Regulation of Fuel Suppliers: Mandatory GHG Reporting and Cap-and-Trade Program

APRIL 30, 2019
California’s GHG Emissions

2016 Total CA Emissions: 429.4 MMTCO₂e

Source: CARB, 2018 Edition
California GHG Inventory
California’s Climate Change Scoping Plan

- Comprehensive strategy to meet California’s 2030 GHG target (40% below 1990 levels)
- Suite of companion measures builds on past success
  - Mobile Source Strategy - help State achieve its federal and state air quality standards
  - Sustainable Freight Action Plan
  - SB 375 – support sustainable community development
  - Enhanced Low Carbon Fuel Standard
  - SB 350 - increase renewable energy and energy efficiency
  - SB 1383 - Short-Lived Climate Pollutant Plan
  - Post-2020 Cap-and-Trade Program
- All policies interact with the transportation sector
Low Carbon Transportation Investments

**CVRP**: Consumer rebates for ZEVs, higher rebates for low-income consumers

**Transportation Equity Projects to Increase Access**: Car scrap and replace, financing assistance, and car sharing/mobility options

**HVIP**: Clean truck and bus vouchers for hybrid, zero-emission, low NOx, technologies

**Freight projects**: demonstrations and early commercial pilots for clean engines and facilities
Regulated Fuel Suppliers

- **Position holders** delivering transportation fuel across fuel terminal racks
- **Refiners** delivering fuel across racks at refineries and downstream terminals as the position holder
- **Enterers** (importers) importing finished transportation fuel outside the bulk transfer/terminal system
  - Example: a fuel distributor delivering diesel fuel from Oregon directly to California service stations
- **Importers and In-State producers** of LNG and LPG
The entity (refiner or position holder) holding title immediately upstream of the terminal or refinery rack must report the annual volume delivered across the rack.

Refiner A sells CARBOB in bulk to Company B.

Company B delivers finished fuel across the terminal rack to Company C for distribution.

Importer A sells ethanol in bulk to Company B. Delivered to terminal.

Company B is the position holder that must report the fuel.
Thresholds for Fuel Suppliers

- **Reporting Threshold**: 10,000 MT CO$_2$e
  - CARBOB: ~1.14 M gallons
  - Diesel #2: ~975 k gallons

- **Cap-and-Trade Threshold**: 25,000 MT CO$_2$e
  - CARBOB: ~2.85 M gallons
  - Diesel #2: ~2.45 M gallons
  - Third party verification required
  - Emissions from Biofuels excluded from Cap-and-Trade
## Transportation Fuels

### Reportable Fuels

<table>
<thead>
<tr>
<th>RBOB (CARBOB)—Summer</th>
<th>Distillate Fuel Oils</th>
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</thead>
<tbody>
<tr>
<td>Regular</td>
<td>Distillate No. 1</td>
</tr>
<tr>
<td>Midgrade</td>
<td>Distillate No. 2</td>
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<tr>
<td>Premium</td>
<td>Liquefied Petroleum Gas (LPG)</td>
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</tbody>
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<table>
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<tr>
<th>RBOB (CARBOB)—Winter</th>
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**Biofuels reported by entity delivering finished (blended) product across rack, and are not subject to Cap-and-Trade**

**LPG and LNG are reported by the importers and in-state producers**
Calculating Emissions from Fuels

- **Reported Data**: Fuel suppliers report the annual volume of each reportable fuel in units of barrels (bbl) for liquid fuels, and heat content (MMBtu) for LNG
  - 1 Barrel = 42 U.S. Gallons
- **Emissions Calculation**: CARB’s online reporting tool, Cal e-GGRT, uses reported data and calculates carbon dioxide equivalent (CO\textsubscript{2}e) using default emission factors for CO\textsubscript{2}, CH\textsubscript{4}, and N\textsubscript{2}O
  - Emission factors are referenced from US EPA Part 98

\[
\text{MT CO}_2\text{e} = \text{Volume (bbls)} \times [(\text{EF}_{CO2} + (\text{EF}_{CH4} \times 21) + (\text{EF}_{N2O} \times 310)]
\]
Resources

Mandatory Reporting Website:
https://ww2.arb.ca.gov/our-work/programs/mandatory-greenhouse-gas-emissions-reporting

Cap-and Trade Website:
http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm

California Climate Investments Website:
http://www.caclimateinvestments.ca.gov

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