FACTS ABOUT

Information for Entities That Take Delivery of Fuel for Fuels Phased into the Cap-and-Trade Program Beginning on January 1, 2015

Starting on January 1, 2015, the carbon pollution (greenhouse gas emissions) from fuels, such as gasoline, diesel, propane, and natural gas, was covered under the Cap-and-Trade Program. Fuel suppliers are required to purchase pollution permits to cover the carbon pollution produced when the fuel they supply is burned.

This document summarizes how the California Cap-and-Trade Program covers carbon pollution from fuels as of January 1, 2015, and describes how compliance costs may appear in fuel invoices. This information is provided to help entities that take delivery of regulated fuels (such as fleet managers for local governments and businesses) understand changes to invoicing or billing that may be occurring due to compliance with this environmental program. The information contained in this fact sheet is current as of January 12, 2015.

Cap-and-Trade Program Overview

What is the Cap-and-Trade Program?

For more than a decade, California has been leading efforts to tackle climate change and reduce carbon pollution, including through programs such as cleaner cars, renewable energy, and energy efficiency. Following the passage of the Global Warming Solutions Act of 2006, also known as "AB 32," the California Air Resources Board (ARB or Board) adopted a variety of programs to reduce carbon pollution, including the Cap-and-Trade Program. The Cap-and-Trade Program places an economy-wide "cap" on major sources of greenhouse gas emissions, such as refineries, power plants, industrial facilities and transportation fuels. To achieve the state's 2020 greenhouse gas emissions target, the cap is lowered by approximately 3 percent each year, thereby reducing total allowable greenhouse gas emissions. The Cap-and-Trade Program, in concert with the other efforts under AB 32, is designed to achieve the maximum feasible and cost-effective reductions in California greenhouse gas emissions (i.e., carbon pollution), including reducing California's emissions to 1990 levels by the year 2020.

Fuel suppliers in this program must buy pollution permits, also called "allowances," to cover their remaining carbon pollution. The more fuel suppliers can reduce their carbon pollution, the fewer allowances they will need to purchase. Allowances can be bought through quarterly auctions managed by ARB or from other program participants who want to sell allowances they already hold. In these ways, the Cap-and-Trade Program creates incentives to invest in cleaner fuels and more efficient uses of energy. The proceeds from the auctions are subject to Legislative appropriation focused on investing in projects that reduce carbon pollution in California, including investments to benefit disadvantaged communities, recycling, and sustainable transit.

Which fuels are covered under the Cap-and-Trade Program?

The carbon pollution from gasoline, diesel fuel no. 1 and no. 2, liquefied petroleum gas, and natural gas are covered under the Cap-and-Trade Program beginning January 1, 2015.

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Who is responsible for carbon pollution from fuels under the Cap-and-Trade Program?
"Fuel Suppliers" are responsible for the carbon pollution from fuels under the Cap-and-Trade Program. A fuel supplier, as defined in the Cap-and-Trade Regulation, is a supplier of petroleum products, a supplier of biomass-derived transportation fuels, a supplier of natural gas including operators of interstate and intrastate pipelines, a supplier of liquefied natural gas, or a supplier of liquefied petroleum gas. A fuel supplier must account for the carbon pollution under the Cap-and-Trade Program if they either hold an inventory position of fuel in the bulk transfer/terminal system, or import fuel into California outside the bulk transfer/terminal system.

Which fuel suppliers are subject to the Program?
The reporting threshold for fuels is different from the threshold for inclusion in the Cap-and-Trade Program. Fuel suppliers that deliver or import fuel in California with 10,000 metric tons or more of annual carbon dioxide equivalent (CO_2e) emissions have been required to report their emissions under California's Mandatory Reporting Regulation since 2012. The fuel suppliers that have reported to ARB the emissions from the fuel they have provided are included in the list of all reporting entities, which is available at: http://www.arb.ca.gov/cc/reporting/ghg-rep/reported-data/ghg-reports.htm. Additional information on reporting requirements for fuel suppliers is available at: http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/fuel-supplier.pdf.

The threshold for a fuel supplier to be covered by the Cap-and-Trade Program is annual emissions from the combustion of fuels equal to 25,000 metric tons or more of CO_2e for fuels delivered or imported into California. The fuel suppliers that have registered with ARB for the Cap-and-Trade Program are included in the list of all registered entities, which is available at: http://www.arb.ca.gov/cc/capandtrade/citss_registrants_123114.pdf.

Compliance Costs in Fuel Invoices

Fuel suppliers covered by the Cap-and-Trade Program may incorporate compliance costs into their invoices for the fuels they sell. This section provides information regarding these costs and how they may appear on invoices.

Does the Cap-and-Trade Program impose a tax on fuels?
The Cap-and-Trade Program is not a tax, nor is any tax being levied on fuels by ARB. Fuel suppliers will incur compliance costs, which will vary based on the type of fuel and the fuel supplier's cost of allowances. The flexible market-based Cap-and-Trade Program is designed to achieve the most cost-effective reductions in carbon pollution possible. Fuel providers may incorporate costs of complying with the Program into the prices for the fuels they sell.

What might I see in my invoice from a fuel supplier?
The Cap-and-Trade Regulation does not dictate whether or how to reflect any Program compliance costs on any invoices. If you purchase fuel subject to the Program, you may see a line item for a cost associated with Program compliance on your invoice. This line item is not a tax. Rather, it is an amount the fuel supplier has decided to include on its invoice to represent its compliance costs. The fuel supplier may alternatively choose to incorporate its compliance costs into the total fuel price on the invoice, without itemizing its compliance cost. If you have a contract with a fuel supplier, the manner in which such costs may appear on your invoice may be covered by the terms of your

contract. If you do not see an itemized cost on your invoice, you may wish to inquire with your fuel supplier regarding the Cap-and-Trade compliance cost they may be incorporating in your invoice.

I see a "Cap-and-Trade" charge on my invoice – How do I know if it is accurate?
The Cap-and-Trade Program does not impose a specific compliance cost. Each fuel supplier has flexibility to comply as cost-effectively as possible. Nevertheless, all fuel suppliers will be complying (at least in part) by acquiring allowances to cover the carbon pollution from the fuels they provide. Because fuels that seem similar may vary in their carbon content, it is not possible to estimate a single compliance cost per gallon. However, allowance prices may be useful for assessing the compliance costs that may appear on an invoice.

The prices for allowances purchased at ARB's quarterly auctions are shown in Summary Results Reports available at: http://www.arb.ca.gov/auction. Each auction includes allowances for the current calendar year and three years in the future to allow entities to purchase future year's allowances at current prices. In the four quarterly auctions in 2014, allowance prices ranged from \$11.48 to \$12.10 per metric ton of CO_2e for 2014 allowances and from \$11.38 to \$11.86 per metric ton for 2017 allowances. Contracts for allowances are also traded on the Intercontinental Exchange. In 2014, prices on the exchange were consistent with the auction prices. Recent contract prices can be downloaded from the exchange website.[1] Private brokers, news services, and fuel price information services also track and report on allowance prices.

Allowance prices can be expressed per gallon of fuel to help assess the compliance costs that may appear on fuel invoices.

Allowance Price Per Gallon = (Allowance Price Per Metric Ton of CO_2e) x
(Metric Tons of CO_2e Emissions Per Gallon of Fuel)

The rate of greenhouse gas emissions per gallon of fuel depends on the fuel's composition.[2]

<u>Gasoline:</u> Most California gasoline is 90 percent CARBOB[3] and 10 percent ethanol. The emissions per gallon of CARBOB and ethanol are defined in California's Mandatory Reporting Regulation, and vary slightly depending on grade and summer/winter blend of the gasoline. Using the 90%/10% gasoline blend, the emissions rate is roughly 0.008 metric tons per gallon of gasoline. With this emissions rate, an allowance price can be expressed per gallon of gasoline using the formula above. Under the Cap-and-Trade Program, ethanol has an emissions rate of roughly 0.0002 metric tons per gallon.[4] Consequently, higher ethanol blends, for example those that can be used in flexible-fuel vehicles, have lower greenhouse gas emissions and reduce Cap-and-Trade compliance costs.

<u>Diesel:</u> The emissions rate from diesel fuel also varies depending on its composition, and is approximately 0.01 metric tons per gallon for petroleum diesel. Under the Cap-and-Trade Program,

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[1] https://www.theice.com
[2] Emissions rates included below are calculated pursuant to the methods required by sections 95121 and 95122 of the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, available here: http://www.arb.ca.gov/cc/reporting/ghg-rep/regulation/mrr-regulation.htm.
[3] CARBOB = California Reformulated Blendstock for Oxygenate Blending
[4] The CO_2 emissions from ethanol, biodiesel, and renewable diesel are exempt from a compliance obligation under the Cap-and-Trade Program. The compliance obligation for these fuels types is based on the methane (CH_4) and nitrous oxide (N_2O) emissions that result from burning the fuels.

biodiesel and renewable diesel each have an emissions rate that is 0.000008 metric tons per gallon.[4] Consequently, biodiesel or renewable diesel blends generally have lower greenhouse gas emissions and reduce Cap-and-Trade compliance costs.

Propane: Similarly, allowance prices can be used for assessing the compliance costs that may appear on an invoice provided by a propane supplier. The emissions rate is roughly 0.0058 metric tons per gallon of propane. Using the same formula as above, this emissions rate can be used to express the allowance price per gallon of propane.

Whom can I contact if I believe that the fuel supplier is charging me too much for complying with the Cap-and-Trade Program?
Please contact the Cap-and-Trade Hotline at 916-322-2037. ARB is working closely with the California Attorney General's Office to investigate claims of fuel price manipulation.

Where Can I Find Additional Information and Ask Questions?
Please contact the Cap-and-Trade Hotline with any questions at 916-322-2037. Additional information will also be made publically available on the Cap-and-Trade website at: http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm.