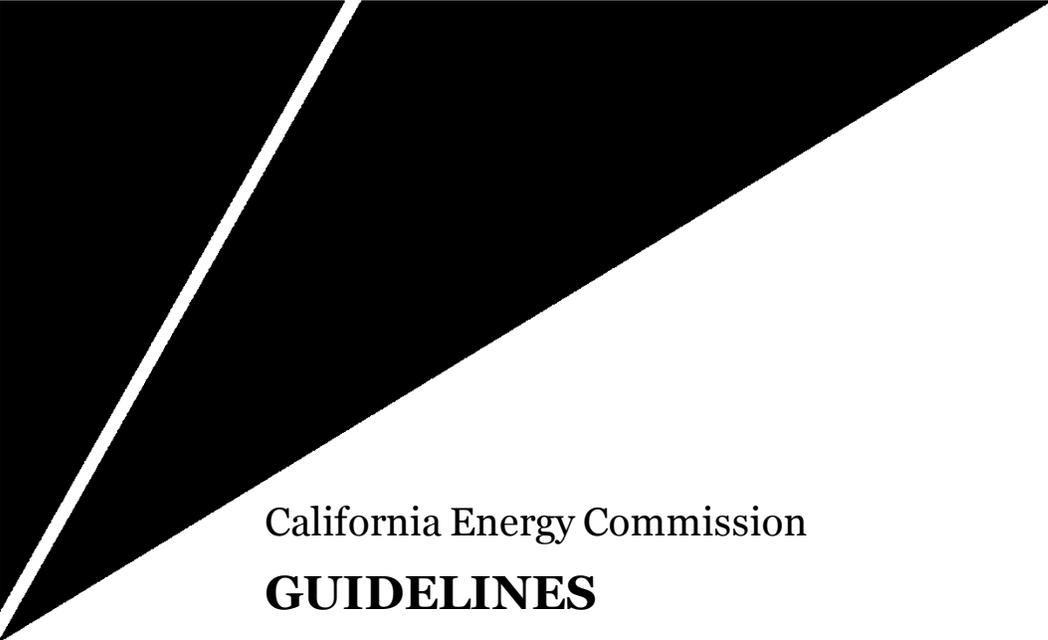


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California Energy Commission  
**GUIDELINES**

# **Low-Carbon Fuel Production Program**

## **2019 Program Implementation Guidelines**



**California Energy Commission**

Gavin Newsom, Governor

July 2019 | CEC-600-2019-006-F



# California Energy Commission

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## ABSTRACT

*The Low Carbon Fuel Production Program: 2019 Program Implementation Guidelines* explain how the Energy Commission's program will be administered and outline terms and definitions.

**Keywords:** Awardee, funding award, vehicle fuel production, advanced low-carbon fuels, ultra-low-carbon fuels, biofuels, renewable hydrogen, alternative and renewable fuels, greenhouse gas reduction, recipient, industrial, biomethane, gas substitutes, diesel substitutes, transportation fuels

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# CHAPTER 1:

## Introduction

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California's on-road transportation sector accounts for roughly 41 percent of the state's greenhouse gas (GHG) emissions,<sup>1</sup> and when oil production and refining are included, it is nearly 50 percent. Providing support for more low-carbon and zero-emission fuels will reduce GHG emissions, decrease air pollution, and help achieve the state's climate change and clean air goals. This support could help ensure California's alternative fuel production industries remain competitive and operational, and the associated jobs remain in California.

The Low-Carbon Fuel Production Program (LCFPP), funded by the Budget Act of 2018, as amended by Senate Bill 856 (Committee on Budget and Fiscal Review, Chapter 30, Statutes of 2018), provides grants to California's vehicle fuel production industry to reduce GHG emissions associated with transportation use and advances the purposes of Assembly Bill 32 (Pavley and Núñez, Chapter 488, Statutes of 2006) and Senate Bill 32 (Pavley, Chapter 249, Statutes of 2016). This program and these guidelines were informed by the following resources:

- California Energy Commission's existing funding of low-carbon fuel production and supply under the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP).
- Staff Workshop to Discuss Draft Guidelines for the Low-Carbon Fuel Production Program conducted on March 5, 2019, and public comments received from this workshop.
- Public comments from stakeholders received by March 12, 2019 (Docket URL: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-TRAN-01>).
- California Air Resources Board's *Funding Guidelines for Agencies That Administer California Climate Investments*: [www.arb.ca.gov/cci-fundingguidelines](http://www.arb.ca.gov/cci-fundingguidelines).

LCFPP will support new and expanded renewable, ultra-low-carbon transportation fuel<sup>2,3,4,5</sup> production at advanced fuel production plants and help the California fuel industry, vehicle manufacturers, and operators work toward a low-carbon future. Based on trends of the low carbon fuel industry and data from current ARFVTP projects, requiring the reduction in carbon intensity of fuel to ultra-low-carbon fuel is a suitable guideline for this program. The projects and technologies to be funded will help construction of new ultra-low-carbon transportation fuel production plants, expand or modify existing low-carbon transportation fuel production plants to increase production capacity, and reduce GHG emissions associated with low-carbon fuel production. The LCFPP is open to California businesses, public agencies, nonprofit organizations, vehicle and technology entities, public-private partnerships, and academic institutions. All projects funded under the LCFPP must reduce GHG emissions and advance the purposes of AB 32 and SB 32.

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<sup>1</sup> California Air Resources Board. 2016 Greenhouse Gas Emission Inventory – 2018 Edition.

<https://www.arb.ca.gov/cc/inventory/data/data.htm>.

<sup>2</sup> [https://www.theicct.org/sites/default/files/publications/CfD-Cost-Benefit-Report\\_ICCT\\_Working-Paper\\_vF\\_23012017.pdf](https://www.theicct.org/sites/default/files/publications/CfD-Cost-Benefit-Report_ICCT_Working-Paper_vF_23012017.pdf).

<sup>3</sup> [https://www.nrdc.org/file/2547/download?token=stjV\\_RBt](https://www.nrdc.org/file/2547/download?token=stjV_RBt).

<sup>4</sup> <http://futurefuelstrategies.com/2016/10/19/novel-mechanism-ultralow-carbon-fuel/>.

<sup>5</sup> [http://www.cadelivers.org/wp-content/uploads/2014/11/LCFS-ResourceGuide\\_April2016\\_FINAL.pdf](http://www.cadelivers.org/wp-content/uploads/2014/11/LCFS-ResourceGuide_April2016_FINAL.pdf).

*The Low-Carbon Fuel Production Program: 2019 Program Implementation Draft Guidelines* provide potential applicants with information on how the program will be structured, who and what technologies are eligible, and on what criteria the applications will be scored. In conjunction with these guidelines, the Energy Commission will release a grant solicitation that will provide detailed instructions on how to submit a funding proposal to the program.

## **A. Background**

The LCFPP is part of California Climate Investments, a statewide program that puts billions of cap-and-trade dollars to work reducing GHG emissions, strengthening the economy, and improving public health and the environment, particularly in disadvantaged communities. The Cap-and-Trade Program also creates a financial incentive for industries to invest in clean technologies and develop innovative ways to reduce pollution. California Climate Investments projects include affordable housing, renewable energy, public transportation, zero-emission vehicles, environmental restoration, more sustainable agriculture, recycling, and much more. At least 35 percent of these investments are located within and benefiting residents of disadvantaged communities, low-income communities, and low-income households across California. For more information, visit the California Climate Investments website at [www.caclimateinvestments.ca.gov](http://www.caclimateinvestments.ca.gov).

All GGRF programs must advance AB 32 and SB 32 as the primary program goal, and each project must provide real and quantifiable GHG emission reductions. The LCFPP will accelerate the adoption of renewable fuels and alternative fuel vehicle technologies that support achieving the state's long-term GHG emissions reduction goals while maximizing other co-benefits. The Energy Commission, in alignment with GGRF principles, will prioritize funds investment in projects that achieve the highest GHG reductions, maximize benefits to disadvantaged communities, and are necessary to meet the state's climate goals. These investments are expected to encourage projects that support California's existing plans, policies, and initiatives (for example, California's 2017 *Climate Change Scoping Plan* and the measures included therein, *California Sustainable Freight Action Plan*, *Mobile Source Strategy*, *Short-Lived Climate Pollutant Strategy*).

This program gives applicants opportunities to work together with other agencies to provide and maximize benefits (for example, California Department of Food and Agriculture's Dairy Digester Research and Development Program, the California Department of Resources Recycling and Recovery's [CalRecycle] Organics Grant Program). To avoid duplicative funding, applicants must coordinate with local, state, and federal programs.

Specific state legislation governing the LCFPP includes the following:

### **AB 32, the Global Warming Solutions Act of 2006**

AB 32 created a comprehensive program mandating a reduction in California GHG emissions to 1990 levels by 2020. In implementing AB 32, the California Air Resources Board (CARB) developed a Scoping Plan that describes the approach California will take to reduce GHG emissions, including the Cap-and-

Trade Program. CARB must update the plan every five years. Additional information can be found at <http://www.arb.ca.gov/cc/ab32/ab32.htm>.

## **Senate Bill 856**

SB 856 appropriates to the Energy Commission \$12.5 million from GGRF to support low-carbon fuel production.

## **Assembly Bill 1532**

Assembly Bill 1532 (Perez, Chapter 807, Statutes of 2012) requires that cap-and-trade auction proceeds be used to promote achievement of GHG emission reductions. To the extent feasible, AB 1532 also shows how activities:

- Maximize economic, environmental, and public health benefits to the State.
- Foster job creation.
- Complement efforts to improve air quality.
- Direct investments toward disadvantaged communities.
- Provide opportunities for businesses, public agencies, nonprofit organizations, and other community institutions to participate in and benefit from statewide efforts to reduce GHG emissions.
- Lessen impacts of climate change on the state's communities, economy, and environment.

## **Assembly Bill 1550**

Assembly Bill 1550 (Gomez, Chapter 369, Statutes of 2016) (AB 1550) amends existing Senate Bill 535 (De León, Chapter 830, Statutes of 2012) to set investment minimums for GGRF projects in and benefiting disadvantaged communities and low-income communities and includes the following requirements:

- A minimum of 25 percent of the proceeds to be invested in projects within and benefitting individuals living in disadvantaged communities.
- An additional minimum of 5 percent to be invested in projects within and benefitting individuals living in low-income communities or benefitting low-income communities statewide.
- An additional minimum of 5 percent be invested in projects that are located within and benefitting individuals living in low-income communities, or benefitting low-income households that are within one-half mile of a disadvantaged community.

## **Assembly Bill 197**

Assembly Bill 197 (Garcia, Eduardo, Chapter 250, Statutes of 2016) requires CARB to consider the social cost of GHG emissions and prioritize regulations that result in direct emission reductions from large stationary sources and mobile sources, when CARB is adopting regulations to reduce GHG emissions.

## **Assembly Bill 398**

Assembly Bill 398 (Garcia, Eduardo, Chapter 135, Statutes of 2017) provides direction on a post-2020 Cap-and-Trade Program and identifies priorities for the Legislature to consider for future appropriations

from GGRF, including, but not limited to, air toxic and criteria air pollutants from stationary and mobile sources; low- and zero-carbon transportation alternatives; sustainable agricultural practices that promote the transitions to clean technology, water efficiency, and improved air quality; healthy forests and urban greening; short-lived climate pollutants; climate adaptation and resiliency; and climate and clean energy research.

## **Senate Bill 32**

Senate Bill 32 (Pavley, Chapter 249, Statutes of 2016) requires CARB to adopt rules and regulations to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 levels by 2030.

## **Senate Bill 535**

Senate Bill 535 (De León, Chapter 830, Statutes of 2012) requires the California Environmental Protection Agency (CalEPA) to identify disadvantaged communities and requires CARB to provide guidance on maximizing benefits to these communities. In 2016, AB 1550 amended the investment minimums for disadvantaged communities and established new investment minimums for low-income communities and low-income households.

## **Senate Bill 862**

Senate Bill 862 (Budget and Fiscal Review Committee, Chapter 36, Statutes of 2014) requires that CARB develop funding guidelines for administering agencies to ensure statutory requirements are met. These guidelines must include a component for how administering agencies should maximize benefits for disadvantaged communities. SB 862 further requires that CARB develop guidance on reporting and quantification methodologies for all administering agencies to ensure that agencies meet their expenditure record requirements.

## **Senate Bill 1018**

Senate Bill 1018 (Budget and Fiscal Review Committee, Chapter 39, Statutes of 2012) establishes GGRF as the account to receive cap-and-trade auction proceeds and establishes accountability requirements to help ensure that GGRF expenditures achieve GHG reductions and advance the purposes of AB 32. SB 1018 also requires each state agency appropriating funds from GGRF to prepare an expenditure record showing how the money will be used, how the expenditure will advance the regulatory purposes of AB 32, how the expenditure contributes to achieving and maintaining GHG emission reductions, how other non-GHG reduction objectives were considered, and how the results achieved from the expenditure will be documented.

## **Senate Bill 1464**

Senate Bill 1464 (De León, Chapter 679, Statutes of 2016) amends the Investment Plan requirements in AB 1532 such that the Department of Finance must include:

- An assessment of how proposed investments interact with state regulations, policies, and programs.
- An evaluation of whether and how those proposed investments could be incorporated into existing programs.

- Recommendations for metrics that would measure progress and benefits from the proposed programmatic investments.

## B. Keywords/Terms

Table 1 identifies the key words or terms used in the LCFPP Guidelines.

**Table 1: Key Words and Terms**

<b>Word/Term</b>	<b>Definition</b>
AB	Assembly Bill
Applicant	An entity who submits a funding proposal under the solicitation.
ARFVTP	Alternative and Renewable Fuel and Vehicle Technology Program. The program created by AB 118 that is charged with developing and deploying alternative and renewable fuels and advanced transportation technologies to help attain the state's climate change policies.
CAM	Commission agreement manager
CARB	California Air Resources Board
CI	Carbon intensity: The amount of life-cycle greenhouse gas emissions, per unit of fuel energy, expressed in grams of carbon dioxide equivalent per megajoule (gCO <sub>2</sub> e/MJ).
CCI	California Climate Investments: An umbrella term and associated logo developed for communication with funding recipients and the public to identify programs or projects funded in whole or in part by the GGRF. For additional information, please refer to <a href="http://www.caclimateinvestments.ca.gov/">http://www.caclimateinvestments.ca.gov/</a> .
CO <sub>2</sub> e	Carbon dioxide equivalent
Co-benefit	Economic, environmental, or public health benefit, other than GHG emission reductions, that results from LCFPP.
CPR	Critical project review
Disadvantaged communities	Areas that are disproportionately affected by specific types of pollution and areas with vulnerable populations. Per SB 535, CalEPA is responsible for identifying disadvantaged communities for the California Climate Investments. Disadvantaged communities are designated as the top 25

<b>Word/Term</b>	<b>Definition</b>
	percent highest scoring census tracts in CalEnviroScreen 3.0, <sup>6</sup> along with other areas with high amounts of pollution and low populations.
DGE	Diesel gallon equivalent
Energy Commission	California Energy Commission
GFO	Grant funding opportunity
GGRF	Greenhouse Gas Reduction Fund
GHG	Greenhouse gas
Grant recipient	Applicants that receive an award under the LCFPP
GREET	The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation Model by Argonne National Laboratory.
Guidelines	Low-Carbon Fuel Production Program: 2019 Program Implementation Guidelines
LCFPP	Low-Carbon Fuel Production Program
LCFS	Low Carbon Fuel Standard, which is administered by CARB
M&V	Measurement and verification
Mandatory Reporting, MRR	Reporting of GHG emissions by major sources is required by the California Global Warming Solutions Act of 2006 (AB 32). The Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (MRR) is applicable to electricity generators, industrial factories, fuel suppliers, and electricity importers. The MRR program requires annual reporting of GHGs from sources that emit greater than 10,000 metric tons of CO <sub>2</sub> e. For more information, please refer to <a href="https://ww2.arb.ca.gov/mrr-data">https://ww2.arb.ca.gov/mrr-data</a> .
NOPA	Notice of proposed award
Priority populations	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.
SB	Senate Bill
Solicitation	The document that requests grant applications from interested parties and includes all attachments, exhibits, any addendums and written notices, and

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<sup>6</sup> <http://calepa.ca.gov/EnvJustice/GHGInvest/>

Word/Term	Definition
	questions and answers. Solicitation may be used interchangeably with grant funding opportunity.
Total allowable project costs	The sum of the Energy Commission's reimbursable share and the recipient's match share.
Very low-carbon fuels	Fuels with a carbon intensity less than 40 percent of fossil fuels.
Ultra-low-carbon fuels	Fuels with a carbon intensity of 30 gCO <sub>2</sub> e/MJ or less.

Source: California Energy Commission

# CHAPTER 2:

## Program Design

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### A. Quantification Methodology

CARB has a statutory role under SB 862 to develop guidance on a quantification methodology to estimate GHG emission reductions and other co-benefits from the LCFPP projects. Adoption of renewable fuels will reduce demand for fossil-based fuels and, thereby, reduce criteria pollutant emissions, which could improve local air quality in communities near the alternative fuel production facility.

The CARB quantification methodology and benefits calculator tool has been developed based on a review of the available science, in close coordination with the Energy Commission, as well as academic consultants and other experts as needed. The tool is posted at: [www.arb.ca.gov/cci-resources](http://www.arb.ca.gov/cci-resources). All projects funded through the LCFPP must use this method.

CARB is also developing co-benefit assessment methodologies for use in evaluating project co-benefits. CARB will incorporate co-benefits assessment methodologies into the benefits calculator tool, as feasible. CARB will also develop standalone assessment methods for co-benefits not suitable for incorporation into calculator tools. These methodologies are available at [www.arb.ca.gov/cci-cobenefits](http://www.arb.ca.gov/cci-cobenefits).

CARB may review and update quantification methodologies periodically, based on new information or public input, to make them more robust and user-friendly and ensure that they are appropriate for the projects being quantified.

### Measurement and Verification (M&V)

The LCFPP requires that GHG emission reductions be quantified as follows:

- **Initial baseline and estimated GHG emission reductions.** An applicant must first calculate a carbon intensity (CI) value for its project based on specific characteristics of the feedstocks, operating conditions at the fuel production plant, and other factors. For improvements and expansions to existing fuel production plants, the applicant shall also determine a CI value for its current fuel production pathway. These estimates of CI must be calculated using a method that conforms to CARB's Low Carbon Fuel Standard (LCFS). Estimates of GHG emission reductions must use the GHG quantification method developed by CARB, incorporated in the corresponding LCFPP Calculator Tool from the CARB website at [www.arb.ca.gov/cci-quantification](http://www.arb.ca.gov/cci-quantification). All assumptions and calculation methods to justify CI and GHG emissions must be submitted with the application. The Energy Commission will evaluate the estimates and assumptions of GHG emissions reductions and CI provided by the applicant in scoring proposals submitted for funding. The scoring criteria will favor those projects having the most potential to reduce GHG emissions cost-effectively, along with other factors such as project cost-share and benefits to priority populations.
- **Postproject determination.** Projects awarded funding will be required to monitor and verify quantities of feedstock processed, volumes of fuel produced and sold, and energy usage to verify

the GHG emissions and energy reductions attained by the low-carbon fuel production plant. Applicants may choose to contract with independent third parties, use in-house staff, or use other options. Self-certification is acceptable. The Energy Commission or its agents reserve the right to audit a sample of the projects to verify assumptions and estimates of energy savings and GHG emission reductions.

## **B. Project Selection Requirements**

### **Program Objectives**

The LCFPP will help California renewable fuel producers achieve the following:

- **Driving the future:**
  - Support new or expanded renewable ultra-low-carbon transportation fuel production projects at new and existing advanced fuel production plants to achieve major GHG emission reductions necessary to transition the transportation sector into a low-carbon future.
  - Support plants in the use of underused renewable energy resources to achieve major GHG emission reductions necessary to transition the transportation sector into a low-carbon future.

### **Eligibility Requirements**

To be eligible for funding, applicants to the LCFPP are limited to renewable fuel production plants that are located or will be located in California and must meet all the following requirements:

1. LCFPP is open to all public and private entities. To be eligible, applicants must have a business presence in California. All corporations, limited liability companies, limited partnerships, and limited liability partnerships that conduct intrastate business in California must be registered and in good standing with the California Secretary of State. Sole proprietors using a fictitious business name must be registered with the appropriate county and provide evidence of registration to the Energy Commission prior to their project being recommended for approval at an Energy Commission business meeting.
2. All eligible low-carbon fuel production plants and existing biorefineries must be in California. Project construction and operations must also occur in California. Proposed projects will assist in commercializing a technology, increase cost effectiveness of a technology, or utilize an eligible, sustainable, and underutilized feedstock, as discussed in the section on eligible feedstocks.
3. The proposed project must result in new fuel production capacity. (Existing fuel production plants must be expanded or modified to increase fuel production capacity.)
4. The proposed project must result in a renewable fuel with a calculated carbon intensity of 30 g CO<sub>2</sub>/MJ or less. The carbon intensity calculation should be consistent with a full GREET evaluation for an LCFS pathway. Eligible ultra-low-carbon fuels include diesel substitutes, gasoline substitutes, renewable hydrogen, biomethane, and electricity for transportation use.
5. The proposed project must reduce on-road motor vehicle air emissions.

6. Minimum project capacities must be at least 1 million DGE per year.

## Funding

Funding for the LCFPP will be awarded through a competitive grant solicitation as described in these guidelines. The grant solicitation will identify any minimum and maximum grant funds for projects, as well as any limitations on maximum award amounts for each project. Up to 5 percent of LCFPP funds may be retained by the Energy Commission for administrative expenses.

Projects are eligible for up to 50 percent of the total project costs or \$5 million, whichever is less.

LCFPP is open to all ultra-low-carbon fuel producers subject to limitations specified in the grant solicitation. The focus of LCFPP is to fund new or expanded renewable ultra-low-carbon transportation fuel production at advanced fuel production plants. Eligible projects include the construction of new ultra-low-carbon transportation fuel production plants and the expansion of existing ultra-low-carbon transportation fuel production plants. Eligible projects will assist in commercializing a technology, increase cost effectiveness of a technology, and/or utilize an eligible, sustainable, and underutilized feedstock. In the case of existing plants, *eligible project costs* are the costs related to the expansion or modification of the existing plants to increase ultra-low-carbon transportation fuel production. The grant can be up to 50 percent of the eligible costs and require a 50 percent match of eligible costs. The match can come from internal or other funds. If the applicant is leveraging or pursuing funding from multiple GGRF sources, the applicant must describe all existing or potential GGRF sources in his or her application materials. A letter of commitment, as described in the solicitation, will be required from all sources providing match funds. The guidelines recommend that funding should leverage private and other government investment to the maximum extent possible.

Please refer to the grant solicitation for any restriction on match funds. It is the responsibility of the applicant to review the grant solicitation requirements.

Eligible feedstocks must be organic material, not derived from fossil fuels or inorganic greenhouse gases, including, but not limited to:

- Prelandfilled waste-based biomass.
- Alternative purpose-grown crops.
- Agricultural residues.
- Biocrude.
- Woody biomass and forest residues.
- Animal manures.
- Food waste.
- The organic portion of municipal solid waste.

*Biomass* is defined as any organic material not derived from fossil fuels or inorganic greenhouse gases, including, but not limited to:

- Agricultural crops.
- Agricultural waste and residues.
- Rangeland maintenance residues.
- Biosolids.
- Sludge derived from organic matter.
- Landscape and right-of-way tree trimmings.
- Wood waste from timbering operations
- Mill residues that result from milling lumber.
- Waste pallets.
- Crates.
- Dunnage, manufacturing, and construction wood wastes.
- Wood.

Agricultural wastes and residues include, but are not limited to:

- Animal wastes.
- Remains and tallow.
- Food wastes.
- Recycled cooking oils.

Landfill gas is not an eligible feedstock; but pre-landfill waste-based biomass is eligible (e.g., the biogenic fraction of municipal solid waste [MSW]). Landfilled waste-based biomass sources are NOT eligible feedstocks because technology for landfill gas conversion is commercially available and already cost effective. Additionally, this program focuses on the use of sustainable and underutilized feedstocks.

Eligible renewable feedstocks for renewable hydrogen production include biomethane or biogas such as: biomass digester gas, sewer (wastewater) gas, municipal solid waste gas from pre-landfilled material, or other waste fuels. Systems using other waste biomass feedstocks, such as biomass waste or residues, may be eligible if the application demonstrates that the proposed system and feedstock comprise a sustainable approach and reduces GHG emissions compared to the relevant petroleum baseline determined by CARB's Low Carbon Fuel Standard (99.44 gCO<sub>2</sub>e/MJ for gasoline, 100.45 gCO<sub>2</sub>e/MJ for diesel). Water is also an eligible feedstock. However, landfill gas is not an eligible renewable feedstock.

Eligible renewable electricity sources include facilities certified through the Renewables Portfolio Standard (RPS) program as outlined in the RPS Eligibility Guidebook, Ninth Edition (Revised)<sup>7</sup>, but

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<sup>7</sup> Renewable Portfolio Standard (RPS) Eligibility Guidebook (Ninth Edition, Revised)

excluding landfill gas<sup>8</sup>. The renewable electricity shall either go directly to the hydrogen production system or be connected via the grid from an in-state RPS-certified generation facility that has its first point of interconnection within the metered boundaries of a California balancing authority area. Renewable Energy Credits must be retired in the Western Renewable Energy Generation Information System (WREGIS) for the production of hydrogen in the proposed system. Further information about WREGIS can be found at: [www.wecc.biz/WREGIS](http://www.wecc.biz/WREGIS).

The Energy Commission reserves the right to:

- Solicit proposals/ applications under separate tiers or together in a solicitation.
- Allocate the funds in phases.
- Limit the number/ amount of awards per entity.
- Limit the number of applications per organization for each grant solicitation.
- Narrow the specific pool of eligible feedstocks and fuels for a particular solicitation.
- Restrict applicant eligibility to provide heavier emphasis on fuel production plants that provide direct benefits to priority populations as identified in AB 1550.

If any of these occur, it will be described in each grant solicitation.

## Key Funding Deadlines

The Energy Commission has two years to encumber funds from the budget authorization date, and grant recipients have up to four years to spend the funds. The following are encumbrance and liquidation dates:

- All funds allocated in FY 2018/2019 budget cycle must be encumbered in awards no later than June 30, 2020. (This means approval of an award by the Energy Commission.)
- All awarded funds from FY 2018/2019 budget cycle must be spent by the recipient no later than June 30, 2024.

If future funds are allocated to LCFPP, similar funding encumbrance and liquidation requirements will be delineated in future grant solicitations.

## Solicitation Procedures

A grant solicitation will be posted on the Energy Commission's website at <https://www.energy.ca.gov/funding-opportunities/solicitations>. Subsequent solicitations, if any, will also be posted on this website.

All information necessary to submit an application will be contained in the grant solicitation and will be consistent with these guidelines. The grant solicitation will include solicitation objectives, eligibility

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<https://efiling.energy.ca.gov/getdocument.aspx?tn=217317>

<sup>8</sup> California Public Resources Code, Section 25741(a)(1)

[https://leginfo.ca.gov/faces/codes\\_displaySection.xhtml?sectionNum=25741&lawCode=PRC](https://leginfo.ca.gov/faces/codes_displaySection.xhtml?sectionNum=25741&lawCode=PRC)

requirements, schedule, scoring criteria, application form, and other required templates, along with the terms and conditions.

Energy Commission staff will hold a preapplication workshop to review the solicitation with potential applicants. Workshop attendance can be in-person or via remote access. Participation is optional but strongly encouraged. The workshop will provide an opportunity for potential applicants to ask questions on the solicitation and the application process. There will also be an opportunity for interested parties to submit written questions about the solicitation. The staff's responses to all questions will be posted on the Energy Commission's website as indicated in the solicitation. Any revisions, corrections, and clarifications on the solicitation will also be posted on the Energy Commission's website and announced through the appropriate listserv(s), such as <https://www.energy.ca.gov/programs-and-topics/programs/low-carbon-fuel-production-program>. The grant solicitation schedule and project timelines will be stated in the solicitation. The Energy Commission will post basic information about all applications received before the funding decision.

The Energy Commission may use a two-phase evaluation process. A two-phase process requires applicants to submit a preapplication abstract based on the requirements listed in the grant application. Applicants who submit preapplication abstracts that receive a passing score as described in the grant solicitation will be eligible to submit a detailed full application.

**Phase 1: Preapplication Phase**—An applicant may be required to submit a preapplication abstract before being approved to submit a full application. Preapplication abstracts will be screened and scored based on the preapplication evaluation criteria. Preapplication abstracts receiving a passing score will be eligible to submit a full application.

**Phase 2: Full Application Phase**—Applicants who receive a passing score on their preapplication abstracts will be eligible to move through to the full application phase. Full applications will be screened and scored based on the full application evaluation criteria. Evaluation criteria and process will be described in each grant solicitation.

The Energy Commission, at its sole discretion, reserves the right to use a one-phase evaluation process, if needed. A one-phase process requires applicants to submit a full application based on the requirements listed in the grant solicitation, which will be scored according to the criteria for full applications as Phase 2.

All applications will be scored according to a set of selection criteria. When scoring for the solicitation is complete for the full applications in either the one-phase or two-phase evaluation process, the applications will be ranked. A notice of proposed award (NOPA) will be released showing the rank of each applicant based on overall score, as well as information that may include applicant name, proposed project title, funds requested and staff recommended funding amount, match funding amount, whether the project is expected to provide benefits to priority populations, and score status. Funding will be awarded first to the top-ranked applicant with a passing score and then to the next-ranked applicant with a passing score until all the funds have been expended.

All applicants will be notified of the results via public posting of the NOPA on the website and potentially a listserv email blast. After the NOPA is released, the Commission agreement manager (CAM) will begin

working with the awardees to develop agreements for the awarded projects. In addition, the NOPA will be posted on the Energy Commission website at least 10 days before the Energy Commission makes a decision on the funding awards. Once the agreement is finalized, it will be presented and voted on at an Energy Commission business meeting. After approval at an Energy Commission business meeting, the agreement will be signed by all parties, and work may begin on the project.

## Project Evaluation and Administrative Screening

Applications will be evaluated and scored based on responses to the information requested in the solicitation. To evaluate applications, the Energy Commission will organize an evaluation committee consisting of Energy Commission staff. The evaluation committee may consult industry experts for application verification under an Energy Commission technical support contract; however, industry experts will not provide a score for any preapplication abstracts or full applications and will be bound by confidentiality agreements.

In the preapplication phase, preapplication abstracts will first be evaluated. Then, in the full application phase, applicants with passing preapplication abstracts may submit full applications. In each phase, materials will be evaluated in two stages: administrative/technical screening and technical scoring. Applications that do not pass all the administrative/technical screening requirements are disqualified and will not move on to the technical scoring stage. Preapplication administrative/technical screening criteria will be listed in each solicitation. Table 2 lists the categories for preapplication abstract screening that may be used for LCFPP solicitations.

**Table 2: Preapplication Abstract Administrative/Technical Screening Criteria**

<b>PREAPPLICATION ABSTRACT SCREENING CRITERIA CATEGORIES</b> <i>The application must pass ALL criteria.</i>
<b>Administrative Screening Criteria:</b> Preapplication abstracts are screened for administrative requirements like completeness, timeliness, and compliance to terms and conditions.
<b>Technical Screening Criteria:</b> Preapplication abstracts are screened for technical requirements like eligibility and minimum match requirements.

Preapplication abstracts that pass the application screening are then scored by an evaluation committee. Table 3 lists the technical scoring criteria categories that may be used, but not limited to, for LCFPP solicitations.

**Table 3: Preapplication Abstract Technical Scoring Criteria Categories**

<b>PREAPPLICATION ABSTRACT SCORING CRITERIA CATEGORIES</b>
<p><b>Project Summary</b> A discussion of the project purpose, scope, proposed technologies, and viability. This criterion identifies the project team member and their roles in the project.</p>
<p><b>Project Readiness and Implementation</b> A discussion on how the applicant has secured site control, feedstock, fuel off-take, and other partnerships, as well as CEQA compliance.</p>
<p><b>Funding Request and Cost-Effectiveness</b> The cost-effectiveness of petroleum displacement and GHG reductions per Energy Commission dollars. This includes a discussion of the need for state funding.</p>
<p><b>Priority Population Considerations</b> A discussion on how the project will provide meaningful benefits to priority populations.</p>

Preapplication abstracts receiving a passing score will be eligible to submit a full application. Table 4 lists the full application screening criteria categories that may be used for LCFPP solicitations.

**Table 4: Full Application Administrative/Technical Screening Criteria**

<b>FULL APPLICATION SCREENING CRITERIA</b> <i>The application must pass ALL criteria.</i>
<p><b>Administrative Screening Criteria:</b> Full applications are screened for administrative requirements like completeness, timeliness, and compliance to terms and conditions.</p>
<p><b>Technical Screening Criteria:</b> Full applications are screened for technical requirements like eligibility and minimum match requirements.</p>

Proposals that pass the full application screening are then scored by an evaluation committee. Table 5 lists the technical scoring criteria categories that may be used for LCFPP solicitations.

**Table 5: Full Application Technical Scoring Criteria Categories**

<b>SCORING CRITERIA CATEGORIES</b>
<p><b>Project Team Qualifications</b> A discussion on how the project team’s qualifications (including relevant expertise, experience, and skill sets) are suitable to the tasks described in the proposed scope of work.</p>
<p><b>Business Plan</b> A discussion of the technology, marketing, and financial plans to ensure the success of the project.</p>
<p><b>Project Readiness and Implementation</b> The degree to which the project has secured site control, feedstock, fuel off-take, and other partnerships, as well as CEQA compliance.</p>
<p><b>Project Budget and Cost-Effectiveness</b> Reasonableness of proposed costs and the cost-effectiveness of petroleum displacement and GHG reductions per Energy Commission dollars.</p>

<b>SCORING CRITERIA CATEGORIES</b>
<p><b>Project Benefits</b> A description on how the project will expand business opportunities, create jobs, generate state and local tax impacts, and benefit disadvantaged communities within California.</p>
<p><b>Sustainability</b> A description on how the project will preserve natural resources and reduce short-lived climate pollutants, GHG, and petroleum use.</p>
<p><b>Priority Population Considerations</b> A discussion on how the project will provide meaningful benefits to a disadvantaged or low-income community or low-income households, properly applying all definitions and requirements for making such a claim.</p>

## **C. Project Implementation Requirements**

If awarded funding, a project agreement is developed. The agreement includes a scope of work, project budget, project schedule, and terms and conditions. A CAM will be assigned to the project and will be responsible for coordinating with funding recipients to guide agreement development, provide project oversight, and serve as the Energy Commission’s point of contact for stakeholders interested in receiving more information about the project.

All recipients will be required to participate in a kick-off meeting to establish expectations, roles and responsibilities, accounting procedures, and reporting requirements; submit periodic progress reports to ensure the recipient is complying with the task schedules specified in the grant agreement; and provide required deliverables as specified in the scope of work. All meetings will be held at the Energy Commission or the project site, as determined by the CAM.

Some LCFPP projects could include one or more critical project review (CPR) meetings at a predesignated milestone(s) in which the CAM will review the progress to date and determine whether the progress to date justifies proceeding to the next phase of the project or make necessary corrections to ensure project success or both. For all projects, CAMs may call a CPR at any time during the project, if the CAM believes there is a significant issue with the progress or administration of the project that needs to be discussed and could result in a change to the project or termination.

Periodic project progress reports are required, which describe project progress to date. These reports are generally required monthly. The CAM will identify the necessary reporting frequency. A final report will document total performance for the project and will be due about three months before the agreement end date.

### **Program Recognition**

All recipients are required to post a sign at the project site recognizing project funding was provided by the Energy Commission and California Climate Investments. The recipient shall use the California Climate Investments logo and the Energy Commission logo on any project announcements, flyers, and news releases.

## D. Maximizing Benefits to Priority Populations

The Energy Commission anticipates maximizing benefits to priority populations by the following minimum percentage of funds:

- A minimum of 25 percent of the funds will be allocated to projects located within and benefiting disadvantaged communities (CalEnviroScreen 3.0 model.)<sup>9</sup>
- A minimum of 5 percent of funds to projects within and benefiting AB 1550 low-income communities (at or below 80 percent of the statewide median income).
- A minimum of 5 percent of funds to projects located within and benefiting individuals living in AB 1550 low-income communities or benefiting low-income households that are within a half-mile of a disadvantaged community.

Applicants must describe their efforts to providing direct, meaningful and assured benefits and addresses an important community need using the evaluation approach in the Section V.C.1 of the California Air Resources Board's *Funding Guidelines for Agencies That Administer California Climate Investments*: [www.arb.ca.gov/cci-fundingguidelines](http://www.arb.ca.gov/cci-fundingguidelines). See also the Priority Population Benefit Criteria Table: [www.arb.ca.gov/cci-resources](http://www.arb.ca.gov/cci-resources).

These expenditures will result in the construction of renewable fuel production plants in or benefiting disadvantaged or low-income communities or both, along with the local use of these fuels, and could result in reduced criteria and toxic air pollutant emissions and other co-benefits.

All solicitations will provide preference points for projects in and benefiting priority populations. Applicants must describe their efforts to determine and meaningfully address common needs of priority populations. Preference points will be awarded based on whether the project meets the requirements indicated in CARB guidance, available at [www.arb.ca.gov/cci-fundingguidelines](http://www.arb.ca.gov/cci-fundingguidelines).

Projects claiming to benefit priority populations must be designed to avoid substantial burdens (for example, displacement of residents and businesses in priority populations, or increased exposure to toxics or other health risks).

The interactive mapping tool to identify disadvantaged and low-income communities is posted at [www.arb.ca.gov/cci-communityinvestments](http://www.arb.ca.gov/cci-communityinvestments).

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<sup>9</sup> <http://calepa.ca.gov/EnvJustice/GHGInvest/>

# **CHAPTER 3:**

## **Administrative Requirements During Project Implementation**

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### **A. Invoicing**

Recipients may bill the Energy Commission for nonmatch portions of eligible incurred costs that appear in the approved budget (for example, paid invoice to a supplier, vendor, outside contractor) during the project. No funds shall be advanced to the recipient for any goods or services related to the project. Additional information on invoicing requirements can be found in the solicitation and the terms and conditions.

The Energy Commission shall retain 10 percent of the award amount for release at the satisfactory conclusion of the project.

### **B. Prevailing Wage**

Projects that receive an award of public funds from the Energy Commission often involve construction, alteration, demolition, installation, repair or maintenance work costing more than \$1,000. For this reason, projects that receive an award of public funds from the Energy Commission are likely to be considered public works under the California Labor Code. (See Chapter 1 of Part 7 of Division 2 of the California Labor Code, commencing with Section 1720 and Title 8, California Code of Regulations, Chapter 8, Subchapter 3, commencing with Section 16000.) Public works projects require the payment of prevailing wages. Prevailing wage rates can be significantly higher than nonprevailing wage rates. If the recipient does not believe the project is a public works project, the recipient is responsible for obtaining a legally binding determination from the California Department of Industrial Relations or a court of competent jurisdiction before work begins on the project. The recipient is fully responsible for complying with all California public works requirements, including, but not limited to, payment of prevailing wage.

If outside contractor labor is used, he or she shall be paid at the prevailing wage for the particular trade, as established by the California Department of Industrial Relations. Projects must comply with any applicable laws pertaining to prevailing wage and labor compliance.

### **C. Audits and Access to Facilities**

Upon written request from the Energy Commission, recipients must provide all project documents, including detailed documentation of all planned and paid expenses; allow the Energy Commission or its designee access to project sites and records; and allow the Energy Commission or its designee to collect project-related data, including the data required to measure and verify fuel production data and GHG emission reductions. Further, if requested, the recipient must provide the Energy Commission or its designee associated data from a period before the start of the project, as necessary, to establish baseline data, such as fuel production data and GHG emissions. Audits or program reviews may occur at any time during program implementation or after projects are completed.

All GGRF administering agencies including the Energy Commission are subject to Legislative oversight, including audits by the California State Auditor, Department of Finance, other state oversight agencies, or a third-party auditor.

## **D. Records Retention**

Recipients must retain all project records (including financial records, progress reports, payment requests, and electricity and fuel use reduction documentation) for at least three years from the date of the final payment. Recipients must include the above audit, record retention, and access rights in any subcontract or subgrant.

## **E. Use and Disclosure of Information and Records and Confidentiality**

Information received by the Energy Commission in response to a solicitation shall be kept confidential before the posting of the NOPA. However, with very few exceptions, all project documents submitted to the Energy Commission or its technical consultant(s), including as part of any audit, are considered public records subject to disclosure under the Public Records Act. The Energy Commission or other state agencies may also use any of these documents or information for any purpose, including to determine eligibility and compliance with the LCFPP, applicable law, or a particular solicitation document; to evaluate related or relevant programs or program elements; or to prepare reports. These documents and information include, but are not limited to applications for funding, the agreement itself, invoices and any documentation submitted in support of applications, all agreement deliverables, final project report and documents prepared for other reporting requirements, and materials and documents developed as part of technology transfer activities.

If the Energy Commission requires an applicant or a recipient to provide copies of records that the recipient believes contain confidential/proprietary information entitled to protection under the California Public Records Act or other law, the applicant or recipient may request that such records be designated confidential according to the Energy Commission's regulations for confidential designation, Title 20, California Code of Regulations, Section 2505.

Applicants or recipients considering requesting confidentiality should note that GGRF funds are subject to information disclosure requirements to ensure transparency. Information concerning the identity of recipients and the grant amount are public information and will be disclosed according to the California Public Records Act. This information, as well as other public information, may also be disclosed through the Energy Commission's website, another State of California agency website, or through other means.

The Energy Commission can disclose confidential information and records to other governmental entities and policing authorities for civil and criminal investigation and enforcement.

## **F. Enforcement**

The Energy Commission can take all actions necessary to enforce the Energy Commission rights.

## **Recovery of Overpayment or Misuse of Funds**

The Energy Commission may direct the Energy Commission's Office of Chief Counsel to commence formal legal action against any applicant, former applicant, or recipient to recover any portion of a payment under a grant agreement that the Executive Director determines the applicant or former applicant was not otherwise entitled to receive.

## **Fraud and Misrepresentation**

The Executive Director may initiate an investigation of any applicant that the Executive Director has reason to believe may have misstated, falsified, or misrepresented information in submitting a reservation application or payment claim or reporting any information required by these guidelines. Based on the results of the investigation, the Executive Director may take any action deemed appropriate, including, but not limited to, cancellation of the agreement, recovery of any overpayment, and, with the concurrence of the Energy Commission, recommending the Attorney General initiate an investigation and prosecution under Government Code Section 12650, et seq., or other provisions of law.

## **Noncompliance With Agreement**

The Energy Commission may seek remedies for noncompliance with agreement terms, work scope, project milestones, and estimated GHG reductions including without limitation stop work, termination, recovery of funds, or any other administrative or civil action.

## **G. LCFPP Guideline Authority**

These LCFPP Guidelines are adopted under SB 856 and Public Resources Code Section 25218(e). In SB 856, Section 67, the Administrative Procedure Act (Chapter 3.5, commencing with Section 11340, of Part 1 of Division 3 of Title 2 of the Government Code) does not apply to guidelines or other standards adopted and used by a state agency in administering an allocation of funds from the GGRF.

If future budget cycles allocate additional funds to LCFPP, these guidelines will apply, unless amended or replaced at an Energy Commission business meeting.

The latest CARB guidance is available at [www.arb.ca.gov/cci-fundingguidelines](http://www.arb.ca.gov/cci-fundingguidelines).

## **H. LCFPP Guideline Interpretation**

Nothing in these LCFPP Guidelines shall be construed to abridge the powers or authority of the Energy Commission.

## **I. Effective Date of the LCFPP Guidelines**

These LCFPP Guidelines are not effective until adopted by the Energy Commission at a publicly noticed business meeting. The Energy Commission will post the adopted guidelines on its website:

<https://www.energy.ca.gov/programs-and-topics/programs/low-carbon-fuel-production-program>.

Applicants may also obtain the LCFPP Guidelines by contacting:

California Energy Commission

Low-Carbon Fuel Production Program  
Fuels and Transportation Division  
1516 Ninth Street, MS-27  
Sacramento, CA 95814

[lowcarbonfuels@energy.ca.gov](mailto:lowcarbonfuels@energy.ca.gov)

## **J. Substantive Changes to the LCFPP Guidelines**

The Energy Commission can make changes to the LCFPP Guidelines from time to time. Changes will take effect after adoption by the Energy Commission at a publicly noticed business meeting. Substantive changes to the LCFPP, policy or design include, but are not limited to:

- Changes in evaluation criteria categories.
- Changes in funding criteria for determining award amount to conform to statutory changes.
- Changes in eligibility.

## **K. Non-substantive Changes to the LCFPP Guidelines**

If the final LCFPP Guidelines requires non-substantive changes, the Energy Commission will provide a notice of the changes to the LCFPP email listserv (lowcarbonfuels listserv) and post the amended LCFPP Guidelines on the LCFPP Web page: <https://www.energy.ca.gov/programs-and-topics/programs/low-carbon-fuel-production-program>.

# **CHAPTER 4:**

## **Project Tracking and Metrics**

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The recipient must track and document detailed project-level information as it relates to fuel production volumes, feedstock usage, GHG emission reductions, and co-benefits throughout the project term. The format in which this information is to be tracked and reported will be developed with the CAM. This information is to be retained for three years following project completion.

For further information, see the “Quantification Method” section in Chapter 2.

# CHAPTER 5:

## Reporting

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Recipients of GGRF funds must submit reports on expenditures, investment benefits, and project outcomes, per CARB guidance. Recipient shall provide a quarterly report on all projects during the term of its agreement with the Energy Commission and for a period specified by CARB to meet project outcome reporting requirements. These requirements will be specified in the solicitation and could exceed the Energy Commission's grant term.

Reporting shall follow the format provided by the Energy Commission, consistent with the project -type specific reporting requirements in CARB guidance.

Information to be reported includes, but is not limited to:

- Recipient name.
- Project description.
- Project location.
- Census tract.
- Dates: project selected and completed.
- GGRF dollars implemented.
- Leveraged and/or match funds.
- Estimated/actual total project GHG emission reductions.
- Number of jobs supported.
- Benefits to priority populations.
- Participation of small businesses and women-, minority-, disabled veteran-, and lesbian, gay, bisexual, and transgender (LGBT) -owned businesses.
- Other benefits or results.