State of Oregon
Department of Environmental Quality Memorandum

Date: Oct. 15, 2014

To: Environmental Quality Commission

From: Dick Pedersen, Director

Subject: Agenda item L, Informational item: Clean Fuels Phase 2 update
Nov. 5-7, 2014, EQC meeting

Why this is important

DEQ intends to bring the Phase 2 rules for the Oregon Clean Fuels Program for commission action in early 2015. Part of the public process for rule development is an opportunity for public comment on draft proposed rules. At the commission's request, DEQ scheduled a formal public hearing and comment opportunity before the commission as part of its November 2014 meeting. This informational item will provide additional context and program updates prior to the hearing.

Background

The Oregon Clean Fuels Program, approved by the 2009 Oregon Legislature, aims to reduce Oregon's greenhouse gas pollution by lowering the carbon content of transportation fuel used in the state. DEQ is currently implementing the program's first phase, which entails collection of data from fuel importers and producers. The commission adopted the Phase 1 rules in December 2012, with modifications in 2013 and 2014.

In February 2014, Governor John Kitzhaber directed DEQ to draft rules for the next phase of the Clean Fuels Program, which include the requirement to reduce the carbon content of Oregon's transportation fuels. The new rulemaking builds on the existing rules designed by DEQ and its Low Carbon Fuel Standards Advisory Committee in 2010. The draft proposed Phase 2 rules:

- Establish clean fuel standards to reduce greenhouse gas emissions from Oregon's transportation fuels by 10 percent over a 10-year period.
- Require importers of transportation fuels to reduce the average carbon intensity of fuels they provide in Oregon to meet the annual clean fuel standards.
- Allow providers of clean fuels to generate and sell clean fuel credits for the fuels they provide in Oregon.
- Modify the definition of fuel importer to be the owner of the fuel when it crosses into Oregon.
- Establish fuel supply and fuel price deferrals to contain the Clean

Fuels Program's costs.

DEQ convened a series of advisory committee meetings in June through August 2014 to review new information and seek input from experts on specific design elements of Oregon's program. Recommendations from that committee were considered and incorporated into the proposed draft rules presented for public comment. DEQ will consider all comments before preparing a final rule proposal for EQC consideration.

Next steps and commission involvement

DEQ has scheduled a public hearing before the commission to immediately follow the staff presentation on this topic. During the hearing, people can present their comments on the draft proposed rules directly to the commission. DEQ staff will collect all comments at the hearing and submitted before the close of the comment period Nov. 7, 2014.

DEQ intends to bring final proposed rules for commission action in January 2015.

Attachments

A. Public notice and proposed draft rules
B. Advisory committee membership list

Approved:

Lydia Emer, Operations Division

David Collier, Air Quality Planning Section

Report prepared by Cory-Ann Wind

Invitation to Comment

Clean Fuels Program Phase 2 Rulemaking

DEQ invites input on proposed permanent rule amendments to chapter 340 of the Oregon Administrative Rules.

State of Oregon Department of Environmental Quality

DEQ proposal

See far-right column to learn how to comment on this proposal. DEQ proposes to amend and adopt Oregon Clean Fuels Program rules under division 253 of chapter 340 of the Oregon Administrative Rules. The proposed phase 2 rules would:

- Implement House Bill 2186, originally passed in 2009.
- Establish clean fuel standards to reduce greenhouse gas emissions from Oregon's transportation fuels by 10 percent over a 10-year period.
- Require importers of transportation fuels to reduce the average carbon intensity of fuels they provide in Oregon to meet the annual clean fuel standards.
- Allow providers of clean fuels to generate and sell clean fuel credits for the fuels they provide in Oregon.
- Modify the definition of fuel importer to be the owner of the fuel when it crosses into Oregon.
- Establish fuel supply and fuel price deferrals to contain the Clean Fuels Program's costs.

Rulemaking goal

Oregon Environmental Quality Commission authority to adopt these rules expires in 2015 under the current legislation. The EQC adopted phase 1 fuels reporting rules in 2012. The proposed rules would provide the Oregon Legislature a fully realized and adopted clean fuels program and information needed to determine whether to lift the sunset.

DEQ requests public comment through Friday, Nov. 7, 2014 on whether to consider other options for achieving these rules' substantive goals while reducing negative economic impact of the rule on business. DEQ's statement of fiscal and economic impact is in the notice online at http://www.oregon.gov/deq/RulesandRegulations/Pages/2014/RCFPPh2.aspx

Who does this affect?

The Clean Fuels Program regulates Oregon producers and importers of transportation fuels for use in Oregon. The proposed rule defines importers as the owners of the transportation fuel when it crosses into Oregon.

Attend a hearing

DEQ invites you to attend the EQC-facilitated public hearing listed in the right-hand column. DEQ staff will present an informational item about this proposed rulemaking before the commission invites your spoken or written comment.

More information

The proposed rules and notice for this rulemaking are on DEQ's rulemaking page at: http://www.oregon.gov/deq/RulesandRegulations/Pages/2014/RCFPPh2.aspx.

Sign up for rulemaking notices

Get email updates about future DEQ proposed rules by signing up at: http://www.oregon.gov/deq/RulesandRegulations/Pages/proposedrule.aspx

What has happened so far?

Advisory committee

DEQ convened an advisory committee. Information about the committee is on http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/A2CFPPh2.aspx.

Documents used to develop proposal

DEQ relied on a number of documents to consider the need for the proposed rules and to prepare the rulemaking documents. A complete list of these documents is in the notice at http://www.oregon.gov/deq/RulesandRegulations/Pages/2014/RCFPPh2.aspx.

Submit written comments

Online
http://www.oregon.gov/deq/RulesandRegulations/Pages/comments/CFPPh2.aspx

Protected email for public university and OHSU students
mailto:Comment-CFPPh2@DEQ.state.or.usC

By mail
Oregon DEQ
Attn: Cory Ann Wind
811 SW 6th Ave.
Portland, OR 97204-1390

By fax
503-229-5675
Attn: Cory Ann Wind

At hearing
Thursday, Nov. 6, 2014
at 1:30 p.m.

Tiffany Center
1410 SW Morrison St
Portland, OR 97205

Comment deadline
Friday, Nov. 7, 2014
at 5 p.m.

Last update: 9/9/2014
Cory-Ann Wind

What will happen next?

Responses to comment

DEQ will prepare a written response to each comment or summary of similar comments received by the comment deadline. DEQ may modify the rule proposal based on the comments.

Comments or summary of comments and responses will become part of the DEQ staff report that will go to the Oregon Environmental Quality Commission for final decision.

Present proposal to the EQC

The Environmental Quality Commission is the board that reviews all proposed changes to division 340 of the Oregon Administrative Rules. The commission adopts, rejects, or adopts with changes, any proposed rule.

DEQ plans to take the completed draft proposal, including any modifications made in response to public comments, to the commission for decision at its meeting in Portland on Jan. 7-8, 2015.

Comment deadline

To consider comments on the proposed rules, DEQ must receive the comment by Friday, Nov. 7, 2014 at 5 p.m.

Accessibility information

You may review copies of web pages and documents referenced in this announcement at:

Oregon DEQ
811 SW Sixth Ave.
Portland, OR 97204-1390

Contact Cory Ann Wind at 229-5388 to schedule a review. The toll-free number in Oregon is 1-800-452-4011, ext. 5388.

Please notify DEQ of any special physical or language accommodations or if you need information in large print, Braille or another format. To make these arrangements, contact DEQ, Portland, at 503-229-5696 or call toll-free in Oregon at 1-800-452-4011, ext. 5696; fax to 503-229-6762; or email to deqinfo@deq.state.or.us. Hearing-impaired persons may call 711.

Oregon Department of Environmental Quality
Oct. 1, 2014
Notice of Proposed Rulemaking

Clean Fuels Program Phase 2 Rulemaking

Overview

Short summary

DEQ proposes to amend and adopt Oregon Clean Fuels Program rules under division 253 of chapter 340 of the Oregon Administrative Rules. The proposed phase 2 rules would:

- Implement House Bill 2186 (2009) by establishing clean fuel standards to reduce greenhouse gas emissions from Oregon's transportation fuels by 10 percent over a 10-year period.
- Require importers of transportation fuels to reduce the average carbon intensity of fuels they provide in Oregon to meet the annual clean fuel standards. To meet the standards, regulated parties would select the strategy that works best for them, such as incorporating more lower-carbon biofuels, natural gas, biogas, propane or electricity into its fuel mix, or by purchasing clean fuel credits from providers of clean fuels.
- Allow providers of clean fuels to generate and sell clean fuel credits for the fuels they provide in Oregon.
- Modify the definition of fuel importer to be the owner of the fuel when it crosses into Oregon.
- Establish fuel supply and fuel price deferrals to contain the costs of the program.

Brief history

The 2009 Oregon Legislature passed House Bill 2186 authorizing the Oregon Environmental Quality Commission to adopt rules to reduce lifecycle emissions of greenhouse gases from Oregon's transportation fuels by 10 percent over a 10-year period.

Oregon started fuels reporting (phase 1) of the Clean Fuels Program on Jan. 1, 2013 after EQC adopted rules in December 2012. Phase 1 rules require Oregon fuel producers and importers to register, keep records and report the volumes and carbon intensities of the transportation fuels they provide in Oregon.

Regulated parties

The Clean Fuels Program regulates Oregon producers and importers of transportation fuels for use in Oregon. The proposed rule defines importers as the owners of the transportation fuel when it crosses into Oregon.

Request for other options

During the public comment period, DEQ requests public comment on whether to consider other options for achieving the rules' substantive goals while reducing negative economic impact of the rule on business. Options could include:

- Different values to establish the baseline year and annual clean fuel standards;
- Different ways to ensure the program includes the most recent science regarding lifecycle emissions of greenhouse gases of transportation fuels;
- Identify who must comply with the proposed rules including how and when to retain or transfer that responsibility;
- Identify who is best suited to generate credits including how to ensure a robust credit generation process;
- Different ways to encourage providers of clean fuels to participate voluntarily in the program to generate credits; and
- Identify alternative mechanisms to control the costs of complying with the program.

Statement of need

What need would the proposed rule address?

Climate change poses a serious threat to Oregon's economy, environment and public health. Transportation sources account for approximately one third of all greenhouse gas emissions in Oregon. The goal of the Clean Fuels Program is to reduce greenhouse gas emissions from Oregon's transportation fuels.

EQC's authority to adopt these rules will expire in 2015 under the current legislation. The EQC adopted phase 1 rules in 2012, but Oregon needs phase 2 rules to provide the Oregon Legislature a fully realized and adopted clean fuels program and allow the legislature to use that information to determine whether to lift the sunset.

How would the proposed rule address the need?

The proposed rules would:

- Supplement the existing phase 1 reporting requirements;
- Implement phase 2 program requirements to reduce the average carbon intensity of Oregon's transportation fuels.
- Provide flexibility for regulated parties to comply with the Clean Fuels Program; and
- Add ways for DEQ to monitor and manage the program's impact on fuel supply and price.

How will DEQ know the rule addressed the need?

DEQ will monitor compliance with the clean fuel standard through quarterly and annual fuel reports submitted by fuel importers and providers of clean fuels. DEQ will use the information to gauge progress towards meeting the goals of the program. DEQ will also review the program periodically to make changes as necessary in response to new science or policy developments.

Program Considerations

Benefits

The primary benefit of the Clean Fuels Program is the greenhouse gas reductions from switching to lower carbon fuels. This program complements other transportation sector strategies such as clean car standards, renewable fuels standards and commitments to reduce the amount that Oregonians drive needed to achieve Oregon's climate change goals. In addition to direct potential environmental benefits from the Clean Fuels Program, reducing climate change pollution has many co-benefits including:

- **Reductions in social cost of carbon**
  The social cost of carbon is the monetized value of damages avoided when there are reductions in carbon emissions. Clean fuel standards can result in significant economic benefits by reducing the social cost of carbon in categories such as agricultural productivity, human health and flooding.

- **Improvements to public health**
  Using clean fuels decreases greenhouse gas emissions and levels of criteria air pollutants, specifically nitrogen oxides, NOx, and particulate matter, PM. Research links NOx and PM to an array of respiratory and heart problems, especially in sensitive populations such as children and the elderly.

- **Increased energy security**
  Increased use of clean fuels will displace fuels produced from petroleum sources. This can improve energy security by reducing the continued risk associated with crude oil supplied from historically unstable regions.

ICF International's recent study titled "California's Low Carbon Fuel Standard: Compliance Outlook & Economic Impacts" monetized the values of the co-benefits described above. Since DEQ did not perform an independent analysis of these impacts, DEQ did not include monetized values in the fiscal and economic impact analysis below.

Cost containment deferrals

The proposed phase 2 rules provide cost containment to assure decision makers and the public that Oregon's Clean Fuels Program is sensitive to: 1) the ability for regulated parties to comply with the regulation and 2) the potential impacts the regulation may have on fuel prices.

DEQ designed a suite of mechanisms designed to allow the program to respond and adjust requirements if Oregon experiences fuel shortages or excessive fuel price increases. DEQ proposes three mechanisms to monitor and evaluate the supply of clean fuels and the price of fuels.

1. Forecasted Deferral Due to Fuel Supply ensures an adequate supply of clean fuels to comply with the clean fuel standards in the next year. This deferral allows DEQ to act proactively to defer requirements and prevent compliance problems before they occur, if there are fuel supply problems.

2. Emergency Deferral Due to Fuel Supply responds to an unanticipated shortage of lower carbon fuel supplies. This deferral allows DEQ to act rapidly to respond to an emergency related to the production or transportation of clean fuels.

3. Fuel Price Deferral ensures that fuel prices in Oregon remain competitive with neighboring states without a low carbon fuel standard. This deferral requires DEQ to defer, amend or suspend program requirements if the Clean Fuels Program is the underlying cause of any significant fuel price increase.

DEQ anticipates the most likely cause of a price increase caused by the program would be due to competition over a limited supply of clean fuels; therefore, the fuel price deferral in 3 above would act as a backstop to the fuel supply deferrals in 1 and 2 above. Though these safeguards will not prevent all future increases in fuel prices, DEQ expects the fuels supply deferrals above would identify and mitigate any potential for significant price increases before DEQ detects any actual effect on prices in Oregon.

Transportation fuels' retail price has varied dramatically in the past and will continue to vary in the future depending on a wide array of factors such as global oil supply and demand, natural and man-made disasters, geo-political unrest, operational problems at primary oil refineries serving Oregon, and the business strategies of individual petroleum companies. Oregon did not design the Clean Fuels Program to address these risks, but it provides safeguards to help manage the risk of price increases that may occur due to program implementation.

Other cost containment approaches

The California Air Resources Board (CARB), which has already adopted and is implementing standards similar to those EQC is considering in this rulemaking, is considering updates to its regulation to add cost containment measures into its comparable program, but has not yet adopted a specific approach. Discussions about California's cost containment provisions are available at http://www.arb.ca.gov/fuels/lcfs/lcfs_meetings/030714lcfsconceptpaper.pdf.

DEQ is tracking California's development of cost containment mechanisms. If CARB develops mechanisms that DEQ believes will be implementable and beneficial to Oregon, the Clean Fuels Program could propose future rules to incorporate similar mechanisms. Any such proposal, of course, would require an assessment of EQC's rulemaking authority and a full public rulemaking process including evaluating the fiscal impacts, public comment and action by EQC.

Rules affected, authorities, supporting documents

Lead division, section	Program or activity
Environmental Solutions Division Air Quality Planning Section	Oregon Clean Fuels Program

Chapter 340 action

Adopt	OAR 340-253-0620, OAR 340-253-1050, OAR 340-253-2000, OAR 340-253-2100, OAR 340-253-2200OAR 340-253-3060, OAR 340-253-3070, OAR 340-253-8080
Amend	OAR 340-253-0000, OAR 340-253-0040, OAR 340-253-0060, OAR 340-253-0100, OAR 340-253-0200, OAR 340-253-0250, OAR 340-253-0310, OAR 340-253-0320, OAR 340-253-0330, OAR 340-253-0340, OAR 340-253-0400, OAR 340-253-0450, OAR 340-253-0500, OAR 340-253-0600, OAR 340-253-0630, OAR 340-253-0650, OAR 340-253-1000, OAR 340-253-1010, OAR 340-253-1020, OAR 340-253-1030
Amend and Renumber	OAR 340-253-3010 to 340-253-8010, OAR 340-253-3020 to 340-253-8020, OAR 340-253-3030 to 340-253-8030, OAR 340-253-3040 to 340-253-8040, OAR 340-253-3050 to 340-253-8050

Statutory authority

ORS 468.020; Sec. 6 of Oregon Laws 2009, chapter 754, also referred to as House Bill 2186 (2009)

Statute implemented

Sec. 6 of Oregon Laws 2009, chapter 754, also referred to as House Bill 2186 (2009)

Legislation

House Bill 2186 (2009)

Documents relied on for rulemaking ORS 183.335(2)(b)(C)

Document title	Document location
Oregon Low Carbon Fuel Standards Advisory Committee Process and Program Design Final Report (2010)	http://www.deq.state.or.us/aq/cleanFuel/ruleprocess.htm
Oregon Clean Fuels Program Phase 1 Rulemaking materials (2012)	http://www.deq.state.or.us/regulations/2012AdoptedRules.htm
Oregon Clean Fuels Program Phase 1 Updates Temporary Rulemaking materials (2013)	http://www.oregon.gov/deq/RulesandRegulations/Pages/2013/CFPPh1.aspx
Oregon Clean Fuels Program Phase 1 Updates Permanent Rulemaking materials (2014)	http://www.oregon.gov/deq/RulesandRegulations/Pages/2014/adopted2014.aspx
Oregon Clean Fuels Program Phase 2 Rulemaking Advisory Committee (2014)	http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/A2CFPPh2.aspx
ICF contract deliverables (Task 1 memo, Task 2 report, Task 3 report)	http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/A2CFPPh2.aspx
Applications from registered regulated parties for the Oregon Clean Fuels Program	Program files located at: DEQ Headquarters 811 SW 6th Avenue Portland OR 97204
California Low Carbon Fuel Standard regulation and rulemaking documents	http://www.arb.ca.gov/fuels/lcfs/lcfs.htm
British Columbia Low Carbon Fuel Requirements regulation	http://www.empr.gov.bc.ca/RET/RLCFRR/Pages/default.aspx

Fee Analysis

This rulemaking does not involve fees.

Statement of fiscal and economic impact

ORS 183.335 (2)(b)(E)

Fiscal and Economic Impact

The Oregon Clean Fuels Program is a technology neutral, market-based regulatory approach to reduce carbon pollution from transportation fuels. The program does not mandate the use of any particular type of fuel or technology. Instead, it defines a performance standard to reduce the average carbon intensity of fuels sold by ten percent over ten years. The proposed rules offer many strategies for meeting the clean fuel standards by allowing each regulated party the flexibility to use any combination of these strategies to meet its particular circumstance, perspective and business needs. California and British Columbia are implementing similar programs.

The flexibility in this regulatory approach makes it difficult to estimate the fiscal and economic costs to individual regulated parties or fuel consumers. The cost to comply with the standards would depend on each regulated party's unique compliance strategy and the future availability and cost of clean fuels and clean fuel credits. Future market forces could influence these factors. There are basic program design elements that can minimize and contain costs and help ensure the economic benefits of the program.

Ten-Year Phase-In Period of the Clean Fuels Program

DEQ's Clean Fuels Program Phase 2 Rules Advisory Committee raised questions about when Oregon must implement the Clean Fuels Program. After consulting with the Oregon Department of Justice, DEQ concluded that EQC has statutory authority to adopt Oregon's implementation schedule to achieve 10 percent reduction in fuel carbon content by the end of a 10 year period. Therefore, DEQ proposes to implement the clean fuels standards in the 2015 to 2025 timeframe.

Sec. 6 of Oregon Laws 2009, chapter 754 grants EQC this authority and states, EQC "may" adopt various features as part of the program to achieve a 10 percent reduction in fuel carbon content, "including but not limited to..." a ten-year phase-in schedule. While the statute, adopted in 2009, anticipates this ten-year period ending in 2020, the clear intent for the program is to have a ten-year phase-in period. This is also consistent with the phase in schedules of California and British Columbia's programs. DEQ concludes it is infeasible to require a 10 percent reduction in fuel carbon content in five years (2015 to 2020). Therefore, DEQ proposes a ten-year phase in period, consistent with statutory authority, of 2015 to 2025.

Potential Impact on Fuel Prices

To estimate the potential fiscal and economic impact of the proposed rule on the price of fuel, DEQ reviewed studies, including the documents in the table below. This table includes a range of potential fuel price impacts that DEQ considered. Details about assumptions used to estimate the fuel price impacts are in each study. The estimated price impacts below reflect potential price increases at the end of the ten-year phase-in period.

Document	Potential Fuel Price Impacts
California's Low Carbon Fuel Standard: Compliance Outlook & Economic Impacts ICF International, 2014	$0.06 to $0.19 per gallon
Understanding the impact of AB 32 Boston Consulting Group, 2012	$0.33 - $1.06 per gallon
Low Carbon Fuel Standard Clarifications Leidos, 2014	$0.04 to $0.06 per gallon

DEQ used a fuel price range of $.04 to $0.19 to characterize the potential impact of the program on future fuel prices by the end of the ten-year period after consulting with experts in the fuels market including other agencies and academic institutions. DEQ also considered the Expert Evaluation of the Report "Understanding the Impacts of AB32" from the UC Davis Policy Institute for Energy, Economy and the Environment, 2013. DEQ concluded the assumptions used to develop fuel prices in the ICF International and Leidos studies are more likely to occur for Oregon than the assumptions that the Boston Consulting Group used.

Potential Impact on Fuel Consumers

Fuel consumers could experience both positive and negative indirect costs as regulated parties pass their savings and costs to the public through the retail price of fuels. For example, if the price of clean fuels were less than the fuels they replace, then the retail fuel price should decrease. Conversely, if the price of clean fuels were greater than the fuels they replace or if regulated parties had to purchase credits to comply with the standards, the price at the pump could increase. This could cause a ripple effect throughout the general economy as businesses react to changes in fuel costs. Businesses that realize fuel savings through investment in lower cost alternative fuels are likely to grow. Conversely, businesses with higher fuel costs could have increased difficulty managing their profitability.

The proposed deferral mechanisms allow DEQ to monitor fuel prices and provide the ability to amend or defer program requirements if Oregon fuel prices cannot compete with nearby states that do not have a clean fuel policy. The trigger for the proposed fuel price deferrals is approximately 5 percent of the retail price of the fuel; approximately $0.20 for fuel that is $4.00 per gallon fuel.

Potential Impact to the Oregon Economy

In 2010, Jack Faucett Associates analyzed the macroeconomic impact of an Oregon low carbon fuel standard (http://www.deq.state.or.us/aq/committees/docs/lcfs/appendixDeconimpact.pdf.) While the 2014 ICF International compliance scenario analysis updated many of the numerical factors from that study, the basic conclusion of the Jack Faucett study remains the same. Jack Faucett Associates concluded that:

- To achieve compliance, significant investment in infrastructure and fuel production capacity results in an influx of economic activity, including growth in employment, income and gross state product.
- Positive economic impacts in Oregon stem from importing less petroleum fuel.
- Many of the lower carbon fuels that replace gasoline and diesel cost less and would result in lower costs at the pump for fuel users.

Statement of Cost of Compliance

Regulated Parties

The Clean Fuels Program currently regulates 61 businesses. DEQ estimates the proposed rules could remove about 12 existing businesses and add about 40 new businesses. Regulated parties are:

- *Importers of Transportation Fuels*

  Businesses that import gasoline, ethanol, diesel fuel, biodiesel and biomass-based diesel for use as a transportation fuel in Oregon are the largest group of regulated parties. These businesses must register with DEQ, keep records and submit reports described under Administrative Costs below and meet the annual clean fuel standards. The cost of compliance would vary for each regulated party depending on their compliance strategy described under Costs to Reduce Carbon below.

  Businesses that import less than 250,000 gallons per year of transportation fuel must register with DEQ, but do not need to keep records, submit reports or meet the clean fuel standards.

- *Producers of Transportation Fuels*

  Currently, there are no producers of gasoline or diesel fuel located in Oregon. One business produces ethanol and one produces biodiesel. Both would be regulated parties that must register with DEQ, keep records and submit reports described under Administrative Costs below. However, since the biofuels they produce already meet the proposed clean fuel standards, there are no additional costs associated with reducing carbon. They could also generate credits and benefit from the sale of those credits.

Providers of Clean Fuels – Credit Generators and Credit Aggregators

Clean fuels include natural gas, biomethane, propane, electricity and hydrogen. The proposed rules do not require providers of clean fuels to participate because they are not regulated parties, but the proposed rules designate the party who is eligible to generate credits if they choose to. Any business that elects to participate in the program must register with DEQ, keep records and submit reports described under Administrative Costs below. There are also costs associated with Transacting Credits as described below. Revenue from the sale of credits is a benefit to a provider of clean fuel. The price of credits in California ranged from $17 - $70 per metric tonne of CO2e since 2012.

To estimate the number of businesses that could generate credits, DEQ identified the following suppliers of alternative fuels for use in Oregon listed in US Department of Energy's Alternative Fueling Station Locater as of September 2014:

- 413 locations containing 988 chargers that supply electricity;
- 14 locations that supply compressed natural gas (CNG);
- 1 location that supplies liquefied natural gas (LNG); and
- 31 locations that supply liquefied petroleum gas (LPG) otherwise known as propane.

A variety of business types could become credit generators including, but not limited to, the following:

- Businesses, local governments, school districts and transit agencies that own alternative fuel fleets and dispensing infrastructure;
- Auto manufacturers that own electric charging stations;
- Businesses that provide chargers for their employees to charge their electric vehicles during work hours; and
- Utilities that help businesses provide fuel and infrastructure.

General Direct Costs

- *Costs to Reduce Carbon*

  To achieve the clean fuel standards, each regulated party could provide greater volumes of clean fuels, blend different types of clean fuels or purchase credits from providers of clean fuels. These options would have varying costs, some could increase and others could decrease. Many lower carbon fuels are cheaper than the gasoline and diesel fuel they replace while others are more expensive. Many alternative fuels also require investment in dispensing infrastructure or vehicles.

  While forecasting the price and carbon intensity values of fuels in 2025 is not possible, DEQ made the following assumptions about how one could quantify the potential cost to reduce carbon. In order to estimate the cost of purchasing clean fuel credits to comply, DEQ used the following information:

  1. The proposed clean fuel standards between 2015 and 2025;
  2. The energy density of gasoline and diesel; and
  3. A reasonable range of clean fuel credit prices.

  The equation is:

$$(Standard_{Year\ X+1} - Standard_{Year\ x})\ \frac{gCO2e}{MJ} \times Energy\ Density\ \frac{MJ}{gal} \times \frac{MT}{1{,}000{,}000\ g} \times Credit\ price\ \frac{\$}{MT}$$

The following table is the result using the method above to calculate the for three credit prices:

Potential Cost to Reduce Carbon (in dollars/gallon)			
	Credit Price ($ per metric ton of CO2e)		
	@ $35/MT	@ $100/MT	@ $150/MT
2025	.0373	.1065	.1598
Average over 2015 - 2025	.0130	.0370	.0556

For example, the table above illustrates that with a credit price of $35 per ton, the incremental increased cost to a gallon of fuel in the year 2025 would be about 4 cents. Over the full ten-year program period of 2015 to 2025, the average incremental cost increase, at $35/ton credit price, is about one cent per gallon.

DEQ considers purchasing credits on the open market would be the highest cost strategy for meeting compliance since it is typically more volatile than long-term contracts with fuel suppliers. DEQ anticipates that most compliance strategies would involve purchasing and blending lower or competitively priced clean fuels combined with the purchase of some credits. The regulated party would incur the costs of purchasing credits to comply and providers of clean fuel would benefit from the sale of credits illustrated in the table above. DEQ is unable to estimate how these parties would pass any costs or benefits to fuel consumers.

- *Administrative Costs*

  DEQ developed an estimate of the initial administrative costs to comply with the Clean Fuels Program during the phase 1 rulemaking in 2012. The fiscal and economic impact from that rulemaking estimated one-time costs to register, keep records and submit reports based on:

  - 20 business days, 160 hours, of labor;
  - hourly wage of $65 per hour;
  - one-time labor cost of $10,400 per business; and
  - $20,000 in one-time IT costs.

  Businesses currently registered with DEQ already incurred the initial administrative costs. However, since the proposed rule would change the definition of businesses that the program regulates, some newly regulated businesses would incur the initial administrative costs. In addition, some businesses currently registered and reporting to DEQ would no longer be subject to the program, eliminating any costs of compliance for those businesses.

  In addition to the initial costs, there are on-going costs to keep records and submit reports that all businesses participating in the program would incur.

  - **Registration**

    Regulated parties and providers of clean fuels that voluntarily participate in the program to generate credits must register with DEQ. This is a one-time requirement, unless changes to the registration information trigger a modification.

  - **Recordkeeping**

    A regulated party must maintain records for each individual fuel transaction. Most businesses already keep records such as invoices and bills of lading that are equivalent to the recordkeeping requirements of this program, but there would be an increase in work to comply with this requirement.

  - **Reporting**

    Regulated parties must submit quarterly and annual reports using the DEQ on-line reporting tool. Most businesses have staff assigned to do similar tasks such as other regulatory reporting requirements and filing taxes that are equivalent to the reporting requirements of this program, but there would be an increase in work to comply with this requirement.

DEQ developed an estimate of the ongoing costs to comply with the Clean Fuels Program during phase 1 rulemaking in 2012. The fiscal and economic impact from that rulemaking estimated ongoing costs to comply with registration, recordkeeping and reporting based on:

- 13 business days, 104 hours, of labor;
- hourly wage of $65 per hour; and
- on-going annual labor cost of $6,760 per business.

Members of the phase 2 Clean Fuels Program Advisory Committee commented that these estimates for administrative costs are too low and should be adjusted to reflect the work of 0.5 full time equivalent employee or approximately $30,000 based on phase 1 implementation. DEQ acknowledges the committee based its comments on the experience of blendstock importers. Specifically, they import biodiesel and ethanol, which need to be traced back to their producers via invoices or bills of lading to document the carbon intensity value of each fuel for every transaction. This is different from the workload for importers of finished fuels that could use statewide carbon intensity values listed in lookup tables.

There are additional variables that could affect the administrative costs for an individual business including, but not limited to, businesses that:

- Participate in California's program. These businesses would incur lower costs to comply with the Oregon program than businesses that do not. For example, SeQuential Biodiesel estimates that they spend approximately 5 to 10 hours per month to comply with California requirements and about the same to comply with Oregon requirements. This is far below the Oregon fuel distributors' recommended estimate.

- Have suppliers and customers that participate in the California program. These businesses are already familiar with the required recordkeeping and would be more prepared to support their business partners in the Oregon program.

- Participate in EPA's Renewable Fuel Standards program. These businesses would encounter minimal additional costs to comply with the Oregon program because much of the information is identical.

- Currently report fuel information to DEQ or another agency. These businesses already have staff familiar with reporting and would unlikely need additional labor.

All participants in the program would incur the following administrative costs.

- **Credit Generation**

  Regulated parties and providers of clean fuels would incur costs to ensure that the generation of credits is legitimate and accurate. These costs would be similar to the recordkeeping and reporting costs described above.

- **Credit Transaction**

  Regulated parties and providers of clean fuels would incur costs to document any transfer of generated credits to another party. There is no transaction fee, but there are documentation

requirements to ensure that the transaction is legitimate and accurate. These costs would be similar to the recordkeeping and reporting costs described above.

Impacts to Various Parties

Oregon Department of Environmental Quality

Direct Impacts: As part of its 2015 – 2017 Agency Request Budget, DEQ requested new resources to implement the Clean Fuels Program. Based on program experience to date and that of other governments operating similar programs, DEQ expects implementation would require three new positions, approximately 2.19 FTE phased-in, plus funding for professional services contracts for analytical studies and information system modifications.

The program would need General Fund dollars to support the work. There is no known fee or federal funding to implement the Clean Fuels Program.

DEQ anticipates the need for additional contract funding to customize the California reporting and credit transaction tool to meet Oregon needs and perform on-going system updates. The estimated cost of this work is $75,000. DEQ also anticipates Oregon could need to contract with experts about the future availability of clean fuels and any new cost containment options. DEQ estimates these costs could be about $125,000. DEQ expects to incur periodic costs from the Oregon Department of Justice to advise the Oregon Clean Fuels Program, but cannot accurately estimate those costs at this time.

Other state and federal agencies

Direct Impacts: The Clean Fuels Program does not impose direct fiscal or economic effects on state or federal agencies, unless the agency imports transportation fuel or provides clean fuels. If so, see the discussions about Providers of Clean Fuels above (Page 11) and General Direct Costs above (Page 12).

Indirect Impacts: State and federal agencies are fuel consumers. See the discussions about Potential Impact on Fuel Prices above (Page 9) and Potential Impact on Fuel Consumers above (Page 10).

Local governments

Direct Impacts: The Clean Fuel Program does not impose direct fiscal or economic effects on local governments, unless the local government imports transportation fuel or provides clean fuels. If so, see the discussions about Providers of Clean Fuels above (Page 11) and General Direct Costs above (Page 12).

Indirect Impacts: Local governments are fuel consumers. See the discussions about Potential Impact on Fuel Prices above (Page 9) and Potential Impact on Fuel Consumers above (Page 10).

Public

Direct Impacts: There are no direct fiscal or economic effects imposed by the Clean Fuels Program on the public.

Indirect Impacts: Members of the public purchase fuel for their personal vehicles and off-road equipment like recreational watercraft and generators. See the discussions about Potential Impact on Fuel Prices above (Page 9) and Potential Impact on Fuel Consumers above (Page 10).

Large businesses - businesses with more than 50 employees

There are currently 25 large businesses registered with the program, primarily fuel terminal operators and fuel marketers. Using currently available information, DEQ estimates the proposed rules would not regulate additional large businesses or remove any from the regulated parties list.

Direct Impacts: See the discussions about General Direct Costs above (Page 12).

Large businesses also provide clean fuels and may either be regulated parties or voluntarily participate in the program to generate credits. Examples include fuel terminals that import lower carbon ethanol or biodiesel; auto manufacturers that help businesses purchase electric vehicles and chargers; or utilities that provide fossil or bio-based liquefied or compressed natural gas for use as a transportation fuel.

Direct Impacts: See the discussion about Providers of Clean Fuels above (Page 11).

Indirect Impacts: Large businesses are fuel consumers. See the discussions about Potential Impact on Fuel Prices above (Page 9) and Potential Impact on Fuel Consumers above (Page 10).

Small businesses – businesses with 50 or fewer employees ORS 183.336

There are currently 36 small businesses registered with the program, primarily fuel distributors and biofuel producers.

Direct Impacts on providers of conventional petroleum fuels: See the discussions about General Direct Costs above (Page 12). Fuel distributors located on borders with states that do not have a similar requirement could be at a competitive disadvantage due to additional regulatory costs.

Direct Impacts on providers of clean fuels: See the discussions about Providers of Clean Fuels above (Page 11). Small businesses provide clean fuels and may either be regulated parties or voluntarily participate in the program to generate credits. These small businesses could experience an economic benefit from selling credits.

Indirect Impacts: Small businesses are fuel consumers. See the discussions about Potential Impact on Fuel Prices above (Page 9) and Potential Impact on Fuel Consumers above (Page 10).

a. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.	Using currently available information, the proposed rules could regulate an additional 40 small businesses, but also remove 12 small businesses from the regulation. Small businesses may provide clean fuels and participate voluntary in the program. Examples include businesses that own equipment to dispense natural gas or propane to fleets like garbage trucks, school buses and delivery trucks.
b. Projected reporting,	Small businesses would incur Administrative Costs as

recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.	described in the discussions about General Direct Costs above (Page 12).
c. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.	Small businesses would incur Administrative Costs as described in the discussions about General Direct Costs above (Page 12).
d. Describe how DEQ involved small businesses in developing this proposed rule.	DEQ convened a 21-member advisory committee that included small businesses to discuss the design of the Oregon Clean Fuels Program. See Advisory Committee discussion below.

Documents relied on for fiscal and economic impact

Document title	Document location
Registration and reporting information from the registered regulated parties	Program files located at: DEQ headquarters 811 SW 6th Avenue Portland OR 97204
Clean Fuels Program Phase 1 Rulemaking - Statement of Need and Fiscal Impact (page 124), Dec. 2012	http://www.deq.state.or.us/about/eqc/agendas/attachments/2012dec/ItemN_Attachments.pdf
California's Low Carbon Fuel Standard: Compliance Outlook & Economic Impacts (ICF International, 2014)	DEQ headquarters
Advisory committee meeting summary	http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/A2CFPPh2.aspx
Economic Impact Analysis of the Low-Carbon Fuel Standard Rule for the State of Oregon (Jack Faucett Associates, Inc., 2010)	http://www.deq.state.or.us/aq/committees/docs/lcfs/appendixDeconimpact.pdf
California's Low Carbon Fuel Standard: Compliance Outlook for 2020 (ICF International, 2012)	http://www.caletc.com/wp-content/downloads/LCFSReportJune.pdf
Understanding the impact of AB 32 (Boston Consulting Group, 2012)	http://www.deq.state.or.us/aq/cleanFuel/docs/IndividualCommenters7.pdf
Low Carbon Fuel Standard feasibility assessment (Boston Consulting Group, 2014)	DEQ headquarters
Evaluation of Comprehensive GHG Emission Reduction Programs Outside of Washington (Leidos, 2013)	http://www.governor.wa.gov/issues/economy/climateWorkgroup/documents/Leidos_Task4_20131014.pdf
Low Carbon Fuel Standard Clarifications (Leidos, 2014)	http://www.theolympian.com/2014/03/04/3015675/consultant-says-clean-fuels-standard.html
Expert Evaluation of the Report: "Understanding the Impacts of AB32" (UC Davis Policy Institute for Energy, Economy and the Environment, 2013)	http://policyinstitute.ucdavis.edu/files/general/pdf/2013-05-09_Expert-Evaluation-of-BCG-Report.pdf

Advisory Committee

DEQ appointed an advisory committee to provide input on the proposed rules and make recommendations on this fiscal and economic impact statement.

To comply with ORS 183.333, DEQ asked for the committee's recommendations on:

- Whether the proposed rules would have a fiscal impact,
- The extent of the impact, and
- Whether the proposed rules would have a significant impact on small businesses and complies with ORS 183.540.

The committee reviewed the draft fiscal and economic impact statement and its recommendations. The committee-meeting summary dated Aug. 28, 2014, documents the recommendation at http://www.oregon.gov/deq/RulesandRegulations/Documents/m3summary.pdf. The committee determined the proposed rules would have an impact on small businesses in Oregon; some impacts may be beneficial while others might be negative. To meet requirements in ORS 183.540, the committee offered the following suggestions to reduce the negative economic impact on small business:

- Create default carbon intensity values in lieu of individual ones. This would significantly reduce the burden of keeping transaction-specific records.

- Create a two-tiered reporting option for importers of finished fuels. There would be a simpler option to report fuels in aggregate using the default carbon intensity values and the more complex option for individual transactions and individual carbon intensity values. The trade off would be that under the simpler option, businesses would not be able generate credits because documentation would not be sufficient. They might have to buy credits to comply, but that might cost less than hiring a new person to keep track of the individual transactions.

- The committee and DEQ discussed exempting importers of finished fuels because this category of fuel importer could experience potential compliance challenges. Many of these businesses are small businesses. DEQ is not proposing an exemption at this time. DEQ expects input on this and other program design issues through the public comment process.

The following advisory committee work is instrumental to the design of the Oregon Clean Fuels Program.

2014
From June through August 2014, DEQ worked with a 21-member advisory committee that included small businesses. The committee discussed phase 2 design of the Clean Fuels Program. Membership and meeting summaries are at http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/A2CFPPh2.aspx.

2013
During the first half of 2013, DEQ conducted extensive outreach to fuel importers and producers across the state to determine who was regulated and non-regulated. This included small businesses.

Outreach included a web-based survey, individual phone conversations and in-person meetings in Portland, Eugene, Salem, Medford, Bend and Pendleton.

2012

In May 2012, DEQ convened an advisory committee to focus on the fiscal and economic impact of implementing phase 1. Membership and the meeting summary are at http://www.deq.state.or.us/aq/cleanFuel/meetings.htm.

2009-2010

From November 2009 through November 2010, DEQ worked with a 29-member advisory committee that included small businesses. The committee discussed the design of the Oregon Clean Fuels Program. Membership and meeting summaries are at http://www.deq.state.or.us/aq/committees/advcomLowCarbonFuel.htm.

Housing cost

To comply with ORS 183.534, DEQ determined the proposed rules would have no effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. The proposed rules only affect transportation fuels used in Oregon.

Federal relationship

"It is the policy of this state that agencies shall seek to retain and promote the unique identity of Oregon by considering local conditions when an agency adopts policies and rules. However, since there are many federal laws and regulations that apply to activities that are also regulated by the state, it is also the policy of this state that agencies attempt to adopt rules that correspond with equivalent federal laws and rules..." ORS 183.332

Relationship to federal requirements

This section complies with OAR 340-011-0029 and ORS 468A.327 to clearly identify the relationship between the proposed rules and applicable federal requirements.

The proposed rules are “in addition to federal requirements” since there are no federal regulations regarding the content of greenhouse gases in transportation fuels. The proposed rules protect the environment by reducing greenhouse gases.

What alternatives did DEQ consider if any?

DEQ considered many alternatives to the proposed rule. Input from advisory committees in 2010, 2012 and 2014 and extensive outreach with affected stakeholders throughout the process informed the design of the Oregon Clean Fuels Program. Documentation is in the rulemaking record.

Land use

"It is the Commission's policy to coordinate the Department's programs, rules and actions that affect land use with local acknowledged plans to the fullest degree possible." OAR 340-018-0010

Land-use considerations

To determine whether the proposed rules involve programs or actions considered that are a *land-use action*, DEQ reviewed:

- Statewide planning goals for specific references. Section III, subsection 2 of the DEQ State Agency Coordination Program document identifies the following statewide goal relating to DEQ's authority:

Goal	Title
5	Open Spaces, Scenic and Historic Areas, and Natural Resources
6	Air, Water and Land Resources Quality
11	Public Facilities and Services
16	Estuarial resources
9	Ocean Resources

- OAR 340-018-0030 for EQC rules on land-use coordination. Division 18 requires DEQ to determine whether proposed rules will significantly affect land use. If yes, how will DEQ:
  - Comply with statewide land-use goals, and
  - Ensure compatibility with acknowledged comprehensive plans, which DEQ most commonly achieves by requiring a Land Use Compatibility Statement.

- DEQ's mandate to protect public health and safety and the environment

- Whether DEQ is the primary authority responsible for land-use programs or actions in the proposed rules

- Present or future land uses identified in acknowledged comprehensive plans

Determination

DEQ determined that the proposed rules listed under the Chapter 340 Action section above **do not affect** existing rules, programs or activities that are land-use programs and actions in OAR 340-018-0030 or in the DEQ State Agency Coordination Program.

Stakeholder and public involvement

Advisory committee

DEQ convened the Clean Fuels Program Phase 2 Rulemaking Advisory Committee that met between June and August 2014. The 21-member committee included representatives from large and small fuel distributors; Oregon producers of biofuels; providers of lower carbon fuel such as electricity, propane, natural gas and biogas; local governments; and business and environmental interests. The purpose of the committee was to gather expert input on policy and technical issues related to several program design options and the fiscal and economic impact of the proposed rules. The advisory committee for phase 1 rules discussed many of the design issues; therefore, the advisory committee for phase 2 rulemaking focused on how new information could affect program design. The committee web page is at http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/A2CFPPh2.aspx.

Roster

Primary Member	Affiliation
Mark Reeve	Chair
Darren Engle	Blue Star Gas
Ralph Poole	Campo & Poole
Jeff Rouse	Carson Oil Co., Inc.
Todd Campbell	Clean Energy Fuels
Josh Proudfoot	Good Company
James Mast	Mast Collaborative
Shanna Brownstein	Northwest Natural Gas
Joel Fisher	Oregon Business Association
Jana Gastellum	Oregon Environmental Council
Bob Russell	Oregon Trucking Association
Tom Koehler	Pacific Ethanol
Dan Sinks	Phillips 66
Gary Neal	Port of Morrow
David Breen	Port of Portland
Brendan McCarthy	Portland General Electric
Gavin Carpenter	SeQuential Biodiesel
Terese Tyler	Space Age Fuel
Miles Heller	Tesoro
Peter Weisberg	The Climate Trust
Chuck White	Waste Management
Frank Holmes	Western States Petroleum Association

Meeting notifications

To notify people about advisory committee's activities, DEQ sent GovDelivery bulletins, a free e-mail subscription service, to the following lists.

- DEQ sent a one-time notice to Oregon Clean Fuels subscribers to describe how to sign up for advisory committee meeting notices. ORS 192.640.
- People who signed up for the Phase 2 Rulemaking Advisory Committee list.

DEQ also added advisory committee announcements to DEQ's calendar of public meetings at http://www.deq.state.or.us/news/events.asp.

Committee input is in the advisory committee meeting summaries. The committee reviewed the fiscal impact statement, specifically the impact on small businesses.

EQC prior involvement

DEQ shares general rulemaking information with EQC through the monthly Director's Report. DEQ shared information about this rulemaking:

- On June 19, 2014, in the Director's Report at the meeting in The Dalles
- On Aug. 27, 2014, in the Director's Report at the meeting in Medford
- On Nov. 6, 2014, in a facilitated hearing at the meeting in Portland

Public notice

DEQ provided notice of the Notice of Proposed Rulemaking with Hearing for this rulemaking. DEQ submitted notice to:

- Secretary of State for publication in the October 2014 *Oregon Bulletin*
- The Rulemaking Web page: http://www.oregon.gov/deq/RulesandRegulations/Pages/proposedrule.aspx
- Approximately 6,182 interested parties on the Agency Rulemaking List through GovDelivery
- Approximately 2,141 stakeholders on the Oregon Clean Fuels List through GovDelivery
- Approximately 519 stakeholders on the Clean Fuels Program Phase 2 Rulemaking Advisory Committee List through GovDelivery
- The following key legislators required under ORS 183.335:
  - Michael Dembrow, Chair, Senate Environment and Natural Resources Committee
  - Paul Holvey, Chair, House Energy and Environment Committee

DEQ provided legal notice in the following newspapers:

The Oregonian – published on October 1, 2014

East Oregon (Pendleton) - published on October 1, 2014

Public hearings

DEQ plans to hold one public hearing hosted by the Environmental Quality Commission on Thursday, Nov. 6, 2014 at 1:30 p.m. at

Tiffany Center
1410 SW Morrison Street
Portland, OR 97205

Before taking public comment and according to Oregon Administrative Rule 137-001-0030, the chair will summarize the content of the notice given under Oregon Revised Statute 183.335 and respond to any questions about the rulemaking.

DEQ will add the names, addresses and affiliations of all hearing attendees to the interested parties list for this rule if provided on a registration form or the attendee list. DEQ will consider verbal and written comments received at the hearing listed below before completing the draft rules. DEQ will summarize all comments and respond to comments in the Environmental Quality Commission staff report.

Close of public comment period

The comment period will close at 5 p.m. on Friday, Nov. 7, 2014.

Proposed Rules –August 15, 2014 Compilation

Oregon Department of Environmental Quality

DIVISION 253

OREGON CLEAN FUELS PROGRAM

340-253-0000

Overview

(1) __Context. The Oregon Legislature ~~has~~ found that climate change poses a serious threat to the economic well-being, public health, natural resources and environment of Oregon, among other findings. Section 1, chapter 907, Oregon Laws 2007. The Oregon Clean Fuels Program will reduce Oregon's contribution to the global levels of greenhouse gas emissions and the impacts of those emissions in Oregon~~,~~ in concert with other greenhouse gas reduction policies and actions by local governments, other states and the federal government.

(2) __Purpose. The purpose of the Oregon Clean Fuels Program is to reduce the ~~average~~ amount of lifecycle greenhouse gas emissions per unit of ~~fuel~~ energy ~~used in Oregon~~ by a minimum of 10 percent below 2010 levels over a 10-year period. This reduction goal applies to the average of all transportation fuels used in Oregon, not to individual fuels. A fuel user's possession of fuel that has higher carbon content than the clean fuel standard is not a violation of the standard.

(3) __~~Authority~~Background. The 2009 Oregon Legislature adopted House Bill 2186~~, which was~~ enacted as chapter 754 of Oregon Laws 2009.~~,~~ The law~~and~~ authorizes the Environmental Quality Commission to adopt low carbon fuel standards for gasoline, diesel fuel and fuels used as substitutes for gasoline or diesel fuel. Sections 6 to 9 of chapter 754, Oregon Laws 2009 is printed as a note following ORS 468A.270 in the ~~(~~2011 Edition~~)~~. OAR ~~chapter 340 division~~ Division 253 of Chapter 340 implements section 6 of the law.

(4) __~~Flexible Implementation Approach~~Program Review. ~~This division requires regulated parties, and those parties that choose voluntarily to opt-in to the program, to register, keep records, report the carbon intensity of the fuel they produce or import for use in Oregon, and calculate surpluses and shortfalls against the baseline carbon intensity values. These values are based on the mix of regulated and opt-in fuels that were supplied in Oregon in 2010. While reporting of net carbon balance is required, regulated and opt-in parties are not required to balance surpluses and shortfalls at this time. This flexible implementation approach is designed to put in place only the administrative procedures necessary to implement the program. This approach is intended to minimize the initial costs to regulated parties by not requiring compliance with declining carbon intensity standards. DEQ will utilize the reports and other information to assess, at a minimum, the following factors to make a recommendation to the EQC about the next phase of the program:~~ EQC expects DEQ to periodically review and assess the Oregon Clean Fuels Program and make recommendations to EQC for improvement. Review and assessment may include:

(a) The costs and ~~administrative burden~~benefits of compliance with ~~applicable~~ rules applicable for regulated ~~and opt-in~~ parties and credit generators;

(b) The costs and benefits of compliance with rules applicable ~~the program~~ to Oregon fuel consumers and Oregon's economy ~~and environment~~;

(c) The current and projected availability of ~~lower carbon~~clean fuels,

(d) The progress and adoption rates of clean fuels, clean fuel infrastructure and clean vehicles~~The methodologies mechanisims to provide exemptions and deferrals necessary to mitigate the cost of complying with the program, in accordance with Section 6(2)(d) of chapter 754, Oregon Laws 2009~~;

(e) The mechanisms to provide exemptions and deferrals necessary to mitigate the cost of complying with the program~~The progress and adoption rates of cleaner fuels and vehicle technologies~~;

(f) The ~~appropriate~~ methods~~, based on the latest science, to establish baseline carbon intensity values and declining carbon intensity standards,~~ to quantify lifestyle direct and indirect emissions from transportation fuels including ~~methodologies to incorporate~~ land use change and other indirect effects;

(g) The latest information on ~~the~~ low carbon fuel policies and related legal issues ~~regarding low carbon fuel standards~~;

(h) The status of federal, ~~and other~~ state and regional programs that address the carbon content of transportation fuel; and

(i) Whether there are the necessary resources~~The costs and administrative capacity of DEQ~~ to implement the program~~; and~~.

~~(j) The likely impact on all of the above elements, if declining average carbon intensity standards are implemented in the future.~~

~~(5) Construction. This division uses the following construction:~~

~~(a) OAR 340-253-#### followed by a bolded title is the number and title of the rule where:~~

~~(A) OAR is the acronym for Oregon Administrative Rules;~~

~~(B) 340 is the chapter number;~~

~~(C) 253 is the division number; and~~

~~(D) #### is the unique rule number.~~

~~(b) The subunits of a rule are within parenthesis in the following order:~~

~~(A) Section. The section is a Hindu-Arabic numeral expressed in sequence as (1), (2), (3) and so forth. Each section has a bold title;~~

~~(B) Subsection. The subsection is a lowercase English alphabet character expressed in sequence as (a), (b), (c) and so forth;~~

~~(C) Paragraph. The paragraph is an uppercase English alphabet character expressed in sequence as (A), (B), (C) and so forth; and~~

~~(D) Subparagraph. The subparagraph is a lowercase Roman numeral expressed in sequence as (i), (ii), (iii) and so forth.~~

~~(c) A reference prefaced with the word section, subsection, paragraph or subparagraph is a reference to a subunit within the same rule; and~~

~~(d) A reference prefaced with OAR 340-253 is a reference to another rule under the Oregon standards.~~

(5)~~(6)~~ LRAPA. Notwithstanding Lane Regional Air Pollution Agency authorization in OAR 340-200-0010(3), ~~the~~ DEQ administers this division in all areas of the State of Oregon.

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition)
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0040

Definitions

The definitions in OAR 340-200-0020 and this rule apply to this division. If this rule and OAR 340-200-0020 define the same term ~~is defined in this rule and OAR 340-200-0020~~, the definition in this rule applies to this division.

(1) ~~"Baseline carbon intensity value" is 90.38 gCO2e per MJ for gasoline and gasoline substitutes and 90.00 gCO2e per MJ for diesel fuel and diesel substitutes. These values are based on the mix of regulated and opt-in fuels supplied for use as a transportation fuel in Oregon in 2010.~~ "Actual PADD 5" means Petroleum Administration for Defense District 5, which includes Oregon, Washington, Arizona, Nevada, Hawaii, California and Alaska.

(2) "Bill of lading" means a ~~diesel substitute that consists of mono-alkyl esters of long chain fatty acids derived from plant or animal matter that complies with ASTM D6751~~document issued that lists goods being shipped and specifies the terms of their transport.

~~(2)~~(3) __ "Biodiesel" ~~has the same meaning as defined under OAR 603-027-0410~~ means a diesel substitute that consists of mono-alkyl esters of long chain fatty acids derived from plant or animal matter that complies with ASTM D6751.

~~(3)~~(4) __ "Biogas" means ~~natural gas that meets the purity requirements under OAR 860-023-0025 and is produced from the breakdown of organic material in the absence of oxygen. Biogas production processes include, but are not limited to, anaerobic digestion,~~the raw methane and carbon dioxide derived from the anaerobic decomposition ~~and thermo-chemical decomposition:~~

~~(a) Applied to biodegradable biomass materials, such as manure, sewage, municipal solid waste, and waste from energy crops; and~~

~~(b) Used to produce~~ of organic matter in a landfill or artificial reactor such as a ~~gas and~~ digester ~~gas~~. Biogas often contains a number of other impurities such as hydrogen sulfide and cannot be directly injected into natural gas pipelines or combusted in most natural gas-fueled vehicles.

~~(4)~~(5) ____ "~~Biogas~~ Bio-based compressed natural gas" or "Bio-CNG" means compressed natural gas ~~consisting solely of compressed biogas~~produced from non-petroleum, biological renewable resources such as plant or animal matter.

~~(5)~~(6) __ "~~Biogas~~ Bio-based liquefied natural gas" or "Bio-LNG" means liquefied natural gas ~~consisting solely of liquefied biogas~~produced from non-petroleum, biological renewable resources such as plant or animal matter.

~~(6)~~(7) __ "~~Biomass~~Bio-based liquefied compressed natural gas" or "Bio-L-CNG" ~~has the same meaning as defined under OAR 603-027-0410~~ means liquefied compressed natural gas ~~that is~~ produced from non-petroleum, biological renewable resources such as plant or animal matter.

~~(7)~~(8) __ "Biomass-~~Based~~ based diesel" ~~or "Renewable diesel" has the same meaning as defined under OAR 603-027-0410.~~

~~(8) "Blendstock"~~ means a ~~component blended~~ diesel substitute that complies with ~~one or more other components to produce a finished fuel used in a motor vehicle~~ASTM D6751 and is produced from non-petroleum renewable resources including:

(a) Animal wastes that include poultry fats and poultry wastes and other waste materials; or

(b) Municipal solid waste and sludges and oils derived from wastewater and the treatment of wastewater.

(9) "Biomethane" means a product of near-pure methane content that is produced when biogas is refined and the carbon dioxide and impurities present in biogas are separated from the methane in the mixture.

(10) **"Broker"** means a person who is not a regulated party or a credit generator and who voluntarily registers to participate in the clean fuels program, described in OAR 340-253-0100(3), to facilitate credit generation and to trade credits with regulated parties, credit

generators and other brokers.

(9)(11) "Carbon intensity" means the amount of lifecycle greenhouse gas emissions per unit of energy of fuel expressed in grams of carbon dioxide equivalent per megajoule (gCO2e per MJ.).

(12) "CFP Online System" means the interactive, secured, internet web-based clean fuels program electronic data tracking, reporting and compliance system that DEQ developed, manages and operates.

(13) "Clean fuel" means a transportation fuel whose carbon intensity value is lower than the applicable clean fuel standard for gasoline and gasoline substitutes in Table 1 under OAR 340-253-8010 or for diesel and diesel substitutes in Table 2 under OAR 340-253-8020.

(14) "Clean fuel standard" means the annual average carbon intensity with which a regulated party must comply, as listed in Table 1 under OAR 340-253-8010 for gasoline and gasoline substitutes and in Table 2 under OAR 340-253-8020 for diesel fuel and diesel substitutes.

(15) "Compliance period" means a calendar year and is the period of time within which regulated parties must demonstrate compliance under OAR 340-253-0100.

(10)(16) "Compressed natural gas" or "CNG" means either biogas or fossil natural gas that meets the standards listed under OAR 860-023-0025 compressed to a pressure greater than ambient pressure.

(11) "Diesel fuel" has the same meaning as defined under OAR 603-027-0410.

(17) "Credit" means a unit of measure that is generated when the carbon intensity value of a fuel that is produced, imported, dispensed or used in Oregon is less than the clean fuel standard. Credits are expressed in units of metric tons of carbon dioxide equivalent and are calculated under OAR 340-253-1020.

(18) "Credit generator" means any person eligible to generate credits by providing clean fuels for use in Oregon and who voluntarily registers to participate in the clean fuels program, described in OAR 340-253-0100(2), and specified by fuel type under OAR 340-253-0310 through 340-253-0340.

(19) "Credit transfer document" or "CTD" means an invoice, bill of lading, purchase contract, or any other proof of credit ownership transfer.

(20) "Deficit" means a unit of measure that is generated when the carbon intensity value of a fuel that is produced or imported in Oregon exceeds the clean fuel standard. Deficits are expressed in units of metric tons of carbon dioxide equivalent and are calculated under OAR 340-253-1020.

(21) "Diesel fuel" means a refined middle distillate suitable for use in a compression-ignition internal combustion engine.

~~(12)~~(22) "Diesel substitute" means any fuel, other than diesel fuel, that may be used in ~~light-duty or heavy-duty vehicles, and off-road vehicles that typically use diesel as a fuel. Diesel substitutes include but are not limited to liquefied natural gas used in a heavy duty motor vehicle and biodiesel used in a heavy duty motor vehicle~~ an engine designed for diesel use.

~~(13) "Electricity bundled services supplier" means any person or entity that provides charging infrastructure and provides access to vehicles charging under contract with a charging service recipient or charging equipment owner.~~

~~(14) "Electric utility" has the same meaning as defined in ORS 757.600.~~

~~(15)~~ (23) "Ethanol," or "Denatured fuel ethanol" means nominally anhydrous ethyl alcohol meeting ASTM D 4806 standards that is blended with gasoline for use in a spark-ignition internal combustion engine~~has the same meaning as defined under OAR 603-027-0410~~.

(24) "Export" means to have ownership title to transportation fuel from locations within Oregon, at the time it is delivered to locations outside Oregon by any means of transport, other than in the fuel tank of a motor vehicle for the purpose of propelling the motor vehicle.

~~(16)~~(25) "Feedstock" means the material from which a fuel is made ~~from~~.

~~(17) "Finished fuel" means a transportation fuel used directly in a motor vehicle without additional chemical or physical processing.~~

~~(18) "Finished hydrogen fuel" means a finished fuel that consists of:~~

~~(a) Hydrogen; or~~

~~(b) A blend of hydrogen and another fuel.~~

~~(19)~~(26) "Fossil compressed natural gas" or "Fossil CNG" means compressed natural gas derived solely from petroleum or fossil sources such as oil fields and coal beds.

~~(20)~~(27) "Fossil liquefied compressed natural gas" or "Fossil L-CNG~~:~~" means liquefied compressed natural gas derived solely from petroleum or fossil sources such as oil fields and coal beds.

(28) "Fossil liquefied natural gas" or "Fossil LNG" means liquefied natural gas derived solely from petroleum or fossil sources such as oil fields and coal beds.

~~(21)~~(29) "Fuel type" ~~or "Fuel pathway"~~ means any unique fuel feedstock and production process combination.

(30) "Fuel pathway code" means a code that represents a unique fuel type. The fuel pathway code is a field in the CFP Online System used to represent a specific type of fuel that has an assigned carbon intensity value.

~~(22)~~(31) "Gasoline" ~~has the same meaning as defined under OAR 603-027-0410~~means any fuel sold for use in spark ignition engines.

~~(23)~~(32) "Gasoline substitute" means any fuel, other than gasoline, that may be used in ~~light-duty vehicles~~an engine ~~that typically use~~designed for gasoline use~~as a fuel~~.

~~Gasoline substitutes include but are not limited to electricity used in a light-duty motor vehicle and natural gas used in a light-duty motor vehicle.~~

~~(24)~~(33) "Heavy duty motor vehicle" or "HDV" means any motor vehicle rated at more than 10,000 pounds gross vehicle weight~~ratinghas the same meaning as defined under OAR 340-256-0010~~.

~~(25)~~(34) "Import" means to have ownership title to transportation ~~bring a blendstock or a finished~~ fuel from locations outside of Oregon at the time it is brought into the State of Oregon by any means of transport other than in the fuel tank of a motor vehicle for the purpose of propelling the motor vehicle.

~~(26)~~(35) "Importer" means~~the person who imports a blendstock or a finished fuel from outside Oregon into Oregon~~:

(a) With respect to any ~~imported~~ liquid fuel, it means the person who imports the fuel~~owns the fuel in the stationary storage tank into which the fuel was first transferred after it was imported into Oregon~~; or

(b) With respect to any ~~biogas~~biomethane, it means the person who owns the ~~imported biogas upon receipt~~biomethane when it is trucked into Oregon or injected ~~at~~ into a pipeline located outside of~~in~~ Oregon ~~through which the biogas is~~and delivered for use in Oregon.

(36) "Invoice" means the receipt or other record of a sale transaction that describes an itemized list of goods shipped specifying the price and terms of sale.

(37) "Large importer" means any person who imports more than 250,000 gallons of transportation fuels.

~~(27)~~(38) "Light-duty motor vehicle" or "LDV" means any motor vehicle rated at 8,500 pounds gross vehicle weight or less~~has the same meaning as defined under OAR 340-256-0010~~.

~~(28)~~(39) "Lifecycle greenhouse gas emissions" ~~means the~~are:

(a) The a~~A~~ggregated quantity of greenhouse gas emissions including direct emissions and significant indirect emissions~~,~~ such as significant emissions from changes in land use associated with the fuels;

(b) Measured over the ~~Full~~full fuel lifecycle including all stages of fuel production, from feedstock generation or extraction, production, distribution, and combustion of the ~~finished~~ fuel by the consumer; and

(c) Stated in terms of ~~Mass~~mass values for all greenhouse gases as adjusted to CO2e to account for ~~their~~ the relative global warming potential of each gas.

~~(29)~~(40) "Liquefied natural gas" or "LNG" means ~~biogas or fossil~~ natural gas ~~converted to liquid form~~that has been liquefied.

(41) "Liquefied compressed natural gas" or "L-CNG" means natural gas that has been liquefied and transported to a dispensing station where it was then re-gasified and compressed to a pressure greater than ambient pressure.

~~(30)~~(42) "Liquefied petroleum gas" or "~~propane~~Propane" or "LPG" means a petroleum product composed predominantly of any of the hydrocarbons propane, propylene, normal or iso butane, butylene, or mixtures thereof, maintained in the liquid state~~has the same meaning as defined under OAR 603-027-0395~~.

(43) "Medium duty vehicle" or "MDV" means any motor vehicle rated between 8,501 pounds and 10,000 pounds gross vehicle weight ~~rating~~.

~~(31)~~(44) "Motor vehicles" means a vehicle that is self-propelled or designed for self-propulsion~~has the same meaning as defined under OAR 603-027-0410~~.

~~(32)~~(45) "Natural gas" means a mixture of gaseous hydrocarbons and other compounds ~~from either fossil or biogas sources,~~ with at least 80 percent methane by volume~~, and typically sold or distributed by utilities such as any utility company regulated by the Oregon Public Utility Commission~~.

~~(33) "Opt-in party" means a person who is not a regulated party and who elects to register with DEQ under OAR 340-253-0100(4).~~

~~(34) "Oregon producer" means:~~

~~(a) With respect to any liquid fuel, the person who makes the liquid blendstock or finished fuel at the Oregon production facility; or~~

~~(b) With respect to any biogas produced in Oregon, the person who refines the biogas to pipeline quality.~~

~~(35) "Oregon production facility" means a facility located in Oregon that:~~

~~(a) Produces any liquid blendstock or finished fuel other than liquefied natural gas; or~~

~~(b) Converts, compresses, liquefies, refines, treats or otherwise processes natural gas into compressed natural gas or liquefied natural gas that is ready for use as a transportation fuel in a motor vehicle without further physical or chemical processing.~~

~~(36)~~(46) "OR-GREET" means the Greenhouse gases, Regulated Emissions, and Energy in Transportation (GREET) Argonne National Laboratory model that DEQ modifie~~d~~s and maintains~~ed~~ for use in Oregon. Copies of OR-GREET are available from DEQ upon request.

~~(37)~~(47) "Physical ~~pathway~~transport mode code" means ~~the way~~how a fuel physically enters~~is transported from the fuel producer to~~ Oregon~~, including any combination of truck routes, rail lines, pipelines, marine vessels and any other transportation method~~. Physical transport mode code is a field in the CFP Online System used to represent how a fuel was imported.

~~(38) "Private access fueling facility" means an Oregon fueling facility that restricts access by use of a card or key-activated fuel dispensing device to dispensing fuel to nonretail customers.~~

(48) "Producer" means:

(a) With respect to any liquid fuel, the person who makes the fuel in Oregon; or

(b) With respect to any biomethane, the person who refines, treats or otherwise processes biogas into biomethane in Oregon.

(49) ~~(39)~~"Product transfer document" or "P~~D~~TD" means ~~an invoice, bill of lading, purchase contract, or any other proof of fuel ownership transfer~~ a document that authenticates the transfer of ownership of fuel from a regulated party to the recipient of the fuel. A party creates a PTD to contain information collectively supplied by other fuel transaction documents such as a bill of lading, invoices, contracts, meter tickets, rail inventory sheets and RFS2 product transfer documents.

~~(40) "Public access fueling facility" means an Oregon fueling facility that is not a private access fueling facility.~~

(50) "Regulated fuel" means a transportation fuel identified under OAR 340-253-0200(2).

~~(41)~~(51) "Regulated party" means a person responsible for compliance with the clean fuel standards identified ~~as a regulated party~~ under OAR 340-253-0310. ~~through 340-253-0340. Regulated parties must comply with the requirements under OAR 340-253-0100.~~

~~(42) "Shortfall(s)" means a state in which the carbon intensity of a fuel is higher than the baseline carbon intensity value for gasoline and gasoline substitutes or diesel fuel and diesel substitutes. Shortfalls are expressed in units of metric tons of carbon dioxide equivalent (CO2e) and are calculated under OAR 340-253-1020.~~

(52) "Renewable diesel" means a diesel fuel derived from vegetable oils, animal fats or other non-petroleum resources and complies with ASTM D975.

~~(43)~~(53) "Small ~~Oregon~~ importer" means any person who imports 250,000 gallons or less of transportation fuel in a given calendar year into Oregon.

(54) "Statutory PADD 5" means Petroleum Administration for Defense District 5, which includes Oregon, Washington, Arizona and Nevada.

~~(44) "Surplus(es)" means a state in which the carbon intensity of a fuel is lower than the baseline carbon intensity value for gasoline or diesel fuel and their substitutes. Surpluses are expressed in units of metric tons of carbon dioxide equivalent (CO2e) and are calculated under OAR 340-253-1020.~~

(55) "Transaction type" means the nature of the fuel transaction. Transaction type is a field in the CFP Online System used to represent how a volume of fuel should be treated in terms of compliance with the clean fuel standards.

~~(45)~~(56) "Transportation fuel" means ~~any fuel used or intended for use in motor vehicles as defined under OAR 603-027-0410.~~ gasoline, diesel, any other flammable or combustible gas or liquid and electricity that can be used as a fuel for the operation of a motor vehicle.

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition).
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14

340-253-0060

Acronyms

The following acronyms apply to this division:

(1) "ASTM" means ASTM International (formerly American Society for Testing and Materials).

(2) "BTU" means British thermal unit.

(3) "CFP" means the clean fuels program established under OAR chapter 340, division 253.

(4) "CIE" means compression ignition engine.

~~(3)~~(5) "DEQ" means Oregon Department of Environmental Quality.

~~(4)~~(6) "EQC" means Oregon Environmental Quality Commission.

~~(5)~~(7) "FEIN" means federal employer identification number.

~~(6)~~(8) "gCO2e per MJ" means grams of carbon dioxide equivalent per megajoule of energy.

~~(7) "gge" means gasoline gallon equivalents.~~

~~(9) "GREET" means the Greenhouse gases, Regulated Emissions and Energy use in Transportation model.~~

(9) "SIE" means spark ignition engine.

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition).
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14

340-253-0100

Oregon Clean Fuels Program Applicability and Requirements

(1) ~~Applicability.~~

~~(a) All r~~Regulated parties. ~~under section (3)~~ All persons that ~~import or~~ produce in Oregon or import into Oregon any regulated fuel must comply with the rules in this division. The regulated parties for regulated fuels produced or imported in Oregon designated ~~, as defined~~ under OAR 340-253-~~0200~~0310~~, are subject to this rule~~.

(a) Regulated parties must comply with sections (4) through (8) below; and

(b) Small importers are exempt from sections (5) through (8).

~~(b) Any person may become an opt-in party by registering with DEQ under section (4) of this rule. All opt-in parties under section (3) that import or produce in Oregon any opt-in fuel, as defined under OAR 340-253-0200, are subject to this rule.~~

~~(2) **Requirements**. Beginning January 1, 2013:~~

~~(a) Regulated and opt-in parties, except for small Oregon importers of finished fuels, must register under section (4) of this rule, keep records under section (5) of this rule, and submit reports under sections (6) and (7) of this rule; and~~

~~(b) Small Oregon importers of finished fuels must register under section (4) of this rule and are exempt from keeping records under section (5) of this rule and submitting reports under sections (6) and (7) of this rule.~~

~~(3)~~(2) __~~Regulated party or opt-in party~~Credit generators.

(a) __The following rules designate ~~regulated and opt-in parties~~persons eligible to generate credits for each ~~, by type of~~ fuel type:

~~(a) OAR 340-253-0310 for gasoline, diesel fuel, biodiesel, biomass-based diesel, ethanol, and any other liquid fuel except liquefied natural gas and liquefied petroleum gas;~~

~~(b)~~(A) __OAR 340-253-0320 for ~~natural gas including~~ compressed natural gas, liquefied natural gas, liquefied compressed natural gas~~biogas~~ and liquefied petroleum gas;

~~(c)~~(B) __OAR 340-253-0330 for electricity; and

~~(d)~~(C) __OAR 340-253-0340 for hydrogen fuel or a hydrogen blend.

(b) __Persons eligible to be credit generators are not required to participate in the program. Persons who choose voluntarily to participate in the program to generate credits must comply with sections (4), (5), (7) and (8).

(3) __Brokers.

(a) __Brokers must comply with sections (4), (5), (7) and (8).

(b) __Brokers may hold and trade credits. A broker also may generate credits and facilitate credit generation and credit trading if a regulated party, credit generator or person eligible to be a credit generator authorized the broker to act on its behalf.

(4) __Registration.

(a) __~~After January 1, 2013, but no later than June 30, 2013, each~~ A regulated party must submit a complete registration application to DEQ under OAR 340-253-0500 ~~to register with DEQ~~ for each fuel type ~~the party imports or produces in Oregon~~ on or before the date upon which it begins to produce the fuel in Oregon or import the fuel into Oregon. The registration application must be submitted using DEQ approved forms~~July 1, 2013, and that it plans to continue to import or produce in Oregon after July 1, 2013~~.

(b) __~~Beginning~~ A credit generator ~~on July 1, 2013, each regulated party~~ must submit a complete registration ~~application~~ to DEQ under OAR 340-253-0500 ~~to register with DEQ~~ for each fuel type~~, on or~~ before it may ~~earn~~generate credits for fuel produced, imported, dispensed or used in Oregon. DEQ will not recognize credits allegedly generated by any person that does not have an approved, accurate and current registration ~~the date upon which it begins to import or produce in Oregon such fuel~~.

(c) ~~To become an opt-in party a person must submit a complete application under OAR 340-253-0500 to register with DEQ.~~ A broker must submit a complete registration to DEQ under OAR 340-253-0500 or modify its existing registration each time it enters into a new contract with a regulated party or credit generator, before trading credits or facilitating credit generation or trading by a regulated party or credit generator. DEQ will not recognize the transfer of credits by a broker that does not have an approved, accurate and current registration.

(d) When DEQ approves the registration application of a regulated party, credit generator or broker under OAR 340-253-0500, the regulated party, credit generator or broker must establish an account in the CFP Online System and must use the CFP Online System to record and report credit and deficit generation, credit trading and compliance with the CFP rules in this division.

(5) Records.

~~(a) Beginning on July 1, 2013, each r~~Regulated ~~party~~ parties, credit generators registered under subsection (4)(b) and brokers registered under subsection (4)(c) must develop and retain all records required under OAR 340-253-0600.

~~(b) Beginning on the latter of either July 1, 2013, or the date that an opt-in party submits a complete application, as determined by DEQ, under subsection (4)(c) of this rule, each opt-in party must develop and retain all records required under OAR 340-253-0600.~~

(6) Clean fuel standards. Each regulated party must comply with the following standards for all transportation fuel it produces in Oregon or imports into Oregon in each compliance period. Regulated parties may demonstrate compliance in each compliance period, subject to OAR 340-253-1030, either by producing or importing fuel that in the aggregate meets the standard or by obtaining sufficient credits to offset deficits for such fuel produced or imported into Oregon.

(a) Table 1 under OAR 340-253-8010 establishes the Oregon Clean Fuel Standard for Gasoline and Gasoline Substitutes; and

(b) Table 2 under OAR 340-253-8020 establishes the Oregon Clean Fuel Standard for Diesel and Diesel Substitutes.

~~(6)~~(7) Quarterly progress report. ~~Beginning on January 1, 2014, each r~~Regulated parties, credit generators and ~~opt-in party~~brokers must submit quarterly progress reports under OAR 340-253-0630. ~~Reports must be submitted to DEQ for:~~

~~(a) January through March of each year, by May 31;~~

~~(b) April through June of each year, by August 31;~~

~~(c) July through September of each year, by November 30; and~~

~~(d) October through December of each year, by February 28 of the following year.~~

~~(7)~~(8) __Annual compliance report. ~~Each r~~Regulated parties, credit generators~~party~~ and ~~opt-in party~~brokers must submit ~~an~~ annual compliance reports ~~each year~~ under OAR 340-253-0650.

~~The report must be submitted to DEQ by April 30 of each year to report for the prior calendar year; except for 2013, when the reporting period is from July 1 through December 31.~~

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition).
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14

340-253-0200

Regulated and ~~Opt-in~~Clean Fuels

(1)~~-~~ ____Applicability. ~~The~~ Producers and importers of transportation fuels listed in this rule ~~are subject to Division 253~~, unless exempt under OAR 340-253-0250~~.~~ are subject to Division 253.

(2) __Regulated fuels. Regulated fuels mean~~s~~ the following transportation fuels ~~or blendstocks~~:

(a) __Gasoline;

(b) __Diesel fuel;

~~(c) Fossil liquefied natural gas that is imported, but not transferred by a natural gas pipeline in Oregon;~~

~~(d)~~(c) __~~A fuel~~ Gasoline blended with ~~containing~~ ethanol such as E10;

~~(e)~~(d) __~~A~~ Diesel fuel blended ~~containing biomass-based diesel or~~ with biodiesel or biomass-based diesel such as B5;

~~(f)~~(e) Ethanol or denatured fuel ethanol~~,~~ also referred to as E100;

(f) __Neat biodiesel also referred to as B100;

(g) __Neat biomass-based diesel ~~and biodiesel,~~ also referred to as B100; and

(h) __Any other liquid or non-liquid fuel not listed in section (3) or exempted under OAR 340-253-0250.

(3) __~~Opt-in~~Clean fuels. ~~Opt-in~~Clean fuels means ~~the following~~a transportation fuels with a carbon intensity value lower than the clean fuel standard for gasoline or diesel fuel and their

substitutes in Table 1 or 2 under OAR 340-253-8010 or 340-253-8020, as applicable, for that calendar year, such as:

(a) Bio-based compressed natural gas;

(b) Bio-based liquefied compressed natural gas;

(c) Bio-based liquefied natural gas;

~~(a)~~(d) Electricity;

~~(b) Hydrogen fuel;~~

~~(c) Hydrogen blends;~~

~~(d)~~(e) Fossil compressed natural gas;

(f) Fossil liquefied compressed natural gas;

~~(e)~~(g) Fossil liquefied natural gas ~~derived from fuel delivered through a natural gas pipeline~~;

~~(f) Biogas compressed natural gas;~~

~~(g) Biogas liquefied natural gas; and~~

(h) Hydrogen or a hydrogen blend; or

~~(h)~~(i) Liquefied petroleum gas.

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition)
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0250

Exemptions ~~Fuels and Fuel Uses~~

(1) Exempt fuels. The following fuels are exempt from the list ~~definition~~ of regulated fuels under OAR 340-253-0200(2)~~(h)~~:

(a) Fuels used in small volumes: A transportation fuel supplied for use in Oregon if all providers supply an aggregate volume of less than 360,000 gasoline gallon equivalents ~~gge~~ per year ~~in Oregon~~. ~~The party must:~~

~~(A) Demonstrate that the exemption applies; and~~

~~(B) Obtain exemption approval from DEQ in writing.~~

(b) Small volume fuels producers: A transportation fuel supplied for use in Oregon if: ~~A fuel produced from a research, development or demonstration facility as defined under OAR 330-090-0110 if the annual production volume is either 10,000 gallons or less, or no more than 50,000 gallons and the fuel producer uses the entire volume for its own motor vehicles. The party must:~~

(A) The producer has an annual production volume of 10,000 gas~~e~~oline gallon equivalents or less; ~~Demonstrate that the exemption applies; and~~

(B) ~~Obtain exemption approval from DEQ in writing~~ The producer has an annual production volume of 50,000 gasoline gallon equivalents or less and the fuel producer uses the entire volume in its own motor vehicles; or

(C) The producer is a research, development or demonstration facility defined under OAR 330-090-0100.

(c) To be exempt, the regulated party must document that the fuel meets the conditions listed in subsection (a) or (b).

(2) Exempt ~~fuels based on~~ fuel uses.

(a) Transportation fuels supplied for use in the following motor vehicles ~~Fuels~~ are exempt from the definition of regulated fuels under OAR 340-253-0200(2)~~(h) if~~:

~~(a) The fuel is supplied for use in the following motor vehicles:~~

(A) Aircraft;

(B) Racing activity vehicles ~~under ORS~~in ORS 801.404;

(C) Military tactical vehicles and tactical support equipment;

(D) ~~Railroad l~~Locomotives;

(E) Ocean-going vessels defined under OAR 856-010-0003, except for vessel under fishery or recreational endorsement under title 46 United States Code, chapter 121;

(F) Motor vehicles registered as farm vehicles in ~~under~~ ORS 805.300;

(G) Farm tractors~~, as~~ defined ~~under~~ in ORS 801.265;

(H) Implements of husbandry~~, as~~ defined ~~under~~ in ORS 801.310; or

(I) Motor trucks~~, as~~ defined in ~~under~~ ORS 801.355 if~~,~~ used primarily to transport logs; and

(b) To be exempt, the~~The~~ regulated ~~or opt-in~~ party must document~~s~~ that the fuel was supplied ~~for~~ to ~~use in~~ a motor vehicle listed in subsection (2)(a) that includes: ~~of this rule, as required under OAR 340-253-0600.~~

(A) Documentation that the fuel ~~was transferred~~ sold through a dedicated source to one of the motor vehicles ~~identified in subsection (a) of this rule~~ is sufficient.

(B) If not ~~transferred~~sold through a dedicated source, all documentation must be on ~~an individual~~ a fuel transaction basis.

~~(3) Fuel possession. Any fuel user or seller may possess any fuel regardless of its carbon intensity value, including but not limited to owners of the motor vehicles listed under subsection (2)(a).~~

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition).
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14

Designation of Regulated and Opt-in Parties

340-253-0310

Regulated Parties: ~~for~~ Gasoline, Diesel Fuel, Ethanol, Biodiesel and ~~,~~ Biomass-based Diesel ~~and Ethanol and Other Regulated Fuels Except for Liquefied Natural Gas~~

(1) ~~Applicability. This rule applies to all liquid blendstocks and liquid finished fuels listed under OAR 340-253-0200(2) except liquefied natural gas.~~

~~(2)~~ Regulated party. The regulated party is the ~~Oregon~~ producer or importer of the regulated fuel.

(2) Recipient notification requirement. If a regulated party intends to transfer ownership of fuel, it is the responsibility of the recipient of the fuel to notify the transferor whether the recipient is a producer, a large importer, a small importer or not an importer.

(3) Recipient is a large importer. If a regulated party transfers the fuel to a large importer, the transferor and the recipient have the options and responsibilities under this section.

(a) Unless the transferor elects to remain the regulated party under (3)(b):

(A) The recipient is now the regulated party who:

(i) Must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0500, -0600, -0620, -0630 and -0650 for the fuel;

(ii) Is responsible for compliance with the clean fuel standard for the fuel under OAR 340-253-0100(6); and

(iii) Is eligible to generate credits for the fuel, as applicable.

(B) The transferor must provide the recipient a product transfer document by the time of transfer. The product transfer document must prominently indicate:

(i) Transferor company name, address and contact information;

(ii) Recipient company name, address and contact information;

(iii) Date of transfer;

(iv) Fuel pathway code and carbon intensity value;

(v) Volume/amount;

(vi) A statement that the recipient is now the regulated party; and

(vii) The fuel production company ID and facility ID, if available.

(C) The transferor is no longer the regulated party for such fuel, except for maintaining the product transfer documentation under OAR 340-253-0600.

(b) The transferor may elect to remain the regulated party for the transferred fuel. If the transferor elects to remain the regulated party:

(A) The transferor remains the regulated party who:

(i) Must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0500, 340-253--0600, 340-253--0620, 340-253--0630 and 340-253--0650 for the fuel;

(ii) Is responsible for compliance with the clean fuel standard for such fuel under OAR 340-253-0100(6); and

(iii) Is eligible to generate credits for the fuel, as applicable.

(B) The transferor must provide the recipient a product transfer document by the time of transfer. The product transfer document must prominently indicate:

(i) Transferor company name, address and contact information;

(ii) Recipient company name, address and contact information;

(iii) Date of transfer;

(iv) Volume/amount; and

(v) A statement that the transferor remains the regulated party.

(C) The recipient is not the regulated party, except for maintaining the product transfer documentation under OAR 340-253-0600.

(4) Recipient is a producer, a small importer or is not an importer. If a regulated party transfers the fuel to a producer, a small importer or a person who is not an importer, the transferor and the recipient have the options and responsibilities under this section.

(a) Unless the recipient and the transferor agree the recipient is the regulated party under subsection (4)(b):

(A) The transferor remains the regulated party who:

(i) Must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0500, 340-253-0600, 340-253-0620, 340-253-0630 and 340-253-0650 for the fuel;

(ii) Is responsible for compliance with the clean fuel standard for such fuel for such fuel under OAR 340-253-0100(6); and

(iii) Is eligible to generate credits for the fuel, as applicable.

(B) The transferor must provide the recipient a product transfer document by the time of transfer. The product transfer document must prominently indicate:

(i) Transferor company name, address and contact information;

(ii) Recipient company name, address and contact information;

(iii) Date of transfer;

(iv) Volume/amount; and

(v) A statement that the transferor remains the regulated party.

(C) The recipient is not the regulated party, except for maintaining the product transfer documentation under OAR 340-253-0600.

(b) The recipient may elect to be the regulated party for the transferred fuel. If the recipient elects to be the regulated party:

(A) The recipient is the regulated party who:

(i) Must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0500, 340-253-0600, 340-253-0620, 340-253-0630 and 340-253-0650 for the fuel;

(ii) Is responsible for compliance with the clean fuel standard for such fuel for such fuel under OAR 340-253-0100(6); and

(iii) Is eligible to generate credits for the fuel, as applicable.

(B) The transferor must provide the recipient a product transfer document by the time of transfer. The product transfer document must prominently indicate:

(i) Transferor company name, address and contact information;

(ii) Recipient company name, address and contact information;

(iii) Date of transfer;

(iv) Fuel pathway code and carbon intensity value;

(v) Volume/amount;

(vi) A statement that the recipient is now the regulated party; and

(vii) The fuel production company ID and facility ID, if available.

(C) The transferor is not the regulated party, except for maintaining the product transfer documentation under OAR 340-253-0600.

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition).
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14

340-253-0320

~~Regulated Parties and Opt-in Parties for~~Credit Generators: Compressed Natural Gas, ~~Biogas,~~ Liquefied Natural Gas, Liquefied Compressed Natural Gas and Liquefied Petroleum Gas

(1) Applicability**.** This rule applies to providers of compressed natural gas, liquefied natural gas, liquefied compressed natural gas and liquefied petroleum gas for use as a transportation fuel in Oregon.

(2) Compressed natural gas**.** For CNG used as a transportation fuel, subsections (a) through (c) determine the person who is eligible to generate credits.

(a) Fossil CNG**.** For fuel that is solely fossil CNG, the person that is eligible to generate credits is the owner of the compressor at the facility where the fuel is dispensed for use in a motor vehicle.

(b) Bio-CNG. For fuel that is solely bio-CNG, the person that is eligible to generate credits is the producer or importer of the fuel.

(c) Blend of fossil CNG and bio-CNG. For fuel that is a blend of fossil CNG and bio-CNG, the generated credits will be split between the persons eligible to generate credits under subsections (a) and (b) to give each credits based on the actual amount of fossil CNG and bio-CNG in the blend.

(3) Liquefied natural gas**.** For LNG used as a transportation fuel, subsections (a) through (c) determine the person who is eligible to generate credits.

(a) Fossil LNG**.** For fuel that is solely fossil LNG, the person that is eligible to generate credits is the owner of the fueling equipment at the facility where the fuel is dispensed for use in a motor vehicle.

(b) Bio-LNG. For fuel that is solely bio-LNG, the person that is eligible to generate credits is the producer or importer of the fuel.

(c) Blend of fossil LNG and bio-LNG**.** For fuel that is a blend of fossil LNG and bio-LNG, the generated credits will be split between the persons eligible to generate credits under subsections (a) and (b) to give each credits based on the actual amount of fossil LNG and bio-LNG in the blend

(4) Liquefied compressed natural gas. For L-CNG used as a transportation fuel, subsections (a) through (c) determine the person who is eligible to generate credits.

(a) Fossil L-CNG**.** For fuel that is solely fossil L-CNG, the person that is eligible to generate credits is the owner of the compressor at the facility where the fuel is dispensed for use in a motor vehicle.

(b) Bio-L-CNG. For fuel that is solely bio-L-CNG, the person that is eligible to generate

credits is the producer or importer of the fuel.

(c) Blend of fossil L-CNG and bio-L-CNG**.** For fuel that is a blend of fossil L-CNG and bio-L-CNG, the generated credits will be split between the persons eligible to generate credits under subsections (a) and (b) to give each credits based on the actual amount of fossil L-CNG and bio-L-CNG in the blend.

(5) Liquefied petroleum gas. For propane used as a transportation fuel, the person that is eligible to generate credits is the owner of the fueling equipment at the facility where the liquefied petroleum gas is dispensed for use in a motor vehicle.

(6) Responsibilities to generate credits. Any person specified in sections (2) through (5) may generate clean fuel credits by complying with the registration, recordkeeping and reporting requirements under OAR 340-253-0500, 340-253-0600, 340-253-0620, 340-253-0630 and 340-253-0650 for the fuel.

~~(1) Fossil compressed natural gas. For fossil compressed natural gas, the opt-in party is the owner of the fueling equipment at the facility where the fossil compressed natural gas is dispensed for use in motor vehicles.~~

~~(2) Biogas compressed natural gas. For biogas compressed natural gas that is dispensed directly into motor vehicles in Oregon without first being blended with fossil compressed natural gas, the opt-in party is the Oregon producer or importer of the biogas.~~

~~(3) Fossil liquefied natural gas. For fossil liquefied natural gas:~~

~~(a) For fuel that is a regulated fuel under OAR 340-253-0200(2)(c), the regulated party is the owner of the liquefied natural gas when it is transferred to the facility where the liquefied natural gas is dispensed for use into motor vehicles; or~~

~~(b) For fuel that is an opt-in fuel under OAR 340-253-0200(3)(e), the opt-in party is the owner of the liquefied natural gas when it is transferred to the facility where the liquefied natural gas is dispensed for use into motor vehicles.~~

~~(4) Biogas liquefied natural gas. For biogas liquefied natural gas that is dispensed directly into motor vehicles in Oregon without first being blended with fossil liquefied natural gas, the opt-in party is the Oregon producer or importer of the biogas liquefied natural gas.~~

~~(5) Biogas compressed natural gas added to fossil compressed natural gas. For blends of these fuels, the opt-in parties for each of the component fuel types of the blended fuel remains the same as provide in sections (1) through (4).~~

~~(6) Biogas liquefied natural gas added to fossil liquefied natural gas. For blends of these fuels, the regulated and opt-in parties for each of the component fuel types of the blended fuel remains the same as provide in sections (1) through (4).~~

~~(7) Liquefied petroleum gas. For liquefied petroleum gas, the opt-in party is the owner of the fueling equipment at the facility where the liquefied petroleum gas is dispensed for use into motor vehicles.~~

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition).
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14

340-253-0330

~~Opt-in Parties for~~Credit Generators: Electricity

(1) Applicability**.** This rule applies to providers of electricity used as a transportation fuel**.**

(2) For residential charging**.** For electricity used as a transportation fuel in a vehicle charged in a residence, subsections (a) and (b) determine the person who is eligible to generate credits.

(a) Electric Utility**.** By October 1 of the current year, an electric utility that is registered or has submitted a complete registration to DEQ under OAR 340-253-0500 may generate credits for the following calendar year.

(b) Broker**.** If an electric utility does not register as the credit generator under subsection (a), then a broker may register to generate credits.

(3) For non-residential charging**.** For electricity used as a transportation fuel in a vehicle charged in non-residential settings, such as at publicly available charging stations, for a fleet, or at a workplace, subsections (a) through (c) determine the person who is eligible to generate credits.

(a) Owner or operator of electric-charging equipment**.** By September 1 of the current year, the owner or operator of the electric-charging equipment that is registered or has submitted a complete registration to DEQ under OAR 340-253-0500 may generate credits for the following calendar year.

(b) Electric utility**.** If the owner or operator of the electric-charging equipment does not register as the credit generator under subsection (a), then an electric utility may generate credits if, by October 1, the electric utility has registered or has submitted a complete registration to DEQ under OAR 340-253-0500.

(c) Broker**.** If the owner or operator of the electric-charging equipment and the electric utility do not register as the credit generator under subsections (a) or (b), then a broker may generate credits if it has provided documentation to DEQ that it has an agreement with the owner or

operator of the electric-charging equipment where electric vehicles are charged with transportation fuel.

(4) Responsibilities to generate credits. Any person specified under sections (2) or (3) may generate clean fuel credits by complying with the registration, recordkeeping and reporting requirements under OAR 340-253-0500, 340-253-0600, 340-253-0620, 340-253-0630 and 340-253-0650 for the fuel.

~~(1) Opt-in party priority and deadlines. Sections (2) through (4) determine the opt-in party who may generate surpluses under OAR 340-253-1000(4) for electricity used as a transportation fuel.~~
~~(2) Electricity bundled services supplier. The electricity bundled services supplier must opt in by submitting a complete application to register with DEQ under OAR 340-253-0500 by September 1 of the year prior to the calendar year in which the surpluses will be generated if the electricity bundled services supplier elects to generate surpluses. Upon submitting a complete application, the electricity bundled services supplier becomes the opt-in party until it opts out under OAR 340-253-0500.~~
~~(3) Electric Utility. The electric utility may opt in by submitting a complete application to register with DEQ under OAR 340-253-0500 by November 1 of the year prior to the calendar year in which the surpluses will be generated, if the electricity bundled services supplier under section (2) does not opt in. Upon submitting a complete application, the electric utility becomes the opt-in party for the following calendar year.~~
~~(4) Owner or operator of electric-charging equipment. The owner or operator of electric-charging equipment, including residential charging equipment, may opt in by submitting a complete application to register with DEQ under OAR 340-253-0500 by December 1 of the year prior to the calendar year in which the surpluses will be generated, if the electricity bundled services supplier under section (2) and the electric utility under section (3) do not opt in. Upon submitting a complete application, the owner or operator of electric-charging equipment becomes the opt-in party for the following calendar year.~~

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition)
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0340

~~Opt-in Parties for~~Credit Generators: Hydrogen Fuel or a Hydrogen Blend~~s~~

(1) Applicability. This rule applies to providers of hydrogen fuel and a hydrogen blend for use as a transportation fuel in Oregon.

(2) Credit generation. For a hydrogen fuel or a hydrogen blend, the person who owns the finished hydrogen fuel where the fuel is dispensed for use into a motor vehicle is eligible to generate credits.

(3) Responsibilities to generate credits. Any person specified in section (2) may generate clean fuel credits by complying with the registration, recordkeeping and reporting requirements under OAR 340-253-0500, -0600, -0620, -0630 and -0650 for the fuel.

~~Opt-in party. The opt-in party for a volume of finished hydrogen fuel is the Oregon producer or importer of the finished hydrogen fuel.~~

Stat. Auth.: ORS 468.020, 468A.270 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: ORS 468A.270 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14

340-253-0400

Fuel Carbon Intensity Values

(1) Statewide carbon intensity values.

(a) Regulated parties, credit generators and brokers ~~A regulated or opt-in party~~ must use the statewide average carbon intensity values in Table 3 or 4 under OAR 340-253-8030 or 8040~~Table 1 under OAR 340-253-3010 or Table 2 under 340-253-3020~~, as applicable, for the following fuels:

(A) Clear gasoline;

(B) Gasoline blended with 10~~%~~ percent ethanol;

(C) Clear diesel fuel;

(D) Diesel fuel blended with 5~~%~~ percent biodiesel or biomass-based diesel;

(E) Fossil compressed natural gas;

(F) Fossil liquefied natural gas;

(G) Liquefied petroleum gas; and

(H) Electricity, unless an electricity provider meets the conditions under subsection (1)(b) and chooses to obtain a different carbon intensity value.

(b) For electricity, credit generators and brokers may obtain a carbon intensity value different from the statewide average carbon intensity value by following the procedures under section (3), if the electricity provider:

(A) Is exempt from the definition of public utility under ORS 757.005 (1)(b)(G), and is not regulated by the Oregon Public Utility Commission; or

(B) Generates lower carbon electricity at the same location as it is dispensed into a vehicle.

~~(E) Compressed fossil natural gas derived from natural gas not imported to North America in liquefied form;~~

~~(F) Liquefied petroleum gas; and~~

~~(G) Electricity, unless an electricity provider meets the conditions under subsection (1)(b) and proposes a different carbon intensity value.~~

~~(b) The opt-in party for electricity may propose a carbon intensity value different from the statewide average carbon intensity value if the electricity provider:~~

~~(A) Only provides electricity for transportation; and~~

~~(B) Is exempt from the definition of public utility under ORS~~in ORS ~~757.005(1)(b)(G), and is not regulated by the Oregon Public Utility Commission.~~

~~(c) Every three years, DEQ must review the statewide average carbon intensity values in Table 1 under OAR 340-253-3010 or Table 2 under 340-253-3020 and must:~~

~~(A) Consider the crude oil and other energy sources, production processes and flaring rates and other considerations that might affect the lifecycle carbon intensity of fuel used in Oregon; and~~

~~(B) Propose the EQC revise and update statewide average carbon intensity values in Table 1 or 2 under OAR 340-253-3010 or -3020 if DEQ determines that values should be changed by more than 5.0 gCO2e per MJ or 10 percent.~~

(2) Carbon intensity values for established pathways. Except as provided in section (3), regulated parties, credit generators and brokers must use the carbon intensity value for each transportation fuel that best matches the description in the fuel pathway in Table 3 or 4 under OAR 340-253-8030 or 340-253-8040, as applicable.~~Except as provided in section (3), regulated and opt-in parties must use the carbon intensity values for ethanol, biodiesel, biomass-based diesel, liquefied natural gas, biogas compressed natural gas, biogas liquefied natural gas, hydrogen, liquefied petroleum gas and any fossil compressed natural gas produced from natural gas that arrives in North America in liquefied form that best matches each fuel's carbon intensity, as listed in Table 1 under OAR 340-253-3010 or Table 2 under 340-253-3020, as applicable.~~

(3) Individual carbon intensity values.

(a) Directed by DEQ. Regulated parties, credit generators or brokers ~~A regulated or opt-in party~~ must obtain an individual carbon intensity value for a fuel~~,~~ if DEQ:

(A) __Determines the fuel's carbon intensity is not adequately represented by any of the carbon intensity values for established pathways in Table 3 or 4 under OAR 340-253-8030 or 340-253-8040, as applicable~~in Table 1 under OAR 340-253-3010 or Table 2 under 340-253-3020~~; and

(B) __Directs the regulated party, credit generator or broker ~~regulated or opt-in party~~ to obtain an individual carbon intensity value under OAR 340-253-0450.

(b)__ -Election of the party. Regulated parties, credit generators or brokers ~~A regulated or opt-in party~~ may ~~propose~~ obtain an individual carbon intensity value for a fuel if:

(A) __It applies for and obtains DEQ approval under OAR 340-253-0450; and

(~~A~~B) The fuel's carbon intensity, when compared to the carbon intensity value for the most similar fuel type in Table 3 or 4 under OAR 340-253-8030 or 340-253-8040~~Table 1 under OAR 340-253-3010 or Table 2 under 340-253-3020~~, as applicable, changes by at least 5.0 gCO2e per MJ or 10 percent, whichever is less;

~~(B) The party has the capacity and intent to provide more than one million gge per year of the fuel in Oregon unless all providers of that fuel type supply less than one million gge per year in total; and~~

~~(C) The party applies for and obtains DEQ approval under OAR 340-253-0450.~~

(c) __New fuel or feedstock. Regulated parties, credit generators or brokers ~~A regulated or opt-in party~~ must obtain approval for an individual carbon intensity value under OAR 340-253-0450 for any fuel not included in Table 3 or 4 under OAR 340-253-8030 or 340-253-8040, as applicable, ~~Table 1 under 340-253-3010 or Table 2 under 340-253-3020~~ and for any fuel made from a feedstock not represented in a carbon intensity value in Table 3 or Table 4 under OAR 340-253-8030 or 340-253--8040, as applicable~~Table 1 under 340-253-3010 or Table 2 under 340-253-3020~~. ~~The party must submit a modification to the original registration under 340-253-0500(5) within 30 days,~~

(d) __Process change notification. If a fuel's carbon intensity value changes in a way that increases the fuel's carbon intensity value by more than either 5.0 gCO2e per MJ or 10 percent, the regulated party, credit generator or broker must notify DEQ and obtain an individual carbon intensity value under OAR 340-253-0450 by submitting a modification to the original registration under OAR 340-253-0500 within 30 days.~~The regulated or opt-in party must notify DEQ and obtain approval for an individual carbon intensity value under OAR 340-253-0450 for any changes to the fuel production process, if the fuel's carbon intensity value changes by more than 5.0 gCO2e per MJ or 10 percent. The party must submit a modification to the original registration under 340-253-0500(5) within 30 days.~~

(~~4~~e) _OR-GREET. Regulated parties, credit generators and brokers ~~The regulated or opt-in party~~ must calculate all carbon intensity values using the approved version of OR-GREET, or a DEQ-approved comparable model for any fuel that cannot be modeled with OR-GREET. Any

variations from the approved version of OR-GREET must be documented as described under OAR 340-253-0450(1) and submitted to DEQ for approval.

(4) DEQ review of carbon intensity values. At least every three years, DEQ must review the carbon intensity values in Table 3 or 4 under OAR 340-253-8030 or 340-253-8040 and:

(a) Must consider, at a minimum:

(A) The sources of crude and associated factors that affect emissions such as flaring rates, extraction technologies, capture of fugitive emissions and energy sources;

(B) The sources of natural gas and associated factors that affect emissions such as extraction technologies, capture of fugitive emissions and energy sources;

(C) The statewide mix of electricity used in Oregon;

(D) Individual carbon intensity values that have been approved under OAR 340-253-0450;

(E) Changes in OR-GREET; and

(F) Changes in indirect land use change and indirect effects.

(b) Report to EQC regarding whether statewide average carbon intensity values in Table 3 or 4 under OAR 340-253-8030 or 340-253-8040 should be revised.

~~(5) Calculation requirements. When a regulated or opt-in party calculates a carbon intensity value of:~~

~~(a) Fuels made from biomass feedstock, the party may assume that the combustion and growing components of the fuel's lifecycle greenhouse gas emissions have net zero lifecycle carbon dioxide emissions.~~

~~(b) Fuels made from petroleum feedstock, including waste petroleum feedstock, the party may not assume that the combustion of the fuel has net zero carbon dioxide emissions.~~

~~(c) Fuels made from waste feedstock, the party may assume that the lifecycle greenhouse gas emissions analysis of the carbon intensity value begins when the original product becomes waste.~~

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition).
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14

340-253-0450

Approval for Individual Carbon Intensity Values

(1) __Individual carbon intensity value approval. A regulated party, credit generator and broker ~~The regulated or opt-in party~~ may not use an individual carbon intensity value without written DEQ approval under this rule. Individual carbon intensity values are not available for the fuels listed under OAR 340-253-0400(1)(a).

(a) __OR-GREET input modifications. To obtain an individual carbon intensity value, a regulated party, credit generator or broker may propose a modification to inputs into OR-GREET that more accurately reflect the specific characteristics of the fuel.~~The regulated or opt-in party may propose a modification to inputs into the OR-GREET model that more accurately reflect the specific carbon intensity of the fuel.~~

(b)__ ~~-~~OR-GREET model modifications. To obtain an individual carbon intensity value, a regulated party, credit generator or broker may propose modifications to OR-GREET model. The proposal for an individual carbon intensity value must include:~~The regulated or opt-in party may propose modifications to the OR-GREET model. The proposal for an individual carbon intensity value must include:~~

(A) __Inputs used to generate the carbon intensity values under OAR 340-253-0400; and

(B) __All modified parameters used to generate the new fuel carbon intensity value.

(c) __Non-OR-GREET modifications. To obtain an individual carbon intensity value, a regulated party, credit generator or broker may propose modifications based on any lifecycle assessment model other than OR-GREET. The proposal for an individual carbon intensity value must include:~~The regulated or opt-in party may propose modifications based on any lifecycle assessment model other than OR-GREET. The proposal for an individual carbon intensity value must include:~~

(A) __Inputs used to generate the carbon intensity values under OAR 340-253-0400; and

(B) __All parameters used to generate the new fuel carbon intensity value.

(2) __Reliability. The regulated party, credit generator or broker ~~regulated or opt-in party~~ must supply documentation necessary for DEQ to determine that the method used to calculate the individual carbon intensity value ~~under section (1)~~ is reliable and ~~at least~~ comparable to ~~the approved version of~~ OR-GREET.

(3) __Modification submittal. The regulated party, credit generator or broker ~~regulated or opt-in party~~ must submit ~~all documentation for the~~ proposed modifications under this rule electronically including ~~all~~:

(a) __CARB approval of the proposed pathway, if available~~Supporting data~~;

(b) __Modifications required for section (1)~~Calculations~~;

(c) Supporting data and calculations~~Flow diagrams~~; and

(d) Any other information DEQ may need to verify the method for calculating the proposed, individual carbon intensity value.~~Equipment description;~~

~~(e) Maps; and~~

~~(f) Any other information DEQ may need to verify the fuel type and the method for calculating the proposed individual carbon intensity value.~~

(4) Review process. Within 15 workdays after receipt of any modification proposal submitted under section (3), DEQ must determine whether the proposal is complete~~DEQ must determine whether the proposal is complete within 15 workdays after receipt of any modification submitted under section (3)~~:

(a) If DEQ determines the proposal is incomplete, DEQ must notify the regulated party, credit generator or broker~~regulated or opt-in party~~ and identify the deficiencies. If the party submits supplemental information, DEQ has 15 workdays to determine if the supplemental submittal is complete, or to notify the party and identify the continued deficiencies.

(b) If DEQ determines the proposal is complete, DEQ must:

(A) Publish the application on the Oregon Clean Fuels Program website; and

(B) Approve or deny an individual carbon intensity value~~ under section (5) or (6)~~.

(5) DEQ approval. A regulated party, credit generator or broker ~~regulated or opt-in party~~ may use an individual carbon intensity value upon receiving written approval from DEQ. DEQ will propose to incorporate all associated parameters and fuel-related information of a DEQ-approved individual carbon intensity value into Table 3 or 4 under OAR 340-253-8030 or 340-253-8040~~Table 1 or 2 under OAR 340-253-3010 or -3020~~, as applicable, in a future rulemaking.

(6) DEQ denial. If DEQ determines the proposal for an individual carbon intensity value is not ~~complete or~~ adequately documented~~ to establish its reliability~~, DEQ must deny the modification proposal, identify the basis for the denial, and notify the party which carbon intensity value ~~to use and identify the basis for the denial~~it is authorized to use.

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition)
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0500

Registration

(1) Registration information. To register, regulated parties, credit generators and brokers must submit the following to DEQ using forms approved by DEQTo register, a regulated or opt-in party must submit the following to DEQ:

(a) Company identification, including physical and mailing addresses, phone numbers, e-mail addresses, and contact namesCompany information including physical and mailing addresses, phone and fax numbers, e-mail addresses, primary and legal contact names and any applicable DEQ or EPA ID numbers.;

(b) The CFP status of the registrant as a producer, small importer, large importer, credit generator or broker;The fuel type(s) that will be imported or produced in Oregon.

(c) The producer of the biofuel, including each producer's physical address and the EPA company and facility ID numbers, for each fuel type.

(dc) For each transportation fuel that will be produced, imported, dispensed or used in Oregon, as applicableThe proposed carbon intensity value, for each fuel type. The proposed carbon intensity value must be:

(A) The proposed carbon intensity value for each fuel. The proposed carbon intensity value must be:

(i) A statewide carbon intensity value for any fuel listed under OAR 340-253-0400(1);

(Bii) -An individual carbon intensity value listed i under Table 3 or 4 under OAR 340-253-8030 or 340-253-8040n Table 1 under OAR 340-253-3010 or Table 2 under OAR 340-253-3020; or

(Ciii) An individual carbon intensity approved by DEQ, or a proposal to obtain a new individual carbon intensity value, under OAR 340-253-0400(3)An individual carbon intensity value under OAR 340-253-0450.;

(B) For a biofuel, its production company ID and facility ID;

(C) The physical transport mode that represents how the fuel will enter Oregon; and

(e) The volume estimated to be imported or produced in Oregon in a calendar year, for each fuel type.

(fd) Other information requested by DEQ related to registration.

(2) Completeness of submittal. DEQ must review the information submitted under section (1) to determine if the submission is complete.

(a) If DEQ determines the submission is incomplete, DEQ must notify the registrantparty of the information needed to complete the submission. The registrantparty must provide the requested information within 30 calendar days from the date on the request.

(b) If DEQ determines the submission is complete, DEQ must notify the party in writing of the completeness determination.

(c) If DEQ does not notify the party in writing of the completeness determination within 30 calendar days of receipt of the registration application, the application is ~~automatically~~ deemed complete.

(3) ~~Determination~~ Approval of carbon intensity values. DEQ ~~must~~ shall review ~~the~~ proposed carbon intensity values to determine if they are accurate.

(a) DEQ must review proposed carbon intensity values as follows:

(A) For a proposed carbon intensity value listed under Table 3 or 4 under OAR 340-253-8030 or 340-253-8040, as applicable~~in Table 1 under OAR 340-253-3010 or Table 2 under OAR 340-252-3020~~, DEQ ~~must~~ shall review whether the fuel type accurately matches the fuel ~~and fuel production process~~pathway description of the proposed carbon intensity value listed.

(~~b~~B) For a proposed individual carbon intensity value, DEQ ~~must~~ shall ~~approve~~ review the proposal as provided ~~carbon intensity value or notify the party which carbon intensity value to use~~ under OAR 340-253-0450.

(b) If DEQ determines that the proposed carbon intensity values accurately reflect the carbon intensity of the fuel types, DEQ shall approve the proposed values. Approval of carbon intensity values is confirmed in the registration approval under section (4).

(c) If DEQ determines that a different carbon intensity value more accurately reflects the information submitted, DEQ will notify the regulated party, credit generator or broker of its determination including DEQ's proposed carbon intensity value and the reason(s) for selecting it within 45 days of DEQ's completeness determination.

(A) The registrant must accept or appeal DEQ's determination in writing within 15 days of receiving DEQ's carbon intensity value determination.

(B) If the registrant accepts DEQ's determination, then confirmation will be through the registration approval under section (4) of this rule.

(C) If the registrant appeals DEQ's determination, then it must submit additional supporting information to DEQ within 30 days of its appeal notification. DEQ will review the additional information as provided in this section for review of initial submissions of carbon intensity values. If DEQ already reviewed one appeal of its carbon intensity determination under this section, DEQ may inform the regulated party, credit generator or broker that DEQ's decision is final and it will not undertake further review.

(4) Registration approval. Once DEQ has approved the carbon intensity values, DEQ will notify the registrant in writing of its registration approval. The notification will include confirmation of the carbon intensity value for each fuel to be used in calculating credits and

deficits under OAR 340-253-1000. After DEQ provides initial written approval of the registration application of a regulated party, credit generator or broker, the regulated party, credit generator or broker must establish an account in the CFP Online System and must use the CFP Online System to record and report credit and deficit generation, credit trading, and compliance with the CFP rules in this division.~~DEQ must notify the party in writing of its registration approval. The notification must include confirmation of the carbon intensity value for each fuel type to be used in calculating surpluses and shortfalls under OAR 340-253-1020.~~

(5) __Modifications to registration.

(a) __The ~~party~~ registrant must submit an amended registration to DEQ within 30 days of any change occurring to information described in section (1)~~, including any change that would result in a different carbon intensity value~~.

(b) __DEQ may require a ~~party~~registrant to submit an amended registration based on new information~~ that DEQ obtains from any source~~.

(c) __If a registrant amends its registration under this section, the registrant must also update the registrant's account in the CFP Online System to accurately reflect the amended information, as appropriate.

(6) __Opting out. To opt-out of the CFP, a credit generator or broker must notify DEQ in writing. A credit generator or broker that opts out cannot generate, trade, or facilitate the generation or trading of credits unless the credit generator or broker re-registers under OAR 340-253-0100(3) or (4). Regulated parties may not opt-out of the CFP.~~To opt-out, an opt-in party must notify DEQ in writing. Regulated parties may not opt-out.~~

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition).
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14

340-253-0600

Records

(1) __Records**.** Regulated parties, credit generators and brokers must retain the following records for at least 5 years~~All regulated and opt-in parties, except for small Oregon importers of finished fuels. Each regulated and opt-in party, except for small Oregon importers of finished fuels, must retain the following records for at least five years~~:

(a) __Product transfer documents~~Copies of all data and reports submitted to DEQ~~;

(b) __Credit transfer documents~~Records of each fuel transaction made including:~~;

~~(A) Fuel name, choosing the most applicable name from a list developed and provided by DEQ;~~

~~(B) Fuel application, choosing the most applicable choice from a list developed and provided by DEQ;~~

~~(C) Fuel pathway code, choosing the most applicable code from a list developed and provided by DEQ;~~

~~(D) Transaction date;~~

~~(E) Transaction type, choosing the most applicable type from a list developed and provided by DEQ;~~

~~(F) Transaction quantity;~~

~~(i) In gallons for liquid fuels including gasoline, diesel fuel, ethanol, biomass-based diesel, liquefied natural gas and liquefied petroleum gas;~~

~~(ii) In standard cubic feet for compressed natural gas;~~

~~(iii) In kilowatt-hours for electricity; and~~

~~(iv) In kilograms for hydrogen fuel.~~

~~(G) Transaction identification number;~~

~~(H) Business partner, choosing the most applicable name from a list developed and provided by DEQ;~~

~~(I) Physical pathway code, choosing the most applicable code from a list developed and provided by DEQ;~~

~~(J) Product transfer documents;~~

~~(K) Exempt status documentation under OAR 340-253-0250, if fuel is excluded from surplus and shortfall calculations under OAR 340-253-1010; and~~

~~(L) For fuel that is exported outside Oregon, where the party is the exporter of record.~~

(c) Copies of all data and reports submitted to DEQ~~Records used to calculate surpluses and shortfalls~~;

(d) Records related to each fuel transaction~~Other records used to determine compliance with the Oregon Clean Fuels Program~~; and

(e) Records used for compliance or credit calculations~~Any other records identified by DEQ and related to the volume, distribution or carbon content of fuel produced or imported by a party~~.

(2) Review. All data, records, and calculations used by a regulated party, a credit generator or a broker to comply with the Oregon Clean Fuels Program are subject to verification by DEQ. Regulated parties, credit generators and brokers must provide records retained under section (1) within 60 calendar days after the date DEQ requests a review of the records, unless otherwise specified by DEQ~~Oregon producers and importers of one or more non-petroleum blendstocks. In addition to section (1), each Oregon producer and importer of one or more non-petroleum blendstocks must retain the following records for at least five years.:~~

~~(a) DEQ-approved carbon intensity for each fuel type, choosing the most appropriate choice from a list developed and provided by DEQ;~~

~~(b) Name of the biofuel producer, including each producer's physical address, EPA company ID and facility ID number, for each fuel type, and choosing the most appropriate choice from a list developed and provided by DEQ; and~~

~~(3) Review. All data, records and calculations used by a regulated or opt-in party to comply with the Oregon Clean Fuels Program are subject to verification by DEQ. The party must provide records retained under section (1) within 60 calendar days after the date DEQ requests a review of the records, unless otherwise specified.~~

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition).
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14

340-253-0620

CFP Online System Reporting

(1) Online reporting. Regulated parties, credit generators and brokers must use the CFP Online System to submit quarterly progress reports under OAR 340-253-0630 and annual compliance reports under OAR 340-253-0650.

(2) Establishing an account. Following DEQ's approval of the regulated party's, credit generator's or broker's registration under OAR 340-253-0500 (the "registrant"), each registrant must establish an account in the CFP Online System. Each registrant must include the following information in its CFP Online System account:

(a) Registrant's name, address, state and county, date and place of incorporation, and federal employer identification number (FEIN);

(b) Registrant's primary contact name, business and mobile phone numbers, email address,

username and password;

(c) Name and title of an Administrator for the registrant;

(d) Name and title of Contributors for the registrant, optional;

(e) Name and title of Reviewers for the registrant, optional; and

(f) Any other information DEQ may require in the CFP Online System.

(3) Account management roles.

(a) Administrator.

(A) Authorized to sign for the registrant;

(B) Responsible for submitting quarterly progress and annual compliance reports;

(C) Makes changes to the company profile; and

(D) May designate users within the company who can review and upload data, but not submit reports.

(b) Contributor.

(A) Authorized to submit quarterly progress and annual compliance reports, if given signature authority; and

(B) Cannot make changes to the company profile.

(c) Reviewer.

(A) Provided read-only access; and

(B) Cannot submit quarterly progress and annual compliance reports.

(4) Signature. Reports must include an electronic signature that certifies that the submitted information is true, accurate and complete.

340-253-0630

Quarterly Progress Reports

~~Quarterly reports must include the following information, in a format provided or approved by DEQ:~~

(1) Quarterly progress reports. Each quarter, regulated parties, credit generators and brokers must submit a quarterly progress report using the CFP Online System by:

(a) May 31 – for January through March of each year;

(b) August 31 – for April through June of each year;

(c) November 30 – for July through September of each year; and

(d) February 28 – for October through December of each previous year.

(2) General reporting requirements for quarterly progress reports. Regulated parties, credit generators and brokers must submit quarterly progress reports that contain the information specified in Table 5 under OAR 340-253-8050 for each transportation fuel subject to the CFP.

(3) Specific reporting parameters for biomethane (including Bio-CNG, Bio-LNG and Bio-L-CNG) used as a transportation fuel. The credit generator must report:

(a) The information specified for CNG and LNG in Table 5 under OAR 340-253-8050;

(b) The carbon intensity value of the bio-CNG, bio-LNG or bio-L-CNG as approved under OAR 340-253-0500(4); and

(c) The production company ID and facility ID.

(4) Specific reporting parameters for electricity used as a transportation fuel. For electricity used as a transportation fuel, a credit generator must report the following:

(a) The information specified for electricity in Table 5 under OAR 340-253-8050;

(b) The carbon intensity value of the electricity as approved under OAR 340-253-0500(4); and

(c) For residential charging stations, the total electricity dispensed (in kilowatt hours) to all vehicles at each residence, measured by:

(A) The use of direct metering (either sub-metering or separate metering) to measure the electricity directly dispensed to all vehicles at each household or residence; or

(B) For households and residences where direct metering is not available and with prior DEQ approval, the credit generator may report the total electricity dispensed as a transportation fuel using an alternative method that the credit generator demonstrates is substantially similar to the use of direct metering.

(d) For each public access, fleet and workplace private access charging facility, the amount of electricity dispensed (in kilowatt hours).

~~(1) For each fuel type imported or produced in Oregon:~~

~~(a) Total volume; and~~

~~(b) DEQ-approved carbon intensity.~~

~~(2) Surpluses and shortfalls as calculated under OAR 340-253-1020, including the;~~

~~(a) Amount of surpluses and shortfalls generated during the quarter; and~~

~~(b) Quarterly and year-to-date net balance calculations under OAR 340-253-1030 for gasoline and gasoline substitutes and diesel and diesel substitutes.~~

~~(3) The volumes of any exempt fuels or fuels transferred to exempt users under OAR 340-253-0250; and~~

~~(4) Volumes exported outside Oregon.~~

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition).
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14

340-253-0650

Annual Compliance Reports

(1) Annual compliance reports. Using the CFP Online System, regulated parties, credit generators and brokers must submit an annual compliance report to DEQ by April 30 for the compliance period running from January 1 through December 31 of the previous year.

(2) General reporting requirements for annual compliance reports. Regulated parties, credit generators and brokers must submit annual compliance reports that meets, at minimum, the general and specific requirements for quarterly progress reports and the following information:

(a) The total credits and deficits generated by the regulated party, credit generator or broker in the current compliance period, calculated in the CFP Online System;

(b) Any credits carried over from the previous compliance period;

(c) Any deficits carried over by a regulated party from the previous compliance period;

(d) The total credits acquired from other regulated parties, credit generators and brokers;

(e) The total credits transferred to other regulated parties, credit generators and brokers; and

(f) The total credits retired by a regulated party to meet the regulated party's compliance obligation.

(3) Correcting a previously submitted report. A regulated party, broker or credit generator may request to have a previously submitted quarterly progress or annual compliance report reopened for corrective edits and re-submittal. The regulated party must submit an "Unlock Report Request Form" using the CFP Online System. The requestor is required to provide justification for the report corrections and indicate the specific corrections to be made to the report. Each submitted request is subject to DEQ approval. DEQ approval of a corrected a report does not preclude DEQ enforcement based on misreporting.

~~Annual reports must include the following information, in a DEQ provided or approved format:~~

~~(1) Company name of the regulated or opt-in party;~~

~~(2) For each fuel type imported or produced in Oregon during the calendar year:~~

~~(a) Total volume; and~~

~~(b) DEQ-approved carbon intensity.~~

~~(3) Surpluses or shortfalls as calculated under OAR 340-253-1020, including the;~~

~~(a) Amount of surpluses and shortfalls carried over from the previous year; and~~

~~(b) Amount of surpluses and shortfalls generated during the year.~~

~~(4) Net balance calculations under OAR 340-253-1030 for gasoline and gasoline substitutes and diesel and diesel substitutes;~~

~~(5) The volumes of any exempt fuels or fuels transferred to exempt users under OAR 340-253-0250; and~~

~~(6) Volumes exported outside Oregon.~~

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition).
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14

340-253-1000

~~Surplus~~ Credit and ~~Shortfall~~ Deficit Basics

(1) __Carbon intensity values.

(a) __Except as provided in subsection (b), when calculating carbon intensity values, regulated parties, credit generators and brokers must:~~the regulated or opt-in party must use the DEQ carbon intensity value approved under OAR 340-253-0500.~~

(A) __Use a DEQ carbon intensity value approved under OAR 340-253-0500(4); and

(B) __Express the carbon intensity value to the same number of significant figures as shown in Table 3 or 4 under OAR 340-253-8030 or 8040, as applicable.

(b) __If a regulated party, credit generator or broker ~~the regulated or opt-in party~~ has submitted a complete registration under OAR 340-253-0500 and DEQ has not approved the proposed carbon intensity value or has not determined that a different carbon intensity value more accurately reflects the fuel type, the regulated party, credit generator or broker~~party~~ must use the carbon intensity value proposed in its registration.

(2) __Fuel quantities. Regulated parties, credit generators and brokers must express fuel quantities to the nearest whole unit applicable for each fuel such as gallons, standard cubic feet, kilowatt-hours or pounds.~~When calculating and reporting fuel quantities, the regulated or opt-in party must:~~

~~(a) Use energy units in MJ. To convert other energy units to MJ, the party must multiply the unit by the corresponding energy density under Table 3 under OAR 340-253-3030, and use the BTU-to-MJ conversion factor of 1,055 J per BTU.~~

~~(b) Express quantities to the nearest whole unit applicable for that quantity such as gallons, standard cubic feet, kilowatt-hours or pounds.~~

(3) __Conversion of energy. To convert other energy units to megajoules, the regulated party, credit generator or broker must multiply the unit by the corresponding energy density factor based on the lower heating values of fuels in OR-GREET using BTU to megajoules conversion of 1,055 J per BTU. Table 6 under OAR 340-253-8060 includes energy density conversions for Oregon~~Metric tons of CO2 equivalent. When reporting surpluses and shortfalls, the regulated or opt-in party must express quantities to the nearest whole metric ton of carbon dioxide equivalent~~.

(4) __Metric tons of CO2 equivalent**.** Regulated parties, credit generators and brokers must express credits and deficits to the nearest whole metric ton of carbon dioxide equivalent.~~Surplus generation. A party generates a clean fuel surplus when:~~

~~(a) The carbon intensity of a fuel identified under OAR 340-253-1010 is lower than the corresponding baseline carbon intensity value for gasoline and gasoline substitutes or diesel fuel and diesel substitutes;~~

~~(b) The party has a DEQ-approved carbon intensity value; and~~

~~(c) The party demonstrates that the fuel is:~~

~~(A) Biodiesel, ethanol, or any other liquid fuel other than liquefied natural gas delivered to a public or private access fueling facility in Oregon;~~

~~(B) Electricity used in Oregon to charge a motor vehicle; or~~

~~(C) Compressed or liquefied natural gas, hydrogen fuel or liquefied petroleum gas dispensed in Oregon for use in a motor vehicle.~~

(5) Credit generation**.** A clean fuel credit is generated when fuel is produced, imported, dispensed or used in Oregon, as applicable, and the carbon intensity value of the fuel approved under OAR 340-253-0500(4), is less than the clean fuel standard for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-8010 or 340-253-8020, as applicable.~~Shortfall generation. A party generates a clean fuel shortfall when:~~

~~(a) The carbon intensity of a fuel identified under OAR 340-253-1010 is higher than the corresponding baseline carbon intensity value for gasoline and gasoline substitutes or diesel fuel and diesel substitutes; and~~

~~(b) The fuel is imported to Oregon or produced by an Oregon producer for use in Oregon for use in a motor vehicle.~~

(6) Deficit generation**.** A clean fuel deficit is generated when fuel is produced or imported in Oregon and the carbon intensity value of the fuel exceeds the clean fuel standard for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-8010 or 340-253-8020, as applicable~~Nature of surpluses. Clean fuel surpluses are a regulatory instrument and do not constitute personal property, instruments, securities or any other form of property. Surpluses are not credits and may not be used to meet any compliance obligations other than as specified in this division~~.

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition)
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-1010

Fuels to include in ~~surplus~~ credit and ~~shortfall~~ deficit calculation

(1) Fuels included. Regulated parties, credit generators and brokers must calculate credits or deficits for all regulated fuels and clean fuels~~A regulated or opt-in party must calculate surpluses~~

~~and shortfalls for all regulated and opt-in fuels under OAR 340-253-0200 that are not otherwise exempt under OAR 340-253-0250, excluding fuels that are exported outside Oregon~~.

(2) Fuels exempted. Except as provided in section (3), regulated parties, credit generators and brokers may not calculate credits and deficits for fuels:~~excluded. Except as provided in section (3), the regulated or opt-in party may not include fuels excluded under OAR 340-253-0250 in surplus and shortfall calculations.~~

(a) Exported outside Oregon; or

(b) Exempt under OAR 340-253-0250.

(3) Voluntary inclusion**.** A regulated party, credit generator or broker may choose to include in its credits and deficits calculations fuel sold to an exempt user under OAR 340-253-0250(2) provided that all fuel listed on the same delivery invoice is included~~Fuels sold to exempt users. The regulated or opt-in party may include or exclude fuel sold to an exempt user under OAR 340-253-0250 from the surpluses and shortfalls calculations~~.

~~(a) If the party includes the fuel, the party must include all fuel volumes listed on an invoice or all fuels included in a single or simultaneous delivery of fuel, regardless of how many invoices are used.~~

~~(b) If the party excludes the fuel, the party must document and report all excluded fuels under OAR 340-253-0600 through 340-253-0650.~~

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition)
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-1020

Calculating ~~Surpluses~~ Credits ~~or Shortfalls~~ or Deficits. Regulated parties, credit generators and brokers must calculate credits or deficits for each fuel included under 340-253-1010 using:

(1) Credit and deficit basics under OAR 340-253-1000~~The regulated or opt-in party must calculate surpluses and shortfalls for each fuel type included under 340-253-1010 using the surplus and shortfall basics under OAR 340-253-1020 to calculate the following~~:

~~(a) Energy in MJs by multiplying the amount of fuel by the energy density of the fuel in Table 3 under OAR 340-253-3030;~~

~~(b) Adjusted energy in MJs by multiplying the energy in MJs from (1)(a) by the energy economy ratio of the fuel using Table 4 or 5 under OAR 340-253-3040 or -3050 for gasoline and gasoline substitutes or diesel fuel and diesel substitutes;~~

~~(c) Carbon intensity difference by subtracting the fuel's carbon intensity value from the corresponding baseline carbon intensity value for gasoline and gasoline substitutes or diesel fuel and diesel substitutes~~

~~(d) Grams of carbon dioxide equivalent by multiplying the adjusted energy in MJs in (1)(b) by the carbon intensity difference in (1)(c); and~~

~~(e) Metric tons of carbon dioxide equivalent by dividing the grams of carbon dioxide equivalent in (1)(c) by 1,000,000.~~

(2) Calculate ***energy in megajoules*** by multiplying the amount of fuel by the energy density of the fuel in Table 6 under OAR 340-253-8060~~If the fuel has a carbon intensity:~~ ;

~~(a) Higher than the corresponding baseline carbon intensity value for gasoline and gasoline substitutes or diesel fuel and diesel substitutes, the absolute value of the metric tons of carbon dioxide equivalent under subsection (1)(e) is a shortfall.~~

~~(b) Lower than the corresponding baseline carbon intensity value for gasoline and gasoline substitutes or diesel fuel and diesel substitutes, the absolute value of the metric tons of carbon dioxide equivalent under subsection (1)(e) is a surplus.~~

(3) Calculate the ***adjusted energy in megajoules*** by multiplying the *energy in megajoules* from section (2) by the energy economy ratio of the fuel using Table 7 or 8 under OAR 340-253-8070 or 340-253-8080, as applicable;

(4) Calculate the ***carbon intensity difference*** by subtracting the fuel's carbon intensity value as approved under OAR 340-253-0500(4) from the clean fuel standard for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-8010 or 340-253-8020, as applicable;

(5) Calculate the ***grams of carbon dioxide equivalent*** by multiplying the *adjusted energy in megajoules* in section (3) by the *carbon intensity difference* in section (4);

(6) Calculate the ***metric tons of carbon dioxide equivalent*** by dividing the *grams of carbon dioxide equivalent* in section (5) by 1,000,000; and

(7) Determine whether credits or deficits are generated under OAR 340-253-1000(5) and (6).

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition)
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-1030

~~Net Balance Calculation~~ Deficit Basics

~~A regulated or opt-in party must calculate the net balance at the end of the reporting period using the following formula: Net balance = SurplusesGenerated + SurplusesForward – ShortfallsGenerated – ShortfallsForward where:~~

(1) Small deficits**.** At the end of a compliance period, a regulated party that has a net deficit balance may carry forward a small deficit to the next compliance period without penalty if the regulated party does not have any credits to offset its deficits. A small deficit exists if the amount of credits needed by the regulated party to meet the standard is 10 percent or less than the total amount of deficits the regulated party generated for the compliance period.

(2) Large deficits. At the end of a compliance period, a regulated party that has a net deficit balance may not carry forward a large deficit to the next compliance period. A large deficit exists if the amount of credits needed by the regulated party to meet the standard is greater than 10 percent of the total amount of deficits the regulated party generated for the compliance period. It is a violation of this rule for a regulated party to have a large deficit at the end of a compliance period.

(3) Deficit reconciliation**.** If a regulated party has a small deficit carried forward from the previous compliance period, the regulated party must eliminate the small deficit by the end of the current compliance period. This provision does not preclude the regulated party from carrying forward a small deficit in the subsequent compliance period based on the total amount of deficits the regulated party generated in the subsequent compliance period.

~~(1) SurplusesGenerated is the total surpluses generated using calculations under OAR 340-253-1020;~~

~~(2) SurplusesForward is the surpluses carried forward from the previous reporting period;~~

~~(3) ShortfallsGenerated is the total shortfalls generated using calculations under OAR 340-253-1020; and~~

~~(4) ShortfallsForward is the shortfall carried forward from the previous reporting period.~~

Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)
Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition)
Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-1050

Credit Basics

(1) General.

(a) Clean fuel credits are a regulatory instrument and do not constitute personal property, instruments, securities or any other form of property.

(b) Regulated parties, credit generators and brokers may:

(A) Retain clean fuel credits without expiration for use within the CFP, subject to this rule and OAR 340-253-1030; and

(B) Acquire or transfer clean fuel credits from or to other regulated parties, credit generators and brokers that are approved program registrants under OAR 340-253-0500(4) and have account access to the CFP Online System.

(c) Regulated parties, credit generators and brokers may not:

(A) Use alleged credits that have not been generated in compliance with the rules in this division; or

(B) Borrow or use anticipated credits from future projected or planned carbon intensity reductions.

(2) Mandatory retirement of credits.

(a) At the end of a compliance period, a regulated party that possesses credits must retire a sufficient number of credits to satisfy the regulated party's compliance obligation for that compliance period. A regulated party may not carry over credits to the next compliance period if the regulated party has any remaining deficits.

(b) If the total number of credits is less than the total number of deficits, the regulated party is subject to OAR 340-253-1030.

(3) Credit transfers between parties.

(a) A regulated party, credit generator or broker who wishes to sell or transfer credits (a "credit seller") and a regulated party, credit generator or broker who wishes to purchase or acquire credits (a "credit buyer") may enter into an agreement to transfer credits.

(b) A credit seller may transfer credits provided the number of credits to be transferred by the credit seller does not exceed the number of total credits in the credit seller's CFP Online System account.

(4) Credit transfer form.

(a) When a credit transfer agreement is desired, the credit seller shall use the "Credit Transfer Form" provided in the CFP Online System and must include the following:

(A) Date of the proposed credit transfer agreement;

(B) Name and FEIN of the credit seller and credit buyer;

(C) Name and contact information of the person who performed the transaction on the credit seller's and credit buyer's behalf;

(D) The number of credits proposed to be transferred; and

(E) The price or equivalent value of the consideration (in US dollars) to be paid per metric ton of credit proposed for transfer, excluding any fees.

(b) After receiving the credit transfer form from the credit seller, the credit buyer must confirm the accuracy of the information contained in the credit transfer form using the CFP Online System.

(5) Broker. A credit seller or a credit buyer may elect to use a broker to facilitate the transfer of credits, provided that the broker has an approved and active registration under OAR 340-253-0500(4), an account on the CFP Online System, and complies with OAR 340-253-0100(4).

(6) Illegitimate credits.

(a) A credit generator commits a violation if the credit generator submits information into the CFP Online System indicating that one or more credits have been generated when such an assertion is inconsistent with the requirements of OAR 340-253-1000 through 340-253-1020. If DEQ determines that one or more clean fuel credits claimed to have been generated by a credit generator was not generated in compliance with such rules, then the credit generator:

(A) Must provide an approved clean fuel credit to replace each credit that was not properly generated, if available; and

(B) Is subject to enforcement.

(b) A regulated party, credit generator or broker that has acquired one or more illegitimate credits commits a violation unless DEQ determines:

(A) The credits were acquired from a registered regulated party, credit generator or broker with a CFP Online System account; and

(B) The carbon intensity value of the fuel for which the credits were generated matches the carbon intensity value approved by DEQ for that fuel pathway.

(7) Public disclosure.

(a) Clean Fuels Program status report. DEQ shall publish a quarterly report that summarizes

the aggregate CFP credit and deficit generation for the:

(A) Most recent quarter;

(B) Past quarters of the current compliance period; and

(C) Past compliance periods.

(b) Clean Fuels Program credit report. DEQ shall publish a monthly report that summarizes the aggregate CFP credit transfer information for:

(A) Most recent month;

(B) Past months of the current compliance period; and

(C) Past compliance periods.

(c) DEQ reports will be based on information submitted into the CFP Online System.

(d) DEQ reports will represent information aggregated for all fuel transacted within the state; not by individual parties.

Deferrals

340-253-2000

Emergency Deferral Due to Clean Fuel Supply

(1) Determining whether to issue an emergency deferral. DEQ must issue an order declaring an emergency deferral from the clean fuel standard, if DEQ determines:

(a) There is a shortage in fuel that is needed for regulated parties to comply with the clean fuel standard, due to:

(A) A natural disaster; or

(B) An unanticipated disruption in production or transportation of clean fuels used for compliance, except disruptions for routine maintenance of a fuel production facility or fuel transmission system; and

(b) The magnitude of the shortage is greater than the equivalent of five percent of the total credits generated by all regulated parties and providers of clean fuels under OAR 340-253-1020 in the previous compliance period. To determine the magnitude of the shortage, DEQ shall consider the following:

(A) The volume and carbon intensity of the fuel determined to be not available under

subsection (1)(a);

(B) The estimated duration of the shortage;

(C) Whether one or both of the following options could mitigate compliance with the clean fuel standard:

(i) The same fuel from other sources;

(ii) Substitutes for the affected fuel and the carbon intensity values of those substitutes; or

(iii) Banked clean fuel credits; and

(D) Other information DEQ may need to determine the magnitude of the shortage.

(2) Content of an emergency deferral. If DEQ determines under section (1) that a deferral must be issued, DEQ must determine:

(a) The start date and end date of the emergency deferral period, which may not exceed one year (but which may be renewed if DEQ makes a subsequent determination under section (1)~~)~~;

(b) The fuel deferred from complying with the clean fuel standard; and

(c) Which of the following methods DEQ selects to defer compliance with the clean fuel standard during the temporary deferral period:

(A) Allow deficits to be carried over into future compliance periods, notwithstanding OAR 340-253-1030(2) ~~—~~and 340-253-1030(3); or

(B) Suspend deficit accrual during the emergency deferral period.

(d) Credits will accrue during the emergency deferral period.

(3) Issuing an emergency deferral. DEQ must issue an emergency deferral order that notifies the affected parties with the following information:

(a) DEQ's determination under section (1);

(b) The deferral period as established under section (2);

(c) The fuel deferred as established under section (2); and

(d) The method selected by DEQ to comply as established under section (2).

340-253-2100

Forecasted Deferral Due to Clean Fuel Supply

(1) DEQ forecast. DEQ must use available data under section (2) to develop a fuel supply forecast for the next calendar year that includes:

(a) The potential volumes of gasoline substitutes and diesel fuel substitutes available in Oregon;

(b) The estimated total aggregate credits available;

(c) The estimated credits needed to meet the clean fuel standard; and

(d) A comparison of the estimates under subsections (1)(a) and (b) with (1)(c) to indicate the availability of fuel needed for compliance.

(2) Available data. DEQ must consider available data to develop the forecast including:

(a) Past Oregon fuel consumption volumes and trends;

(b) Oregon and nationwide trends in alternative fuel use;

(c) Information on numbers of alternative-fueled vehicles in Oregon;

(d) Banked clean fuel credits;

(e) Projected total transportation fuel consumption volumes in Oregon, including gasoline and diesel fuel;

(f) Planned projects in or near Oregon such as electric vehicle charging or natural gas fueling stations;

(g) The status of existing and planned clean fuel production facilities nationwide;

(h) Applicable updates to the carbon intensity values of fuels;

(i) Nationwide volumes for fuels required under the federal renewable fuel standard; and

(j) Any other information DEQ may need to develop the forecast.

(3) Determining whether to issue a forecasted deferral. If DEQ forecasts a shortfall in clean fuel credits under subsection (1)(d), and the shortfall is greater than the equivalent of five percent of the credits needed under (1)(c) to comply with the clean fuel standard, then DEQ shall determine whether a forecasted deferral is needed by considering the following:

(a) Timing of fuel availability;

(b) Timing, duration and magnitude of the estimated clean fuel shortfall;

(c) Information in addition to material considered under section (2), on potential and current gasoline substitutes and diesel fuel substitutes, including:

(A) Production nationwide;

(B) Use in Oregon; and

(C) Clean fuel infrastructure development in Oregon; and

(d) Any other information DEQ may need in the analysis.

(4) Content of a forecasted deferral. If DEQ determines under section (3) that a forecasted deferral must be issued, DEQ must determine:

(a) The start date and end date of the forecasted deferral period, which may not exceed one year (but which may be renewed if DEQ makes a subsequent determination under section (3));

(b) The fuel deferred from complying with the clean fuel standard; and

(c) Which of the following methods DEQ selects to defer compliance with the clean fuel standard during the forecasted deferral period:

(A) Defer the requirement to comply with the clean fuel standard for up to one year, and allow credits to accrue during the deferral period; or

(B) Propose that EQC revise the CFP through a rulemaking to:

(i) Amend the clean fuel standard;

(ii) Amend the clean fuel standard to extend beyond 2025, the year when Oregon must meet the lowest average carbon intensity values to allow for less stringent annual reductions while still reaching the same average carbon intensity value at the end of the period; or

(iii) Otherwise amend the CFP to address the forecasted fuel supply shortage, such as by adopting a multi-year deferral.

(5) Issuing a forecasted deferral. DEQ must issue a forecasted deferral order to the affected parties with the following information:

(a) DEQ's determination under section (3);

(b) The deferral period as established under section (4);

(c) The fuel deferred as established under section (4); and

(d) The method selected by DEQ to comply as established under section (4).

340-253-2200

Monthly Fuel Price Deferral

(1) Definitions. As used in this rule:

(a) **"**Diesel Blends**"** means diesel fuel and diesel fuel blended with biodiesel or biomass-based diesel.

(b) "Gasoline Blends" means gasoline and gasoline blended with ethanol.

(c) "Price evaluation threshold" means that the 12-month rolling weighted average price of gasoline blends or diesel blends in Oregon is more than five percent higher than the 12-month rolling weighted average price in the:

(A) Statutory PADD 5 for gasoline; or

(B) Statutory PADD 5 or, if unavailable, Actual PADD 5 for diesel fuel.

(2) Average price. Each month, DEQ shall calculate the 12-month rolling average price for gasoline blends and diesel blends using data available from the U.S. Energy Information Administration or a comparable source, as follows:

(a) Oregon's 12-month rolling average price. Each month, DEQ shall calculate the Oregon 12-month rolling average price for gasoline blends and diesel blends.

(b) Gasoline 12-month rolling weighted-average price for PADD 5. Each month, DEQ shall calculate the PADD 5 12-month rolling volume-weighted average price for gasoline blends using the statutory PADD 5 data.

(c) Diesel 12-month rolling weighted-average price for PADD 5. Each month, DEQ shall calculate the PADD 5 12-month rolling volume-weighted average price for diesel blends using the actual PADD 5 or, if available, the statutory PADD 5 data.

(3) Determining need for cost mitigation. If the price of gasoline blends or diesel blends in Oregon exceeds the price evaluation threshold:

(a) DEQ must provide fuel data and analysis to EQC that includes the applicable information under sections (4) and (5);

(b) EQC shall determine the need to mitigate the costs of complying with the clean fuel standard after considering the DEQ fuel data and analysis. EQC will direct DEQ to implement one or more cost mitigation strategies upon making the following two determinations that:

(A) The price of Oregon gasoline blends or diesel blends exceeds the price evaluation threshold due to the costs of complying with the clean fuel standard; and

(B) One of the strategies under section (6) is necessary to mitigate the costs of compliance with the clean fuel standard.

(4) Determining whether the clean fuel standard caused the price evaluation threshold exceedance**.** EQC must determine whether the price of Oregon gasoline blends or diesel blends exceeds the price evaluation threshold due to the costs of complying with the clean fuel standard. DEQ must analyze and provide the following information to the Commission:

(a) Whether fuel volume and price data is faulty or incomplete;

(b) Price of gasoline substitutes and diesel substitutes;

(c) Changes in demand for gasoline blends and diesel blends such as changes caused by:

(A) An increase in population; or

(B) An increase in fuel usage.

(d) A decrease in retail outlets for gasoline blends and diesel blends in Oregon;

(e) Natural or manmade disasters affecting Oregon but not the statutory PADD 5 as a whole;

(f) Regulatory change that affects Oregon but not the statutory PADD 5 as a whole;

(g) Change in the usage of reformulated gasoline or other special fuel in any state in the statutory PADD 5; and

(h) Any other information DEQ or EQC may need to determine whether the clean fuel standard caused the price of Oregon gasoline blends or diesel blends to exceed the price evaluation threshold.

(5) Factors in determining whether a price mitigation strategy is necessary. EQC must consider the following factors to determine whether it is necessary to mitigate the costs of compliance with the clean fuel standard, or whether the price of gasoline blends or diesel blends will fall below the price evaluation threshold within six months without implementing a cost mitigation strategy:

(a) Fuel price trends;

(b) Price of gasoline substitutes and diesel substitutes;

(c) Availability and use of gasoline substitutes and diesel substitutes in Oregon;

(d) Compliance schedule for the fuel;

(e) Future supply of gasoline substitutes and diesel substitutes; and

(f) Any other information DEQ or EQC may need to determine whether standard cost mitigation strategy is necessary.

(6) Cost mitigation strategies. If EQC determines under subsection (3)(b) that mitigating the cost of compliance is necessary, it must order, and DEQ must implement, one of the following cost mitigation strategies with EQC-approved start and end dates:

(a) Suspend deficit accrual during a cost mitigation period and allow credits to accrue during that period;

(b) Allow credits to accrue and allow deficits to be carried over into future compliance periods, notwithstanding OAR 340-253-1030(2) and– 340-253-1030(3), during a cost mitigation period. EQC may allow deficits to be carried over for one, two, or three future compliance periods before the deficits must be reconciled;

(c) Suspend deficit accrual for a percentage of the fuel during the cost mitigation period and allow credits to accrue during the period;

(d) Eliminate the requirement to comply with the clean fuel standard for up to one year; or

(e) Adopt any other price mitigation strategy that EQC determines to be necessary to effectively mitigate the cost of compliance.

(7) EQC reconsideration. EQC may reconsider and revise its determinations under sections (4) and (5), and as a result may reconsider and revise or withdraw any cost mitigation strategies ordered under section (6), if the information it considered under sections (4) and (5) has changed.

(8) DEQ implementation. In implementing a cost mitigation strategy as directed by EQC, DEQ must notify the affected parties with the following information:

(a) EQC's determinations under sections (4) –through (6);

(b) The start date and end date for the cost mitigation strategy period;

(c) The fuel(s) affected by the price mitigation strategy; and

(d) The cost--mitigation strategy that EQC adopted under section (6).

THESE RULES WERE RENUMBERED AND AMENDED IN OAR 340-253-8010

~~340-253-3010~~

~~Table 1 — Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes~~

~~This table contains the fuel carbon intensity values referenced in 340-253-0400.~~

~~[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]~~

~~Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)~~
~~Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition).~~
~~Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14~~

THESE RULES WERE RENUMBERED AND AMENDED IN OAR 340-253-8020

~~340-253-3020~~

~~Table 2 — Oregon Carbon Intensity Lookup Table for Diesel Fuel and Diesel Substitutes~~

~~This table contains the fuel carbon intensity value referenced in 340-253-0400.~~

~~[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]~~

~~Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)~~
~~Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition).~~
~~Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14~~

THESE RULES WERE RENUMBERED AND AMENDED IN OAR 340-253-8030

~~340-253-3030~~

~~Table 3 — Oregon Energy Densities of Fuels~~

~~[Table not included. See ED. NOTE.]~~

~~[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]~~

~~Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)~~
~~Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition)~~
~~Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12~~

THESE RULES WERE RENUMBERED AND AMENDED IN OAR 340-253-8040

~~340-253-3040~~

~~Table 4 — Oregon Energy Economy Ratios for Fuel used in Light-Duty Applications~~

~~[Table not included. See ED. NOTE.]~~

~~[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]~~

~~Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)~~
~~Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition)~~
~~Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12~~

THESE RULES WERE RENUMBERED AND AMENDED IN OAR 340-253-8050

~~340-253-3050~~

~~Table 5 — Oregon Energy Economy Ratios for Fuel Used in Heavy-Duty Applications~~

~~[Table not included. See ED. NOTE.]~~

~~[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]~~

~~Stat. Auth.: ORS 468.020 Sec. 6, ch. 754, OL 2009, (2011 Edition)~~
~~Stats. Implemented: Sec. 6, ch. 754, OL 2009, (2011 Edition)~~
~~Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12~~

340-253-8010

Oregon Clean Fuel Standard for Gasoline and Gasoline Substitutes

Table #1 **Oregon Clean Fuel Standard for Gasoline and Gasoline Substitutes**		
Calendar Year	Oregon Clean Fuel Standard (gCO2e per MJ)	Percent Reduction
2015	None (Gasoline Baseline is 89.31)	
2016	89.08	0.25 percent
2017	88.86	0.50 percent
2018	88.41	1.00 percent
2019	87.97	1.50 percent
2020	87.08	2.50 percent
2021	86.18	3.50 percent
2022	84.84	5.00 percent
2023	83.50	6.50 percent
2024	82.16	8.00 percent
2025 and beyond	80.36	10.00 percent

340-253-8020

Oregon Clean Fuel Standard for Diesel Fuel and Diesel Substitutes

Table #2 **Oregon Clean Fuel Standard for Diesel Fuel and Diesel Substitutes**		
Calendar Year	Oregon Clean Fuel Standard (gCO2e per MJ)	Percent Reduction
2015	None (Diesel Baseline is 87.09)	
2016	86.87	0.25 percent
2017	86.65	0.50 percent
2018	86.22	1.00 percent
2019	85.78	1.50 percent
2020	84.91	2.50 percent
2021	84.04	3.50 percent
2022	82.73	5.00 percent
2023	81.43	6.50 percent
2024	80.12	8.00 percent
2025 and beyond	78.38	10.00 percent

340-253-8030

Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes

PRE-PROPOSED RULE

State of Oregon Department of Environmental Quality

Table 1 – OAR 340-253-3010

Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes

Fuel	Feedstock/Fuel Production Process	Carbon Intensity Values (Gco2e per MJ)			
		Direct Emissions	Land Use Change or Other Indirect Effect	Energy Economy Ratio Applied	Final
Gasoline	Clear gasoline, based on a weighted average of gasoline supplied to Oregon	92.34	-	1	92.34
	Blended gasoline, 10% ethanol, based on assuming 90% clear gasoline and 10% GREET default corn ethanol	89.59	-	1	89.59
Ethanol from Corn	GREET default adjusted for transport to Oregon	64.80	-	1	64.80
	Wet Mill, Natural Gas	64.52	-	1	64.52
	Wet Mill, Coal	90.99	-	1	90.99
	Dry Mill, Wet DGS, Natural Gas	57.00	-	1	57.00
	Dry Mill, Coal	92.46	-	1	92.46
Ethanol from Sugarcane	GREET defaults adjusted for transport to Oregon	26.44	-	1	26.44
Cellulosic Ethanol	Farmed trees	15.54	-	1	15.54
	Wheat straw	20.90	-	1	20.90
	Forest residue	20.49	-	1	20.49
	Mill waste	12.31	-	1	12.31
Compressed Natural Gas	North American natural gas delivered via pipeline; compressed in Oregon	71.41	-	1	71.41
	Landfill gas cleaned to pipeline quality	11.26	-	1	11.26
Liquefied Natural Gas	North American natural gas delivered via pipeline; liquefied in Oregon w/ 80% efficiency	83.13	-	1	83.13
	Overseas liquefied natural gas delivered to Oregon; re-gasified then re-liquefied w/ 80% efficiency	93.37	-	1	93.37
	Overseas liquefied natural gas delivered to Oregon; no re-gasification or re-	77.50	-	1	77.50

	liquefaction				
Electricity	Oregon average electricity mix 2015	154.98	-	4.1	37.81
	Oregon average electricity mix 2016	154.98	-	4.0	38.75
	Oregon average electricity mix 2017	154.98	-	3.9	39.74
	Oregon average electricity mix 2018	154.98	-	3.8	40.78
	Oregon average electricity mix 2019	154.98	-	3.7	41.89
	Oregon average electricity mix 2020	154.98	-	3.6	43.05
	Oregon average electricity mix 2021	154.98	-	3.5	44.28
	Oregon average electricity mix 2022	154.98	-	3.4	45.58
	Oregon average electricity mix 2023	154.98	-	3.3	46.96
	Oregon average electricity mix 2024	154.98	-	3.2	48.43

PROPOSED RULE

Table #3

Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes

Fuel	Pathway Identifier	Pathway Description	Carbon Intensity Values (gCO2e/MJ)		
			Direct Emissions	Land Use or Other Indirect Effect	Total
Gasoline	ORGAS001	Clear gasoline, based on a weighted average of gasoline supplied to Oregon	89.40	-	89.40
	ORGAS002	Blended gasoline, 10% ethanol, based on assuming 90% clear gasoline and 10% GREET default corn ethanol	89.31	-	89.31
Ethanol from Corn	ETHC001	Midwest average; 80% Dry Mill; 20% Wet Mill; Dry DGS; NG	69.40	30	99.40
	ETHC002	California average; 80% Midwest Average; 20% California; Dry Mill; Wet DGS; NG	65.66	30	95.66
	ETHC003	California; Dry Mill; Wet DGS; NG	50.70	30	80.70
	ETHC004	Midwest; Dry Mill; Dry DGS, NG	68.40	30	98.40
	ETHC005	Midwest; Wet Mill, 60% NG, 40% coal	75.10	30	105.10
	ETHC006	Midwest; Wet Mill, 100% NG	64.52	30	94.52

Table #3

Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes

	ETHC007	Midwest; Wet Mill, 100% coal	90.99	30	120.99
	ETHC008	Midwest; Dry Mill; Wet, DGS; NG	60.10	30	90.10
	ETHC009	California; Dry Mill; Dry DGS, NG	58.90	30	88.90
	ETHC010	Midwest; Dry Mill; Dry DGS; 80% NG; 20% Biomass	63.60	30	93.60
	ETHC011	Midwest; Dry Mill; Wet DGS; 80% NG; 20% Biomass	56.80	30	86.80
	ETHC012	California; Dry Mill; Dry DGS; 80% NG; 20% Biomass	54.20	30	84.20
	ETHC013	California; Dry Mill; Wet DGS; 80% NG; 20% Biomass	47.44	30	77.44
	ETHC014	2B Application*: Midwest; Dry Mill; Plant energy use not to exceed a value the applicant classifies as confidential; No grid electricity use; Coal use not to exceed 71% of fuel use (by energy); Coal carbon content not to exceed 48%	60.99	30	90.99
	ETHC015	2B Application*: Midwest; Dry Mill; Plant energy use not to exceed a value the applicant classifies as confidential; No grid electricity use; Biomass must be at least 5% of the fuel use (by energy); Coal use not to exceed 66% of fuel use (by energy); Coal carbon content not to exceed 48%	59.08	30	89.08
	ETHC016	2B Application*: Midwest; Dry Mill; Plant energy use not to exceed a value the applicant classifies as confidential; No grid electricity use; Biomass must be at least 10% of the fuel use (by energy); Coal use not to exceed 60% of fuel use (by energy); Coal carbon content not to exceed 48%	57.16	30	87.16
	ETHC017	2B Application*: Midwest; Dry Mill; Plant energy use not to exceed a value the applicant classifies as	55.24	30	85.24

Table #3

Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes

		confidential; No grid electricity use; Biomass must be at least 15% of the fuel use (by energy); Coal use not to exceed 54% of fuel use (by energy); Coal carbon content not to exceed 48%			
	ETHC018	2B Application*: Midwest; Dry Mill; Plant energy use not to exceed a value the applicant classifies as confidential; No grid electricity use; Coal use not to exceed 71% of fuel use (by energy); Coal carbon content not to exceed 48%	59.80	30	89.80
	ETHC019	2B Application*: Midwest; Dry Mill; Plant energy use not to exceed a value the applicant classifies as confidential; No grid electricity use; Biomass must be at least 5% of the fuel use (by energy); Coal use not to exceed 65% of fuel use (by energy); Coal carbon content not to exceed 48%	57.86	30	87.86
	ETHC020	2B Application*: Midwest; Dry Mill; Plant energy use not to exceed a value the applicant classifies as confidential; No grid electricity use; Biomass must be at least 10% of the fuel use (by energy); Coal use not to exceed 59% of fuel use (by energy); Coal carbon content not to exceed 48%.	55.91	30	85.91
	ETHC021	2B Application*: Midwest; Dry Mill; Plant energy use not to exceed a value the applicant classifies as confidential; No grid electricity use; Biomass must be at least 15% of the fuel use (by energy); Coal use not to exceed 53% of fuel use (by energy); Coal carbon content not to exceed 48%	53.96	30	83.96
	ETHC022	2A Application*: Midwest; Dry Mill; 15% Dry DGS, 85% Partially Dry DGS; NG; Plant energy use not to	57.16	30	87.16

Table #3

Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes

		exceed a value the applicant classifies as confidential			
	ETHC023	2A Application*: Midwest; Dry Mill; Partially Dry DGS; NG; Plant energy use not to exceed a value the applicant classifies as confidential	54.29	30	84.29
	ETHC024	2A Application*: Midwest; Dry Mill; 75% Dry DGS, 25% Wet DGS; NG; Plant energy use not to exceed a value the applicant classifies as confidential	61.60	30	91.60
	ETHC025	2A Application*: Dry Mill; Dry DGS; Raw starch hydrolysis; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential	62.44	30	92.44
	ETHC026	2A Application*: Dry Mill; Dry DGS; Raw starch hydrolysis/ combined heat and power; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential	58.49	30	88.49
	ETHC027	2A Application*: Dry Mill; Dry DGS; Raw starch hydrolysis/biomass & landfill gas fuels; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential	58.50	30	88.50
	ETHC028	2A Application*: Dry Mill; Dry DGS; Raw starch hydrolysis/corn fractionation; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential	61.66	30	91.66
	ETHC029	2A Application*: Dry Mill; Dry DGS; Conventional cook/combined heat and power; Amount and type of fuel use, and amount of grid electricity use not to exceed a value	60.52	30	90.52

Table #3

Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes

		the applicant classifies as confidential			
	ETHC030	2A Application*: Dry Mill; Dry DGS; Raw starch hydrolysis/biogas process fuel; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential	44.70	30	74.70
	ETHC031	2A Application*: Dry Mill; Wet DGS; Raw starch hydrolysis; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential	53.69	30	83.69
	ETHC032	2A Application*: Dry Mill; Wet DGS; Raw starch hydrolysis/ combined heat and power; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential	50.01	30	80.01
	ETHC033	2A Application*: Dry Mill; Wet DGS; Raw starch hydrolysis/corn fractionation; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential	50.26	30	80.26
	ETHC034	2A Application*: Dry Mill; Wet DGS; Conventional cook/combined heat and power; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential	50.47	30	80.47
	ETHC035	2A Application*: Dry Mill; Wet DGS; Raw starch hydrolysis/biogas process fuel; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential	43.21	30	73.21
Ethanol from Sugarcane	ETHS001	Brazilian sugarcane using average production processes	27.40	46	73.40
	ETHS002	Brazilian sugarcane with average	12.40	46	58.40

Table #3

Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes

		production process, mechanized harvesting and electricity co-product credit			
	ETHS003	Brazilian sugarcane with average production process and electricity co-product credit	20.40	46	66.40
	ETHS004	2B Application*: Brazilian sugarcane processed in the CBI with average production process; Thermal process power supplied with NG	32.94	46	78.94
	ETHS005	2B Application*: Brazilian sugarcane processed in the CBI with average production process, mechanized harvesting and electricity co-product credit; Thermal process power supplied with NG	17.94	46	63.94
	ETHS006	2B Application*: Brazilian sugarcane processed in the CBI with average production process and electricity co-product credit; Thermal process power supplied with NG	25.94	46	71.94
Compressed Natural Gas	CNG002	North American NG delivered via pipeline; compressed in OR	68.00	0	68.00
	CNG003	Landfill gas (biomethane) cleaned up to pipeline quality NG; compressed in OR	11.26	0	11.26
	CNG004	Dairy Digester Biogas to CNG	13.45	0	13.45
	CNG005	Biomethane produced from the high-solids (greater than 15 percent total solids) anaerobic digestion of food and green wastes; compressed in OR	-15.29	0	-15.29
	CNG006	North American landfill gas to pipeline-quality biomethane; delivered via pipeline; compressed in OR	33.02	0	33.02
Liquefied Natural Gas	LNG001	North American NG delivered via pipeline; liquefied in OR using liquefaction with 80% efficiency	83.13	0	83.13
	LNG002	North American NG delivered via pipeline; liquefied in OR using liquefaction with 90% efficiency	72.38	0	72.38
	LNG003	Overseas-sourced LNG delivered as LNG to OR; re-gasified then re-liquefied in OR using liquefaction with 80% efficiency	93.37	0	93.37

Table #3

Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes

	LNG004	Overseas-sourced LNG delivered as LNG to OR; re-gasified then re-liquefied in OR using liquefaction with 90% efficiency	82.62	0	82.62
	LNG005	Overseas-sourced LNG delivered as LNG to OR; no re-gasification or re-liquefaction in OR	77.50	0	77.50
	LNG006	Landfill Gas (biomethane) to LNG liquefied in OR using liquefaction with 80% efficiency	26.31	0	26.31
	LNG007	Landfill Gas (biomethane) to LNG liquefied in OR using liquefaction with 90% efficiency	15.56	0	15.56
	LNG008	Dairy Digester Biogas to LNG liquefied in OR using liquefaction with 80% efficiency	28.53	0	28.53
	LNG009	Dairy Digester Biogas to LNG liquefied in OR using liquefaction with 90% efficiency	17.78	0	17.78
Electricity	ELC001	Oregon average electricity mix	154.98	0	154.98
Hydrogen	HYGN001	Compressed H2 from central reforming of NG (includes liquefaction and re-gasification steps)	142.20	0	142.20
	HYGN002	Liquid H2 from central reforming of NG	133.00	0	133.00
	HYGN003	Compressed H2 from central reforming of NG (no liquefaction and re-gasification steps)	98.80	0	98.80
	HYGN004	Compressed H2 from on-site reforming of NG	98.30	0	98.30
	HYGN005	Compressed H2 from on-site reforming with renewable feedstocks	76.10	0	76.10

340-253-8040

Oregon Carbon Intensity Lookup Table for Diesel and Diesel Substitutes

PRE-PROPOSED RULE

State of Oregon Department of Environmental Quality

Table 2 – 340-253-3020

Oregon Carbon Intensity Lookup Table for Diesel Fuel and Diesel Substitutes

Fuel	Feedstock/Fuel Production Process	Carbon Intensity Values (Gco2e per MJ)			
		Direct Emissions	Indirect Land Use Change or Other Indirect Effect	Energy Economy Ratio Applied	Final
Ultra Low Sulfur Diesel	Clear diesel, based on a weighted average of diesel fuel supplied to Oregon	91.53	-	1	91.53
	Blended diesel, 5% biodiesel, based on assuming 95% clear diesel and 5% GREET default soybean biodiesel	87.95			87.95
Renewable Diesel	Soybeans to renewable diesel	21.70	-	1	21.70
Biodiesel	Soybean GREET default adjusted for transport to Oregon	20.00	-	1	20.00
	Canola	27.31	-	1	27.31
	Used cooking oil to fatty acid methyl esters – FAME	10.3	-	1	10.30
	Tallow	16.85	-	1	16.85
Compressed Natural Gas	North American natural gas delivered via pipeline; compressed in Oregon	71.41	-	0.94	75.97
	Landfill gas cleaned to pipeline quality	11.26		0.94	11.98
Liquefied Natural Gas	North American natural gas delivered via pipeline; liquefied in Oregon w/ 80% efficiency	83.13	-	0.94	88.44
	Overseas liquefied natural gas delivered to Oregon; re-gasified then re-liquefied w/ 80% efficiency	93.37	-	0.94	99.33
	Overseas liquefied natural gas delivered to Oregon; no re-gasification or re-liquefaction	77.50	-	0.94	82.45
Electricity	Oregon average electricity mix	154.98	-	2.70	57.40
Liquefied Petroleum Gas	Liquefied Petroleum Gas, Crude and NG Mix	83.05	-	1	83.05

PROPOSED RULE

Table #4

Oregon Carbon Intensity Lookup Table for Diesel and Diesel Substitutes

Fuel	Pathway Identifier	Pathway Description	Carbon Intensity Values (gCO2e/MJ)		
			Direct Emissions	Land Use or Other Indirect Effect	Total
Diesel	ORULSD001	Clear diesel, based on a weighted average of diesel fuel supplied to Oregon	89.00	-	89.00
	ORULSD002	Blended diesel, 5% biodiesel, based on assuming 95% clear diesel and 5% GREET default soybean biodiesel	87.09	-	87.09
Biodiesel	BIOD001	Conversion of Midwest soybeans to biodiesel (fatty acid methyl esters - FAME)	21.25	62	83.25
	BIOD002	Conversion of waste oils (Used Cooking Oil) to biodiesel (fatty acid methyl esters -FAME) where "cooking" is required	15.84	0	15.84
	BIOD003	Conversion of waste oils (Used Cooking Oil) to biodiesel (fatty acid methyl esters -FAME) where "cooking" is not required	11.76	0	11.76
	BIOD004	Conversion of waste oils (Used Cooking Oil) to biodiesel (fatty acid methyl esters -FAME) where "cooking" is required. Fuel produced in the Midwest	18.72	0	18.72
	BIOD005	Conversion of waste oils (Used Cooking Oil) to biodiesel (fatty acid methyl esters -FAME) where "cooking" is not required. Fuel produced in the Midwest	13.83	0	13.83
	BIOD007	Conversion of corn oil, extracted from distillers grains prior to the drying process, to biodiesel	4.00	0	4.00
Renewable Diesel	RNWD001	Conversion of Midwest soybeans to renewable diesel	20.16	62	82.16

Table #4

Oregon Carbon Intensity Lookup Table for Diesel and Diesel Substitutes

	RNWD002	Conversion of tallow to renewable diesel using higher energy use for rendering	39.33	0	39.33
	RNWD003	Conversion of tallow to renewable diesel using lower energy use for rendering	19.65	0	19.65
Compressed Natural Gas	CNG002	North American NG delivered via pipeline; compressed in OR	68.00	0	68.00
	CNG003	Landfill gas (biomethane) cleaned up to pipeline quality NG; compressed in OR	11.26	0	11.26
	CNG004	Dairy Digester Biogas to CNG	13.45	0	13.45
	CNG005	Biomethane produced from the high-solids (greater than 15 percent total solids) anaerobic digestion of food and green wastes; compressed in OR	-15.29	0	-15.29
	CNG006	North American landfill gas to pipeline-quality biomethane; delivered via pipeline; compressed in OR	33.02	0	33.02
Liquefied Natural Gas	LNG001	North American NG delivered via pipeline; liquefied in OR using liquefaction with 80% efficiency	83.13	0	83.13
	LNG002	North American NG delivered via pipeline; liquefied in OR using liquefaction with 90% efficiency	72.38	0	72.38
	LNG003	Overseas-sourced LNG delivered as LNG to OR; re-gasified then re-liquefied in OR using liquefaction with 80% efficiency	93.37	0	93.37
	LNG004	Overseas-sourced LNG delivered as LNG to OR; re-gasified then re-liquefied in OR using liquefaction with 90% efficiency	82.62	0	82.62
	LNG005	Overseas-sourced LNG delivered as LNG to OR; no re-gasification or re-liquefaction in OR	77.50	0	77.50
	LNG006	Landfill Gas (bio-methane) to LNG	26.31	0	26.31

Table #4

Oregon Carbon Intensity Lookup Table for Diesel and Diesel Substitutes

		liquefied in OR using liquefaction with 80% efficiency			
	LNG007	Landfill Gas (bio-methane) to LNG liquefied in OR using liquefaction with 90% efficiency	15.56	0	15.56
	LNG008	Dairy Digester Biogas to LNG liquefied in OR using liquefaction with 80% efficiency	28.53	0	28.53
	LNG009	Dairy Digester Biogas to LNG liquefied in OR using liquefaction with 90% efficiency	17.78	0	17.78
Electricity	ELC001	Oregon average electricity mix	154.98	0	154.98
Hydrogen	HYGN001	Compressed H2 from central reforming of NG (includes liquefaction and re-gasification steps)	142.20	0	142.20
	HYGN002	Liquid H2 from central reforming of NG	133.00	0	133.00
	HYGN003	Compressed H2 from central reforming of NG (no liquefaction and re-gasification steps)	98.80	0	98.80
	HYGN004	Compressed H2 from on-site reforming of NG	98.30	0	98.30
	HYGN005	Compressed H2 from on-site reforming with renewable feedstocks	76.10	0	76.10

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Summary Checklist of Quarterly Progress and Annual Compliance Reporting Requirements

Table #5

Summary Checklist of Quarterly Progress and Annual Compliance Reporting Requirements

Parameters to Report	Gasoline & Diesel Fuel	Ethanol or Biomass-Based Diesel Fuel	CNG, LNG & LPG	Electricity	Hydrogen or Hydrogen Blends
Company or organization name	x	x	x	x	x
Reporting period	x	x	x	x	x
Fuel pathway code	x	x	x	x	x
Transaction type	x	x	x	x	x
Transaction date	x	x	x	x	x
Business Partner	x	x	x	x	x
Production Company ID and Facility ID	n/a	x	n/a	n/a	x
Physical transport mode code	x	x	x	x	x
Aggregation	x	x	x	x	x
Application / EER	x	x	x	x	x
Amount of each fuel used as gasoline replacement	x	x	x	x	x
Amount of each fuel used as diesel fuel replacement	x	x	x	x	x
*Credits/deficits generated per quarter (MT)	x	x	x	x	x
For Annual Compliance Reporting (in addition to the items above)					
*Credits and Deficits generated per year (MT)	x	x	x	x	x
*Credits/deficits carried over from the previous year (MT), if any	x	x	x	x	x
*Credits acquired from another party	x	x	x	x	x

Table #5 **Summary Checklist of Quarterly Progress and Annual Compliance Reporting Requirements**					
(MT), if any					
*Credits sold to another party (MT), if any	x	x	x	x	x
*Credits retired within LCFS (MT) to meet compliance obligation, if any	x	x	x	x	x

*Value will be calculated and stored in the CFP Online System.

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Oregon Energy Densities of Fuels

Table #6 **Oregon Energy Densities of Fuels**	
Fuel (units)	MJ/unit
Gasoline (gallon)	116.09 (MJ/gallon)
Diesel fuel (gallon)	129.49 (MJ/gallon)
Compressed natural gas (standard cubic feet)	0.98 (MJ/standard cubic feet)
Electricity (kilowatt hour)	3.60 (MJ/kilowatt hour)
Denatured Ethanol (gallon)	80.53 (MJ/gallon)
Neat Biomass-based Diesel (gallon)	119.55 (MJ/gallon)
Liquefied natural gas (gallons)	76.84 (MJ/gallon)
Hydrogen (kilograms)	123.00 (MJ/kilogram)
Liquefied petroleum gas (gallons)	96.5 (MJ/gallon)

340-253-8070

Oregon Energy Economy Ratio Values for Fuels Used as Gasoline Substitutes

PRE-PROPOSED RULE

Table 4

Oregon Energy Economy Ratios for

Fuel Used in Light-Duty Applications

Year	Fuel/Vehicle Combination Energy Economy Ratio			
	Gasoline or any ethanol blend	**Compressed natural gas / liquefied petroleum gas/ Internal combustion engine vehicle**	**Hydrogen or fuel cell vehicle**	**Electricity / battery electric vehicle, or plug-in hybrid electric vehicle**
2015	1.0	1.0 (needs to be adjusted: not reformulated gasoline)	3.0 (needs to be adjusted: not reformulated gasoline)	4.1
2016	1.0	To be announced[1]	3.0	4.0
2017	1.0	To be announced[1]	2.9	3.9
2018	1.0	To be announced[1]	2.8	3.8
2019	1.0	To be announced[1]	2.8	3.7
2020	1.0	To be announced[1]	2.7	3.6
2021	1.0	To be announced[1]	2.6	3.5
2022	1.0	To be announced[1]	2.5	3.4
2023	1.0	To be announced[1]	2.5	3.3
2024	1.0	To be announced[1]	2.4	3.2
2025	1.0	To be announced[1]	2.3	3.1

[1] A future Clean Fuels Program review will include analysis of the energy economy ratios for light-duty applications to determine the values for 2015 through 2025.

PROPOSED RULES

Table #7

Oregon Energy Economy Ratio Values for Fuels Used as Gasoline Substitutes

Fuel/Vehicle Combination	EER Value Relative to Gasoline
Gasoline or any ethanol blend	1.0
Compressed Natural Gas (CNG) or Internal Combustion Engine Vehicle (ICEV)	1.0
Electricity, Battery Electric Vehicle or Plug-In Electric Vehicle	3.4
Hydrogen or Fuel Cell Vehicle	2.5

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Oregon Energy Economy Ratio Values for Fuels Used as Diesel Substitutes

PRE-PROPOSED RULE

TABLE 5 Oregon Energy Economy Ratios for Fuel Used in Heavy-Duty Applications			
Fuel/Vehicle Combination Energy Economy Ratio			
Diesel fuel or Biomass-based diesel blends	**CNG or LNG**	**Hydrogen or fuel cell vehicle**	**Electricity / battery electric vehicle, or plug-in hybrid electric vehicle**
1.0	0.94	1.9	2.7

PROPOSED RULE

Table #8 **Oregon Energy Economy Ratio Values for Fuels Used as Diesel Substitutes**	
Fuel/Vehicle Combination	EER Value Relative to Diesel
Diesel fuel or biomass-based diesel blends	1.0
Compressed Natural Gas (CNG) or Liquefied Natural Gas (LNG) (Spark-Ignition Engines)	0.9
Compressed Natural Gas (CNG) or Liquefied Natural Gas (LNG) (Compression-Ignition Engines)	1.0
Electricity, Battery Electric Vehicle or Plug-In Electric Vehicle	2.7
Hydrogen or Fuel Cell Vehicle	1.9

Oregon Department of Environmental Quality

Oregon Clean Fuels Program - Phase 2

Rulemaking Advisory Committee

Member	Affiliation
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Jeff Stewart - A	Blue Star Gas
Michael Rensing - P	British Columbia Ministry of Mines
Manisha Singh - P	California Air Resources Board
Mike Waugh - A	California Air Resources Board
Ralph Poole - P	Campo & Poole
Jeff Rouse - P	Carson Oil Co., Inc.
Todd Campbell - P	Clean Energy Fuels
Harrison Clay - A	Clean Energy Renewable Fuels
Josh Proudfoot - P	Good Company
James Mast - P	Mast Collaborative
Shanna Brownstein - P	Northwest Natural Gas
Joel Fisher - P	Oregon Business Association
Jana Gastellum - P	Oregon Environmental Council
Paul Romain - A	The Romain Group
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Frank Holmes - P	Western States Petroleum Association

* P= Primary member A= Alternate Member