

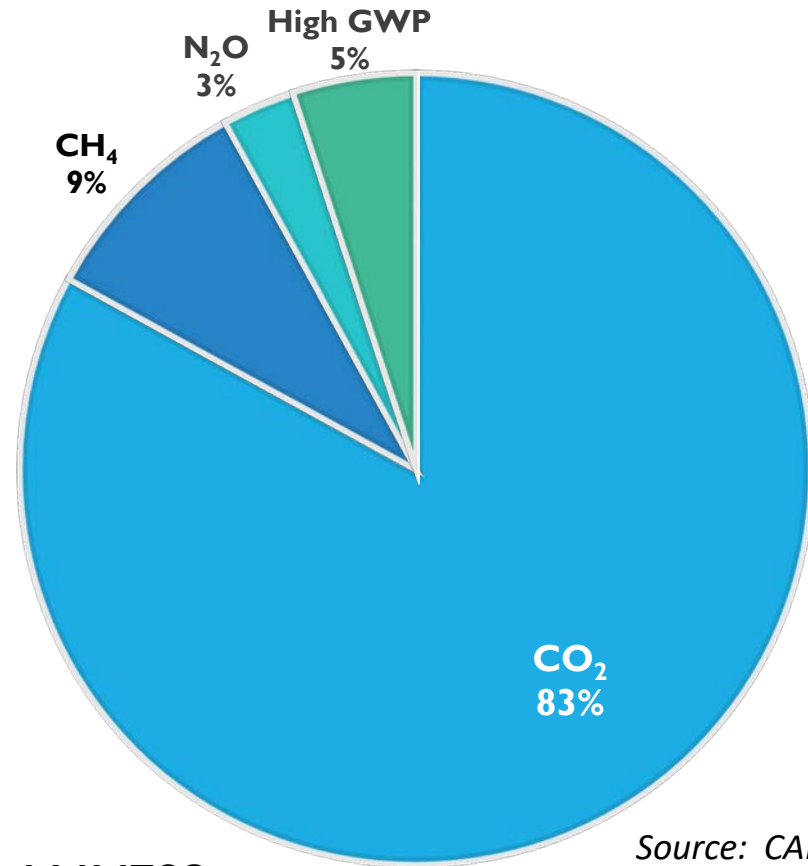
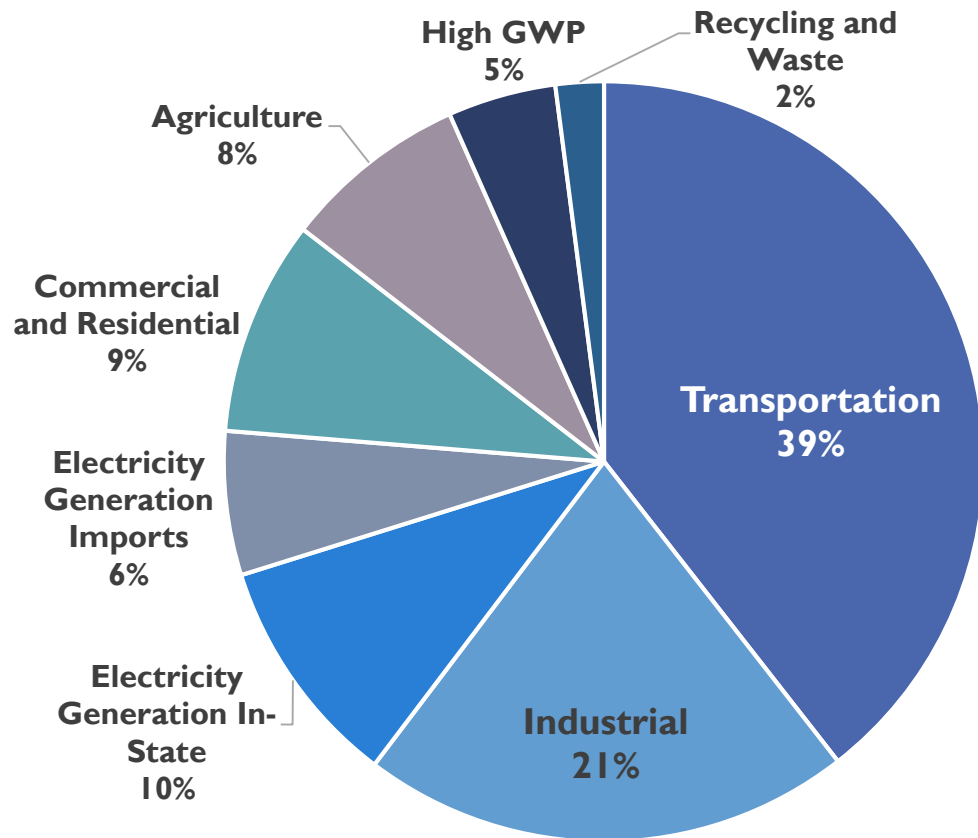
# Regulation of Fuel Suppliers: Mandatory GHG Reporting and Cap-and-Trade Program

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APRIL 30, 2019



# California's GHG Emissions



2016 Total CA Emissions: 429.4 MMTCO<sub>2</sub>e

Source: CARB, 2018 Edition California GHG Inventory

# California's Climate Change Scoping Plan

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- 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

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**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

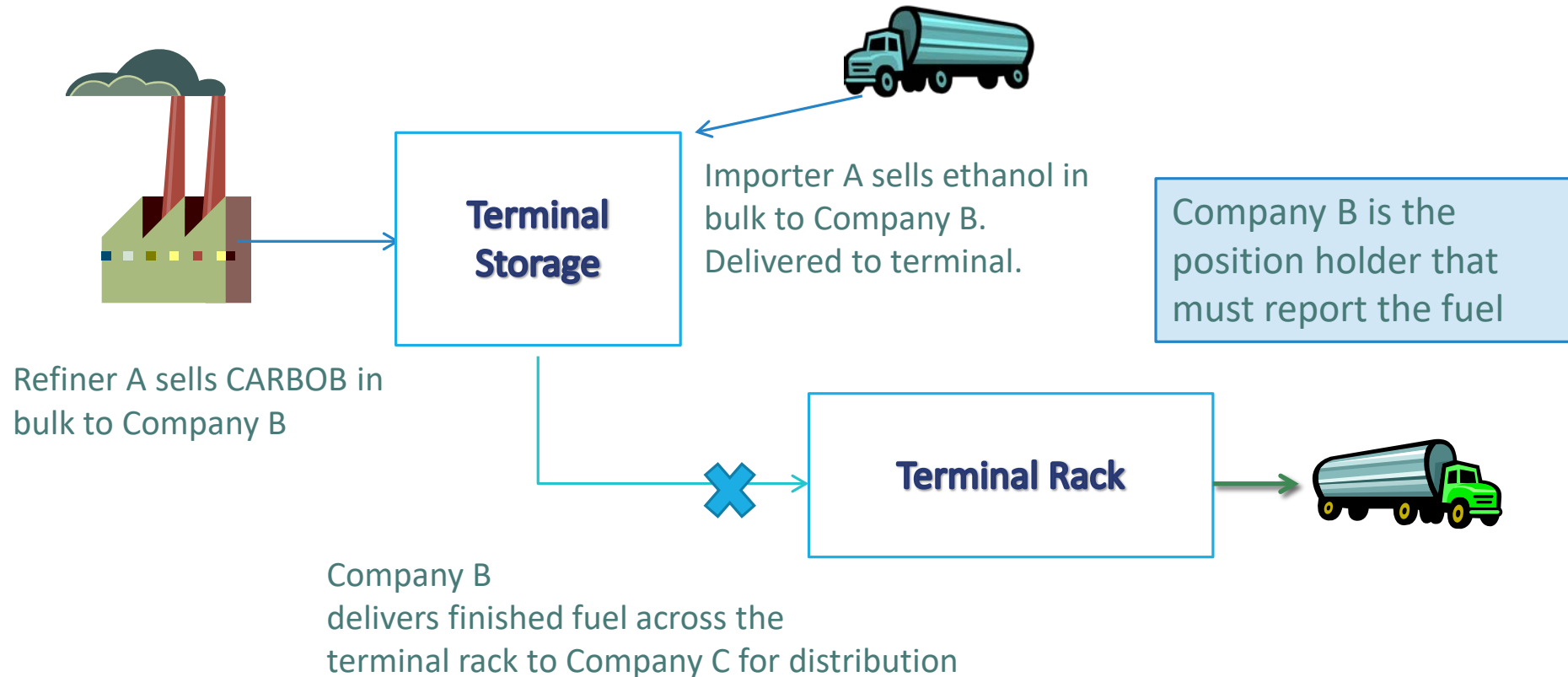
# Regulated Fuel Suppliers

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- **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

# Point of Regulation - Example

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



# Thresholds for Fuel Suppliers

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- **Reporting Threshold:** 10,000 MT CO<sub>2</sub>e
  - CARBOB: ~1.14 M gallons
  - Diesel # 2: ~ 975 k gallons
- **Cap-and-Trade Threshold:** 25,000 MT CO<sub>2</sub>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	
<b>RBOB (CARBOB)—Summer</b>	<b>Distillate Fuel Oils</b>
Regular	Distillate No. 1
Midgrade	Distillate No. 2
Premium	<b>Liquefied Petroleum Gas (LPG)</b>
<b>RBOB (CARBOB)—Winter</b>	<b>Liquefied Natural Gas (LNG)</b>
Regular	
Midgrade	
Premium	
<b>Biomass-Derived Fuel</b>	
Ethanol	
Biodiesel	
Renewable Diesel	

LPG and LNG are reported by the importers and in-state producers

Biofuels reported by entity delivering finished (blended) product across rack, and are not subject to Cap-and-Trade



# Calculating Emissions from Fuels

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- **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<sub>2</sub>e) using default emission factors for CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O
  - Emission factors are referenced from US EPA Part 98

$$\text{MT } CO_2e = \text{Volume}(bbls) \times [(EF_{CO_2} + (EF_{CH_4} \times 21) + (EF_{N_2O} \times 310))]$$

# Resources

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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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