	 Construction of new ultra-low carbon transportation fuel production facilities. Expansion or modification of existing low carbon transportation fuel production facilities to increase production capacity.
Intended recipients	 Public and private fuel producers.
Program structure and process for selecting projects for funding	 Competitive grant 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 AB 1532 (Chapter 807, Statutes of 2012) requires that monies expenditure is from the Fund be appropriated in a manner that is consistent with the three-year Investment Plan. The "Cap-and-Trade consistent with Auction Proceeds Third Investment Plan: Fiscal Years 2019-20 the Investment Plan and the through 2021-2022" recommends support for the development of advanced biofuels and the production of ultra-low carbon Scoping Plan fuels. In addition, the Investment Plan specifically describes and recommends the types of projects that will be funded by expenditures under the Program (e.g., development of Alternative Fuels and Infrastructure, reducing the carbon intensity of transportation fuels). 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 greenhouse gas (GHG) emissions and achieve the goals and purposes of AB 32 and related statutes. The recommended

actions for the transportation sector include promoting

research, development, and deployment of low carbon fuels

such as renewable gas, including renewable hydrogen, and rapidly reducing the carbon intensity of existing liquid and gaseous transportation fuels. Therefore, the expenditures covered by this record are consistent with the Climate Change Scoping Plan and align with the priorities expressed in the Plan.

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	•	The program will facilitate GHG reductions and reduce criteria and toxic pollutant emissions by funding the in-state production of alternative and renewable transportation fuels which displace and emit less GHG emissions than conventional gasoline and diesel fuel. In-state production will also lower the GHG emissions associated with transporting the fuel to its end use. GHG reductions may occur from funding projects that capture or avoid biomass-based methane emissions, by using waste- based feedstocks.
Explain when GHG emission reductions and/or co-benefits are expected to occur and how they will be maintained	•	Low-carbon fuel production facilities will begin to yield GHG and criteria pollutant emission reductions as soon as low carbon-fuel production facilities become operational and will continue to provide clean energy and long term GHG emission reductions for an expected quantification period up to 20 years based on expected equipment life and fuel sales.

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 The new development and expansion of existing renewable fuel production facilities will yield economic, environmental, co-benefits, and public health co-benefits. These projects will give particularly preference to applicants located in disadvantaged communities environmental, and/or provide California jobs for disadvantaged community economic, public residents through targeted recruitment. The local use of low health and carbon fuels will also improve air quality and public health in safety, and the surrounding communities and along busy roadways by climate resiliency reducing GHG emissions and exposure to criteria pollutants from on-road vehicles.

How the project will support other objectives of AB 32 and related statutes	 Projects that utilize organic waste material may assist with the state's organic waste diversion goals and sustainable forest management and wildfire prevention. Project co-products, such as biochar, soil amendments, and fertilizers, may be used to support the state's Healthy Soils Initiative. The production of low carbon fuels will enable sustainable decarbonization in the transportation sector by displacing fossil fuels. The project will complement the State's efforts to improve air quality by reducing short-lived climate pollutants. The project will direct public and private investment toward the most disadvantaged communities in California. The project may encourage sustainable agricultural practices that promote transition to clean technology, water efficiency, and improved air quality. The project may promote healthy forests and urban greening by utilizing woody biomass feedstocks. The project will support climate adaptation and resiliency by producing renewable low carbon fuels in-state. The project will stimulate climate and clean energy research by advancing low carbon fuel production technologies.
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 established a target to expend at least 25 percent of the total project funds received under this fiscal year appropriation to fund projects that provide benefits to disadvantaged communities. We expect this amount to include at least 25 percent of project funds located within and benefitting disadvantaged communities as defined by CalEnviroScreen 3.0. At least 5 percent of projects within and benefitting low-income communities and at least 5 percent of projects located within and benefitting low-income communities and at least 5 percent of projects within and benefitting low-income communities and at least 5 percent of projects located within and benefitting low-income
Describe the benefits to priority populations per CARB guidance	 Projects will provide in-state low carbon fuel production that will reduce criteria air pollutant and toxic air contaminant emissions, such as diesel particulate matter that typically benefit priority populations with the worst air quality. Projects will create jobs and other economic benefits in disadvantaged or low-income communities. Projects will use waste-based feedstock to reduce environmental hazards and pollutants in disadvantaged and low-income communities.

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.

Explain strategies the administering agency will use to maximize benefits to disadvantaged communities	 The Energy Commission will include in the solicitation(s) preference points for projects located in and benefiting disadvantaged communities. Applicants will be required to meaningfully explain how the project will benefit disadvantaged communities.
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 residents and/or businesses because of the project).

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 track progress through actimanagement of the recipients, including requiring fundin recipients to maintain records and submit monthly status reports. In addition, Energy Commission will conduct periodic reviews of selected projects. If a funding recipient does not perform in accordance with program requirement the recipient will be subject to the remedies for non-performance, as identified in the administering agency's guidelines and the grant agreement.	ig S ent
Describe the approach that will be used to document GHG emission reductions and/or other benefits	The Energy Commission will calculate the GHG emissio reductions and co-benefits expected and achieved from projects using a CARB-developed method and/or tool. The Energy Commission will coordinate with CARB to estimate GHG emission reductions and co-benefits (e.g. job creations), using CARB quantification methodologies Energy Commission staff will review calculations prepare	, S.

before and after project completion.	by applicants to ensure consistency with approved methodologies.
Type of information that will be collected to document results, consistent with CARB guidance	 The Energy Commission will require funding recipients to collect data on fuel production, production capacity, fuel carbon intensity, project location, feedstock, technologies, benefits to priority populations and other data consistent with CARB guidance and grant agreement requirements. To determine job creation benefits, the Energy Commission will require funding recipients to collect data on jobs provided, both the quality and quantity, including long-term and short-term, average wages and benefits, and residence location or census tracts (to identify priority populations) consistent with CARB guidance. The Energy Commission will require funding recipients to collect data on project location, decrease of air pollutants such as CO, NOx, short-lived climate pollutant, etc., economic benefits such as taxes, and other data, as applicable and as specified in CARB guidance.
How the administering agency will report on program status	 The Energy Commission will report regularly to CARB consistent with CARB guidance. Reports will include expenditure amounts, estimates of GHG emission reductions, quantification of other benefits as applicable (e.g., jobs created, air pollutants decreased), and information on project outcomes.