



# LCFS Guidance



## Low Carbon Fuel Standard (LCFS) Guidance 19-02

### Cost and Revenue Reporting for Infrastructure Pathways

Revised: December 2019

#### INTRODUCTION

The California Air Resources Board's (CARB) Low Carbon Fuel Standard regulation, which appears at sections 95480 to 95503 of title 17, California Code of Regulations, is designed to reduce greenhouse gas emissions associated with the life cycle of transportation fuels used in California. CARB staff has prepared this guidance document to describe the regulatory requirements in a user-friendly format. Unlike the regulation itself, this document does not have the force of law. It is not intended to and cannot establish new mandatory requirements beyond those that are already in the LCFS Regulation, nor can it supplant, replace or amend any of the legal requirements of the regulation. Conversely, any omission or truncation of regulatory requirements does not relieve entities of their legal obligation to fully comply with all requirements of the regulation.

#### BACKGROUND

This guidance is designed to summarize and describe the requirements for quarterly reporting of cost and revenue data for generating credits under Zero-Emission Vehicle (ZEV) fueling infrastructure pathways pursuant to sections 95486.2(a)(6)(C) and 95486.2(b)(6)(B) of the LCFS Regulation.<sup>1</sup>

Starting with the first quarter of 2019, eligible applicants may apply for ZEV fueling infrastructure credit pathways, which consist of Hydrogen Refueling Infrastructure (HRI) and Direct Current (DC) Fast Charging Infrastructure (FCI) pathways. Quarterly cost and revenue data must be reported to CARB before credits will be issued to the LCFS Reporting Tool (LRT) account associated with an approved ZEV fueling infrastructure pathway.

All information submitted in the cost and revenue data report is subject to audit by CARB or a third-party approved by CARB. Entities approved for ZEV fueling infrastructure pathways must maintain supporting documents and records for ten years

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<sup>1</sup> All citations to the LCFS Regulation are to title 17 of the California Code of Regulations (CCR) sections 95480-95503.

from the time any LCFS report is submitted to CARB pursuant to section 95491.1(a) of the LCFS Regulation.

## **HRI COST AND REVENUE DATA REPORT**

The cost and revenue data for a hydrogen station approved under an HRI pathway can be reported using the ***HRI Cost and Revenue Reporting Template*** available for download on the [LCFS Guidance Documents and FAQs](#) webpage. The completed template must be uploaded as a supplemental document in the quarterly report submission. For each quarter, the reporting entity should report costs and revenues associated with each hydrogen station paid or received in that quarter, and not the cumulative costs and revenues. The “Q1” row in the template represents the first quarter in which fuel transactions are reported for credit generation under the HRI pathway within the approved HRI crediting period. All other cost and revenue occurring prior to Q1 should be captured in the “prior to Q1” row if applicable. If adequately designated, data submitted in this report will be protected as Confidential Business Information.<sup>2</sup>

**Capital expenditure (CAPEX):** This includes costs incurred by the hydrogen station owner associated with preparing the station for long-term use (transportation of equipment, installation, etc.) including costs associated with the acquisition of a long-term asset (a non-current asset). CAPEX thus includes:

- Delivered purchase price of refueling system and associated equipment<sup>3</sup>
- Delivered price of hydrogen production equipment<sup>4</sup>
- Assembly and installation costs of refueling system, hydrogen production system, and associated equipment
- Engineering costs<sup>5</sup>
- Project management costs
- Costs for making the site compliant with Americans with Disabilities Act (ADA)
- Site rental costs (during construction)
- Permitting costs
- Construction costs (including labor and material)
- Modification to station (flooring, wiring, lighting)
- Inspection of equipment and test runs
- Beautification/landscaping costs when required by permitting authority or site host (documentation must be provided to justify).

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<sup>2</sup> The definition of “confidential business information,” for the purposes of this reporting, is the same as the definition of “trade secret” found in Government Code, section 6254.7. CCR title 17, section 91011 specifies procedures for designation of trade secret/confidential business information submitted to CARB.

<sup>3</sup> If equipment is manufactured in-house, substitute this cost with the cost of manufacturing the equipment (including labor and materials).

<sup>4</sup> If equipment is manufactured in-house, substitute this cost with the cost of manufacturing the equipment (including labor and materials).

<sup>5</sup> If costs are shared between multiple stations, distribute these costs equally amongst the stations.

**Total delivered cost of hydrogen (\$):** include costs associated with obtaining hydrogen from supplier to the station and environmental attributes of the feedstock for the hydrogen.

**Average delivered cost of hydrogen (\$/kg):** Total delivered cost of hydrogen divided by the total hydrogen delivered in a given period.

**Maintenance costs (\$):** includes all costs that maintain the asset at its original conditions, including repairs, replacement of faulty hardware/equipment. This may include the cost of:

- Labor
- Material
- Planned maintenance
- Unplanned repairs
- Fees or labor associated with maintaining the rental property at an acceptable condition

**Rental costs (\$):** Costs incurred for renting the property during operation of the station.

**Other operational expenditure (OPEX):** All other costs associated with projects should be included here such as:

- Insurance
- Electricity for compression, refrigeration, lighting, electrolysis, etc.
- Water supply for onsite electrolysis
- Natural gas supply for onsite SMR
- Other labor
- Taxes
- Credit card fees

**CAPEX grant revenues (\$):** Grants, rebates, and any other subsidies including tax/fee breaks/holidays associated with the project capital expenditure.

**OPEX grant revenues (\$):** Grants, rebates, and any other subsidies including tax/fee breaks/holidays associated with the project operations and maintenance expenditure.

**Total hydrogen sale revenues (\$):** Report total revenue from the sale of hydrogen.

**Average hydrogen retail price (\$/kg):** Total hydrogen sale revenue divided by the total hydrogen sold in a given period.

**Additional notes:** Additional information stakeholders may wish to report to help CARB better understand the costs and revenues associated with the station.

## **FCI COST AND REVENUE DATA REPORT**

The cost and revenue data for DC Fast Chargers approved under an FCI application can be reported using the ***FCI Cost and Revenue Reporting Template*** available for download on the [LCFS Guidance Documents and FAQs](#) webpage. The completed template must be uploaded as a supplemental document in the quarterly report submission. For each quarter, the entity should report costs and revenues associated with each site paid or received in that quarter, and not the cumulative costs and revenues. The “Q1” row in the template represents the first quarter in which fuel transactions are reported for credit generation under the FCI pathway within the approved FCI crediting period. All other cost and revenue occurring prior to Q1 should be captured in the “prior to Q1” row if applicable. If adequately designated, data submitted in this report will be protected as Confidential Business Information.

**Capital expenditure (CAPEX):** This includes costs incurred by the FSE owner associated with preparing the site for long term use (transportation of equipment, installation, etc.) including costs associated with the acquisition of a long-term asset (a non-current asset). CAPEX thus includes:

- Delivered purchase price of charging system and associated equipment<sup>6</sup>
- Delivered price of on-site electricity generation equipment<sup>7</sup>
- Delivered price of onsite electricity storage equipment<sup>8</sup>
- Assembly and installation costs of refueling system, on-site electricity generation system, onsite electricity storage, and associated equipment
- Engineering costs<sup>9</sup>
- Project management costs
- Costs for making the site compliant with Americans with Disabilities Act (ADA)
- Site rental costs (during construction)
- Permitting costs
- Construction costs (including labor and material)
- Modification to site (flooring, wiring, lighting)
- Inspection of equipment and test runs
- Beautification/landscaping costs when required by permitting authority or site host (documentation must be provided to justify).
- Site’s share of utility upgrades.

**Total delivered cost of electricity (\$):** Include costs associated with demand charges and electricity consumption.

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<sup>6</sup> If equipment is manufactured in-house, substitute this cost with the cost of manufacturing the equipment (including labor and materials).

<sup>7</sup> If equipment is manufactured in-house, substitute this cost with the cost of manufacturing the equipment (including labor and materials).

<sup>8</sup> If equipment is manufactured in-house, substitute this cost with the cost of manufacturing the equipment (including labor and materials).

<sup>9</sup> If costs are shared between multiple sites, distribute these costs equally amongst the sites.

**Average delivered cost of electricity (\$/kWh):** Total delivered cost of electricity divided by the total kWh of electricity consumed in a given period.

**Maintenance costs (\$):** includes all costs that maintain the asset at its original conditions, including repairs, replacement of faulty hardware/equipment. This may include the cost of:

- Labor
- Material
- Planned maintenance
- Unplanned repairs
- Fees or labor associated with maintaining the rental property at an acceptable condition

**Rental costs (\$):** Costs incurred for renting the property during operation of the charging site.

**Other operational expenditure (OPEX):** All other costs associated with projects should be included here such as:

- Insurance
- Electricity for lighting
- Other labor
- Taxes
- Credit card fees

**CAPEX grant revenues (\$):** Grants, rebates and any other subsidies including tax/fee breaks/holidays associated with the project capital expenditure. This includes funding received by the utility.

**OPEX grant revenues (\$):** Grants, rebates and any other subsidies including tax/fee breaks/holidays associated with the project operations and maintenance expenditure.

**Total electricity sale revenues (\$):** Report total revenue from electricity sales for EV charging and/or from the use of charger.

**Average electricity retail price (\$/kWh):** Total dispensed electricity sale revenue divided by the total electricity dispensed for EV charging in a given period.

**Additional notes:** Additional information stakeholders may wish to report to aid CARB to better understand the costs and revenues associated with the station.

## CONTACT

If you have questions regarding the above information, please visit the [LCFS Contacts](#) webpage.