## Oregon Clean Fuels Program

# September 2016: Program Update

## How does the program work?

The goal of the Clean Fuels Program (CFP) is to reduce the average carbon intensity of Oregon's transportation fuels by 10 percent over a 10-year period. DEQ has set a series of annual reduction targets to reach the overall goal between 2016 and 2025. Compliance with the annual targets is shown through quarterly reports submitted by Oregon producers and importers of gasoline, diesel, ethanol and biodiesel.

Each type of fuel is assigned a carbon intensity (CI) which represents the amount of greenhouse gases that are emitted over its lifecycle. If the CI of a fuel exceeds the clean fuel standard, it generates deficits; if the CI of a fuel is lower than the clean fuel standard, it generates credits. One deficit or credit equals one ton of greenhouse gases. The amount of deficits or credits generated is relative to the petroleum fuel it replaces.

At the end of the compliance period, a regulated party must have enough credits to balance out their deficits to be in compliance. A regulated party can generate their own credits by importing ethanol, biodiesel or renewable diesel or by producing or providing clean fuels such as electricity, propane, natural gas or biogas. Credits can also be purchased from other companies, including those whose sole business it is to provide clean fuels.

### What has happened so far?

Implementation of the program is proceeding smoothly. DEQ has been working with the fuels industry, fleets, local governments and the public to help ensure everyone understands and complies with the regulation.

About 75 fuel providers reported to DEQ about the volumes and types of fuels they imported, produced, dispensed or used in Oregon during the first quarter of 2016.

- Overall, there were more credits than deficits generated for the quarter, as shown in the graph to the right. A summary of the data can be found on our <a href="webpage">webpage</a> at <a href="http://www.deq.state.or.us/aq/cleanFuel/index.htm">http://www.deq.state.or.us/aq/cleanFuel/index.htm</a>.
- Fuels represented include gasoline, diesel, ethanol, biodiesel, electricity, propane and natural gas.
- The CI of the various types of ethanol reported ranged from 53.81 to 76.00 gCO2e/MJ, as compared to 100.77 gCO2e/MJ for the gasoline it replaces.
- The CI of the various types of biodiesel reported ranged from 18.18 to 62.99 gCO2e/MJ, as compared to 101.65 gCO2e/MJ of the diesel it replaces.
- No credits have been traded yet, but the system is ready to process them.

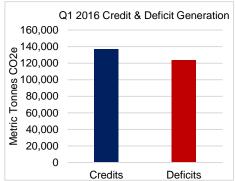


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http://www.deq.state.or. us/aq/cleanFuel/index.h tm

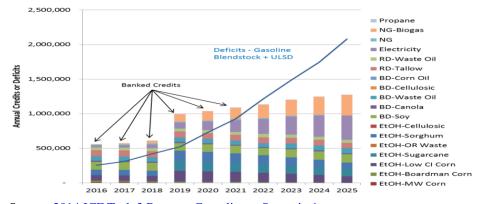
811 SW 6<sup>th</sup> Avenue Portland, OR 97204 <u>OregonCleanFuels@de</u> q.state.or.us

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### What's coming next?

<u>Forecasted Fuel Supply and Program Scenarios</u>: DEQ is hiring a contractor to assess the future supply of clean fuels, in terms of available volume and range of carbon intensities. The contractor will forecast for 2017 and develop scenarios of how the program's requirements can be met through 2025. Below is an example of similar work completed in 2014:

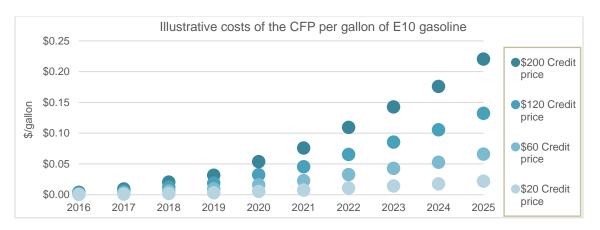


Source: 2014 ICF Task 3 Report - Compliance Scenario 1

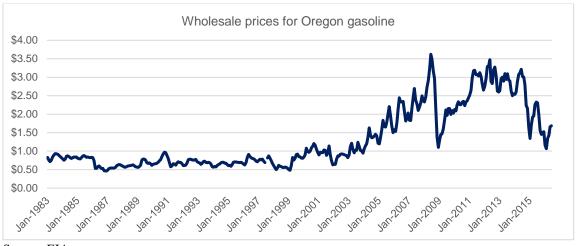
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<u>CFP Improvements Rulemaking</u>: In November, DEQ will begin rulemaking to fully implement SB 324 as adopted by the 2015 legislature and consider other additions to the CFP. The rule advisory committee will review the current cost containment mechanisms and consider additional provisions that might enhance it, following some basic concepts of cost containment such as:

- Creating additional opportunities for credit generation
- Modifying compliance requirements
- Delaying compliance requirements to a time when the costs may be lower
- Creating a hard limit on the price of compliance by capping costs or allowing for alternative compliance payments
- Creating a soft limit on the price of compliance by adding to the supply of credits if prices reach certain levels



The graph above illustrates the possible range of costs to comply with the CFP as it is currently adopted. It shows a range of credit prices and provides the maximum cost per gallon if the regulated party only purchased credits to comply. A lower cost compliance strategy would be for regulated parties to blend low-carbon biofuels. The range of credit prices shown is purely illustrative. It also reflects the range of credit prices seen in similar programs and the \$200/ton credit price trigger for California's cost containment mechanism. These program costs should also be considered in context with the fuel prices themselves, as shown over the past 20 years in the graph below:



Source: EIA

#### Want more information?

For information about the Clean Fuels Program, go to the <u>program webpage</u> at <a href="http://www.deq.state.or.us/aq/cleanFuel/index.htm">http://www.deq.state.or.us/aq/cleanFuel/index.htm</a>. For information about the rulemaking, go to the rulemaking webpage at <a href="http://www.oregon.gov/deq/RulesandRegulations/Pages/default.aspx">http://www.oregon.gov/deq/RulesandRegulations/Pages/default.aspx</a>.



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