

Background

The policy objective of the Clean Fuels Program Expansion 2022 Rulemaking is to consider the expansion the program's carbon intensity reduction requirements beyond the currently adopted 10 percent reduction in average carbon intensity by 2025. Long-term targets will create certainty for investment in and deployment of lower-, zero-, and negative-carbon transportation fuels that are necessary to continue to decarbonize Oregon's transportation sector.

Summary of proposed changes

For this rulemaking, DEQ considered the entirety of Division 253 to be in-scope to support and complement the expansion of the carbon intensity reduction targets. DEQ started the process by hiring the consulting firm ICF International to develop post-2025 scenarios of what combination of vehicles and fuels we might see in the future and determine what reductions in greenhouse gases would result from those assumptions.

DEQ then held a listening session to solicit input from stakeholders as to what they were interested in updating to the Clean Fuels Program. For some topics, DEQ deferred them for future consideration in order to better align with neighboring jurisdictions. The ones that are moving forward in this rulemaking are described below in four main categories – 1) expansion of the targets; 2) updates to violations of the CFP rules; 3) updates to existing provisions; and 4) housekeeping updates.

1. Expansion of the targets

As stated above, the primary goal of this rulemaking is to establish carbon intensity reduction targets beyond 10% and beyond 2025. The proposed targets were informed by the Long-term Illustrative Compliance Scenarios and extensive discussions with stakeholders over a 2-year process. At this time, DEQ is planning to propose extending and increasing the Clean Fuels Standards to 20% below 2015 levels by 2030 and 37% below 2015 levels by 2035 (shown below).

Existing Program	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
% Reduction	0.25%	0.5%	1.0%	1.5%	2.5%	3.5%	5.0%	6.5%	8.0%	10.0%
% Change year over year	0.25%	0.25%	0.5%	0.5%	1.0%	1.0%	1.5%	1.5%	1.5%	2.0%
Proposal for Expanded Program	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035

% Reduction	12.0%	14.0%	16.0%	18.0%	20.0%	23.4%	26.8%	30.2%	33.6%	37.0%
% Change year over year	2.0%	2.0%	2.0%	2.0%	2.0%	3.4%	3.4%	3.4%	3.4%	3.4%

These targets are:

- consistent with Oregon's ambitious long-term carbon reduction goals and strategy, including the targets established in the Climate Protection Program, and supportive of other policies and programs that aim to decarbonize the transportation sector in Oregon such as Zero Emission Vehicle regulations for light-, medium-, and heavyduty vehicles;
- aligned with other low carbon fuel standards on the West Coast; and,
- achievable with multiple paths to compliance from different combinations of lowcarbon fuels and set at a level that balances the need to incentivize continued improvements in all fuels while supporting the deployment of mandated zero emission vehicles.

2. Updates to violations of the Clean Fuels Program

In order to maintain the integrity of the program's greenhouse gas reductions and the clean fuels market, DEQ is proposing updates to Division 12, "Enforcement Procedure and Civil Penalties" and Division 253. As a reminder, unclassified violations of the Division 253 rules can still be

a. Class 1 violations

- Newly classified violation Misstating material information or providing false information when submitting an application for advance credits
- Newly classified violation Failure by a fuel producer to inform DEQ if its operational carbon intensity exceeds its certified carbon intensity when those certified carbon intensities were used to generate illegitimate credits
- Reformatting existing classified violations: Making each deficit not complied with if
 the entity does not participate in the Credit Clearance Market or illegitimate credit
 generated a separate violation
- Moved from Class 2 to Class 1 Failing to register as a regulated party under the Oregon Clean Fuels Program, failing to submit a complete and accurate quarterly report

b. Class 2 violations

- Newly classified violation Failure to receive Green-e certification for RECs used to generate incremental credits
- Newly classified violations failure by a registered party or a fuel producer to ensure that they have the exclusive right to claim environmental attributes reported using a book and claim methodology
- Newly classified violation failure to notify DEQ of a change of ownership or control of a registered party

• Reformatted existing violation – Failure to keep records as required under OAR 340-253-0600 now applies to all records

c. Class 3 violations

 Newly classified violation - Making changes to a quarterly or annual report where the changes were not specifically authorized by DEQ

ci. Selected magnitude categories

• Major - exceeding the clean fuel standards; failing to register with the Clean Fuels Program; failing to submit complete and accurate reports; generating an illegitimate credit; committing an action related to a credit transfer that is prohibited

cii. Base penalties

- \$12,000 matrix failing to demonstrate compliance with the annual clean fuel standard; prohibited credit transfers; generating illegitimate credits, submitting misstated or false material information for a carbon intensity score or advanced credit application. Any violation by an importer of blendstocks.
- \$8,000 matrix any violation of the Clean Fuels Program not otherwise classified. Any violation by a participant in the Clean Fuels Program other than an importer of blendstocks.

ciii. Updates to existing provisions

This is a summary of proposed changes to various provisions within Division 253. Each of these were topics of discussion during the rulemaking advisory committee meetings and technical workshops. The rulemaking web page

(https://www.oregon.gov/deq/rulemaking/Pages/cfp2022.aspx) contains links to all meeting materials, including agendas, memos, presentations, written comments received, and meeting summaries. In order to organize the many changes that are being proposed, DEQ has attempted to group individual updates based on potential fiscal impact.

a. Minor impact

- Various simple updates related to registration and reporting
- Clarify who is eligible to generate credits from charging of electric vehicles and use of hydrogen vehicles
- Add clear requirements for changes of ownership, control, or bankruptcy by a registered party
- Update the documentation required for registering credit transfers with CFP
- Clarify the language for demonstrating that fuels are exempt from the regulation
- Establish a new administrative process to add transaction types in the Oregon Fuels Reporting System
- Correct an error in an existing simplified calculator and develop a new simplified calculator for biogas-to-electricity pathways

• Clarify that lower-carbon hydrogen can be used directly (not book-and-claim) as an input into a fuel production facility. This also includes a new definition of renewable hydrogen.

b. Moderate impact

- Establish a new Energy Economy Ratio for airport electric ground service equipment that will allow for credit generation for those vehicles
- Establish a clear definition of ocean-going vessels that are eligible to generate credits under the existing EER. This category of vessels was previously not well defined and this update clarifies that only large vessels qualify to generate credits under this EER as that was the dataset used to establish the EER. Small vessels will not be eligible to generate credits as of January 1, 2023 unless a new EER is approved.
- Update the advance crediting provisions to apply to all zero emission vehicles and infrastructure. Currently, this provision only applies to selected battery electric vehicles, but this change would add hydrogen fuel cell vehicles (FCVs) as eligible for qualified applicants. In addition, applicants with projects that receive funding from the Bipartisan Infrastructure Law (such as the National Electric Vehicle Infrastructure program or the Electric School Bus program) would now be eligible. Several new requirements have been proposed because of this expansion of eligible projects but the cap on the number of advance credits that can be generated has not changed.
- Update the provisions to protect against multiple claims of the environmental attributes associated with renewable natural gas. This includes a new requirement for electronic tracking of the claims and clarifying the attestation language regarding book-and-claim transfers when electronic tracking does not take place.
- Allow for additional credits to be generated post-third-party verification by a fuel producer registered for reporting in the program if a verified operational carbon intensity is one or more grams CO2e/megajoule lower than the approved carbon intensity the credits were initially generated against.

c. Housekeeping updates

Housekeeping updates fall primarily into three categories – 1) fixing spelling, grammar, and numbering errors; 2) clarifying confusing or unclear language in the existing rules; and 3 adding definitions for several terms. These types of updates appear in virtually every rule in Division 253 and are the result of feedback from working with over 200 registered parties over the past six years. DEQ is proposing these updates for clarity, workability, and to ensure that program participants know what is expected of them.

Statement of fiscal and economic impact

The Oregon Clean Fuels Program is a technology-neutral, market-based regulatory approach to reduce carbon pollution from transportation fuels and promote the commercialization of innovative low-carbon alternative and conventional fuels. The program does not mandate the use of any particular type of fuel or technology. Instead, it

creates a performance standard to reduce the average carbon intensity of fuels delivered to Oregon. The program allows for many strategies to be employed for meeting the clean fuel standards by giving each regulated party the flexibility to consider its particular circumstance, perspective and business needs when devising its own strategy to meet the standard.

Fiscal and economic impact of the proposed updates

The scope of this fiscal and economic impact statement is limited to the impact of the proposed rule changes contained in this rulemaking; it does not re-assess the existing CFP. The proposed rules involve changes to numerous provisions of the CFP and the expansion of the carbon intensity reduction targets through 2035.

The categories below follow the order of description above in the summary of proposed changes.

- 1. Setting future targets This proposed change would have significant fiscal and economic impact as the program works to transition the state's fuels towards cleaner options. The increased standards will support the transition of the vehicle fleet away from internal combustion engines to zero emission vehicles and push the remaining fossil gasoline and diesel engines towards renewable substitutes. The program's long-term targets provide transportation fuel market participants a better understanding of the future regulatory environment, the economic incentives created by the program, and the opportunity to better plan for the transition that is ahead.
- 2. Updates to violations of the Clean Fuels Program These proposed changes only have fiscal impact if a party violates the rules and are therefore outside the scope of this fiscal and economic impact analysis.
- 3. Updates to existing provisions
 - a. Updates with minor impact These updates are mostly administrative in nature or provide clarity to existing language and therefore do not have significant fiscal and economic impacts.
 - b. Updates with moderate impact
 - i. New EER for electric ground service equipment This proposal will have a positive fiscal and economic benefit to the owner of the charger that will be able to generate credits from the deployment of these vehicles, most likely an airport or airline. DEQ is unable to anticipate the number of EVs that will take advantage of this proposal.
 - ii. Modify eligibility for credit generation such that only large ocean-going vessels can generate credits This proposal will have minor fiscal and economic impact for smaller vessels who are currently generating credits but will not be eligible as of January 1, 2023, unless they can apply for a new EER. DEQ is does not have the data to anticipate the number of small vessels that will be impacted by this proposal.

- iii. Advance crediting for all zero emission technologies This proposal will have slight positive fiscal and economic benefit to the fleets that participate in this provision. The impact is slight since the advancing of credits effectively is a loan rather than granting extra credits. Since the cap on the number of advance credits that can be generated has not been increased, DEQ does not anticipate that the number of fleets that apply will increase but they might be spread between electric and hydrogen fuel cell fleets.
- iv. Require electronic tracking of renewable natural gas claims This proposal will have a moderate fiscal and economic impact since parties reporting renewable natural gas will have to pay to be part of a registry, but that cost is minor compared to the revenue from generating the credits. Currently, there are 4 parties that report transaction of renewable natural gas and they might be impacted by this proposal if they continue to do so in the future.
- v. Allow for additional credits to be generated post-verification This proposal will have a positive fiscal and economic benefit for pathway holders whose verified carbon intensity is lower than their approved carbon intensity. DEQ is unable to anticipate the number of pathway holders that will be impacted by this proposal.
- 4. Housekeeping updates These proposed changes do not have fiscal and economic impact.

Direct costs of complying with the proposed targets

The increasing targets will increase the number of deficits that are generated by a given volume of fossil fuel. It also decreases credit generation from the same volume of low-carbon fuel. For a producer or provider of high-carbon fuels, there will be an increase in deficit obligations under this program if they continue to operate their business as usual and do not make changes in response to the proposed changes in this program.

There is no quick or easy way to estimate the maximum possible future cost of compliance with the proposed targets due to the many variables involved, but one way to approach it is to estimate the number of deficits in 2035 assuming that fuel providers only make the changes modeled in the illustrative compliance scenario. We believe that the assumptions in the illustrative compliance scenario are still reasonably conservative and therefore believe that this maximum possible impact likely significantly overestimates the direct costs of compliance. Drawing from the Long-Term Illustrative Compliance Scenarios¹, approximately 5,443,520 deficits will be generated in 2035 in the 37% scenario.

The following table presents the maximum possible cost of complying with the future targets using three different credit prices - \$100 and \$150 that represent a range around the current market price of \$125, and \$230.43 which is the maximum allowed in the 2022 Credit Clearance Market. The maximum price of 2035 CCM will be adjusted for inflation, but the

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¹ https://www.oregon.gov/deq/ghgp/Documents/cfpIlluCompScenD.pdf

following table is presented in current dollars without an adjustment for inflation between now and 2035.

The cost of compliance is simply the number of deficits multiplied by each of the credit price:

	Maximum Estimated Cost of Compliance				
Number of Deficits in 2035	\$100 per credit	\$150 per credit	\$230.43 per credit (2022 CCM price)		
5,443,520	\$ 544,352,000	\$ 816,528,000	\$ 1,254,350,314		

We simply do not have sufficient data or the ability to accurately predict future behavior to determine how much lower than this maximum estimated cost of compliance the actual cost will be. The potential cost can vary widely based on a number of factors, from inherently volatile crude oil prices to various agricultural markets, and the adoption of alternative vehicle technologies.

In order to comply, the regulated parties need to acquire and retire credits against those deficits. They can generate credits themselves by providing low-carbon fuels or they can purchase them from other credit generators. In this case, the value paid for credits goes to other parties that generate credits in the program which means that these dollars are not lost to the economy but are invested within the transportation fuel market.

The regulated parties in this program often are among its largest credit generators because of the biofuels they purchase, import, or produce. Increasingly so, they are investing more in other low-carbon fuels such as electric vehicle chargers and renewable natural gas projects as the market transitions away from fossil fuels. Several petroleum refineries have already begun co-processing or completely converting to renewable feedstocks in order to transition to producing renewable fuels.

Benefits from Reducing Tailpipe Air Pollutants

DEQ contracted with UC Davis researchers to model the expected impacts for the proposed expansion of the Clean Fuels Program, both in tailpipe emissions and health outcomes. The modeling indicates that the proposed expansion of the CFP is likely to produce a significant air quality benefit. This aligns with the prevalent consensus within transportation and air quality research literature: displacing petroleum-based transportation fuels for non-petroleum alternatives typically yields improved air quality.

The modeling also shows that the proposed targets are likely to yield significant reductions in health impacts, primarily through the reduction of vehicular PM when compared to a modeled business-as-usual. An estimate of \$84 - \$87 million dollars of annual net health benefits are realized from avoiding premature deaths that includes the financial cost of air pollution health impacts and additional disease burden.

While not calculated in this study, there are additional reductions in other criteria pollutants such as nitrogen oxides, carbon monoxide, and volatile organic compounds that have associated cost savings and health benefits.

Indirect Costs to Fuel Consumers

Switching to non-petroleum fuels buffers consumers from crude oil price shocks due to market or weather or geopolitical factors, which can have a significant economic effect for both those consumers and the overall economy. In the absence of efforts to diversify the fuels that Oregon consumes, consumers and the state economy are at the mercy of oil price shocks. As more of the state moves away from fossil gasoline and diesel, the impacts from oil price shocks will become more muted, benefiting both consumers and the state.

That said, DEQ can estimate how the clean fuels standards are affecting the price of traditional gasoline and diesel fuels. ORS 468A.271 requires DEQ to annually calculate the average cost or cost-savings of the Clean Fuels Program per gallon of gasoline (E10 – a blend of 90% gasoline and 10% ethanol) and per gallon of diesel (B5 – a blend of 95% diesel and 5% biodiesel). It is difficult to quantify with any certainty what the future price of fuels will be in the future due to the uncertainty in the costs of fuels themselves and the highly volatile nature of variables involved in that calculation which are susceptible to many risks.

The approach specified in ORS 468A.271 uses three pieces of information: 1) the carbon intensity of the fuel, 2) the clean fuel standard for the year and 3) the average price of credits for the year.

Here is the equation for that calculation:

$$Cost\left(\frac{\$}{gal}\right) = \left[\left(fuel\ CI\right) - \left(Std\right)\frac{gCO2e}{MJ}\right] * (ED)\frac{MJ}{gal} * \left(\frac{1\ ton}{1,000,000\ grams}\right) * \frac{\$(CP)}{ton}$$

Where CI: carbon intensity of the fuel in gCO2e per MJ

Std: gasoline or diesel standard in a given year in gCO2e per MJ

ED: energy density of the fuel in MJ per gallon

CP: credit price in dollars per ton

Following are the resulting calculations of the impact of the CFP on fuel prices in cents per gallon for E10 and B5 in the years 2017 through 2021, taking into consideration the costs of obtaining credits to offset deficits. This chart also provides the amount of reductions in greenhouse gas emissions achieved in those years:

Year	GHGs reduced	Avg E10 CFP cost	Avg B5 CFP cost
2017	926,000 tonnes	0.23 cent/gallon	0.31 cent/gallon
2018	976,000 tonnes	0.98 cent/gallon	1.13 cent/gallon
2019	1,275,000 tonnes	2.57 cents/gallon	2.94 cents/gallon
2020	1,318,000 tonnes	3.71 cents/gallon	4.24 cents/gallon
2021	1,472,000 tonnes	5.09 cents/gallon	5.80 cents/gallon

Both costs and cost savings need to be considered. As the proposed targets increase, credit prices are likely to increase and regulated parties will likely turn to higher blends of low-carbon fuels as a cost-effective compliance strategy or even switching entirely from a fossil version to a renewable version of a fuel. For example, switching from a higher-carbon fuel to a lower-carbon fuel can lower your fuel costs by a substantial amount assuming 2021 average credit price of \$125²:

This is what you would typically get	This is a lower carbon option	CFP credits brings the cost down by
B5 (5% soybean)	B20 (20% used cooking oil)	24 cents/gal
	R99 (99% soybean)	95 cents/gal
Communicati National	Renewable Natural Gas (landfill gas)	39 cents/therm
Compressed Natural Gas (fossil)	Renewable Natural Gas (dairy manure biogas)	\$4.35/therm

The credits generated by electricity and renewable natural gas are often enough to cover a significant fraction of the cost of that fuel, or all of it, which, assuming those benefits are passed through to consumers (just as we assume above that increased costs are passed through) would significantly lower the cost of that fuel.

As the program progresses, and the clean fuel standards get more stringent, there is a need for additional credits to be retired against the increasing number of deficits that fossil gasoline and diesel generate. However, the consumption of deficit-generating fuels will also be decreasing due as a result of this program, as well as complementary policies such as the Zero Emission Vehicle regulations for light-, medium-, and heavy-duty vehicles. That will have a moderating effect by requiring fewer overall credits needed by the Clean Fuels market.

It is important to note that credit prices are another important variable that are not known for future years. Credit prices in any given year are set by the market and based on the relative demand for credits against the deficits that are generated; the greater the difference, the higher the likely CFP credit price will need to be depending on the relative cost of the low-carbon fuels.

In order to present what the impact might be to fuel costs, we can use the same calculation prescribed in ORS 468A.271 and use the credit prices that are required in the Credit Clearance Market (CCM), a cost containment mechanism included in the program. That maximum price is established as \$200 in 2017 dollars and increased annually for inflation. The current credit price of \$125 (2022 dollars) is also used to show a range of potential costs.

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² https://www.oregon.gov/deq/ghgp/cfp/Pages/Monthly-Data.aspx

Credit Prices	Proposed Targets	Imported Finished Gasoline (E10)	Imported Finished Diesel (B5)
CCM miss	2030	47 cents per gallon	53 cents per gallon
CCM price	2035	87 cents per gallon	99 cents per gallon
Current	2030	29 cents per gallon	33 cents per gallon
Market Price	2035	55 cents per gallon	62 cents per gallon

There are several ways that this calculation is an overestimation:

- Decreasing demand for gasoline and diesel is likely to lower their prices over time.
- The credits generated by biofuels will increase the blend rates and help lower the retail cost of those fuels. The blend rates of biofuel to petroleum fuel are already increasing and will likely continue to increase dramatically over the next several years.
- As Washington's Clean Fuels Standards come into effect starting in 2023, the blended gasoline and diesel fuels that Oregon receives from Washington will likely begin to decrease in carbon intensity and generate fewer deficits.

CFP also has a series of cost containment provisions to ensure parties are not adversely impacted, including an emergency deferral mechanism for short-term fuel supply shortages, the annual fuel supply forecast and deferral in the event of a longer-term fuel supply concern, and the Credit Clearance Market which provides a de facto cap on the price of credits. Collectively, these provisions help ensure that the program will not have any sudden or significant changes in prices for regulated parties or consumers.

Cumulative economic and fiscal impact of the proposed rules

Oregon has seen worsening air quality from wildfires³ that are becoming more frequent, intense, and longer-lasting due to global warming⁴, in addition to its other effects on snowpack, heat waves, and local climates that harm the health of our residents and the state's economy.

No single jurisdiction or action can arrest climate change on its own but working collaboratively can have a big impact. This rulemaking is occurring alongside similar efforts in our neighboring jurisdictions (California, Washington, and British Columbia) to decarbonize their economies. Similarly, Oregon's state agencies are working collaboratively on a portfolio of actions to achieve the state's climate goals.

At a high level, the proposals contained in this rulemaking will expand the market for low-carbon fuels which would be a significant benefit to the parties that provide them. It will also increase the obligation of deficit-generating high-carbon fuels and the costs associated with them. The scenario analysis performed by DEQ's consultant shows that the effect of the expanded 2035 target will reduce tailpipe greenhouse gas emissions by about half from roughly 20 million metric tons CO2e per year to 10.55 million metric tons by 2035. Using

⁴ Orgon Fifth Climate Change Assessment Report, Oregon Climate Change Research Institute: https://oregonstate.app.box.com/s/7mynjzhda9yunbzqib6mn1dcpd6q5jka

³ https://www.oregon.gov/deq/wildfires/Documents/WildfireSmokeTrendsReport.pdf

the most recent federal estimate⁵ of the social cost of carbon in 2035, using a 2.5% discount rate, the cost per ton is \$96/mt so the value of this reduction in emissions is \$916 million dollars. When this is added to the avoided health costs, the benefits of an expanded Clean Fuels Program nearly offset even the highest estimate of compliance costs.

Relationship to other programs

The evaluation contained in this document considers the potential effects of the proposed expansion of the CFP without assuming that other greenhouse gas reduction programs and policies could moderate them. To any extent that other existing (or future) programs effectuate reductions in greenhouse gas emissions from transportation fuels, that could lower the estimated costs and benefits of the CFP discussed in this document.

For example, the recently adopted Climate Protection Program, which covers essentially all of the same fossil fuels covered by the CFP (as well as other fossil fuels such as natural gas used in buildings), requires a reduction in greenhouse gas emissions from those fuels of 50% by 2035. While CPP regulates tailpipe emissions, CFP regulates lifecycle emissions. DEQ modeling indicates that the proposed 37% reduction in lifecycle greenhouse gases in 2035 would equate to almost exactly a 50% reduction in tailpipe greenhouse gases.

So, the already adopted CPP may require similar reductions as the proposed CFP expansion. This could suggest the adoption of this proposed expansion could come at no additional cost beyond costs that will already be incurred to comply with the CPP. However, DEQ believes it is important to look at this proposal itself, effectively "in a vacuum," and identify the costs and benefits it could incur without discounting for the likelihood that required compliance with other programs will effectively moderate the effects analyzed and disclosed in this document.

Statement of Cost of Compliance

Oregon Department of Environmental Quality

For DEQ, implementing these proposals will require new processes for: 1) auditing retirement records for renewable natural gas transactions; 2) extending advance crediting to hydrogen fuel cell vehicles and fueling infrastructure; and 3) calculating additional credits for post-verification adjustments. Implementing the remainder of these rule changes will require outreach, engagement, and ongoing implementation work with the parties in the program. DEQ does not have additional resources planned for implementing these rules.

Other state agencies and local governments

Other state agencies and local governments are consumers of transportation fuels, and included in the fiscal and economic impact as described in the section above describing the Indirect Costs to Fuel Consumers. They may also be participants in the program as many of them own electric vehicle chargers and generate credits from the electricity they dispense.

⁵ Available from the White House: https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf A more significant update is expected this year.

Public

The public are consumers of transportation fuels, and the fiscal and economic impact to the public is described in the section above describing the Indirect Costs to Fuel Consumers. The public also benefits from the reduction of tailpipe emissions as described above.

Large businesses - businesses with more than 50 employees

Currently, approximately 220 entities are registered to participate in the Clean Fuels Program. Of those, approximately 60 are registered as regulated parties and the remaining are credit generators and aggregators. Approximately 95 percent are large businesses and are a mix of fuel producers and distributors, electric utilities, electric vehicle charging station owners, and local governments.

For those who provide deficit-generating fuels, the proposed expansion of the targets will have a significant fiscal and economic impact on them. The traditional blend of gasoline and diesel will generate more deficits and the regulated parties will need to acquire and retire more credits to comply with the proposed targets. For those who provide credit-generating fuels, the proposed expansion of the targets will have a significant fiscal and economic benefit as the demand their fuels and the credits they generate increases and credit prices may rise due to that. This is described in more detail in the section above.

Additionally, the proposed updates described in Categories 2-4 above would have a minor to moderate fiscal and economic impact depending on how many of those provisions affect an individual party and are described above.

Small businesses – businesses with 50 or fewer employees

ORS 183.336 Cost of Compliance Effect on Small Businesses

1. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.

Approximately 5 percent of participants in the Clean Fuels Program are small businesses. They fall into two categories of businesses: local fuel distribution companies and companies that are registered as an aggregator to assist larger companies in reporting data and managing credit transactions.

2. Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.

The proposed rules offer mostly minor updates to existing requirements. For both categories of small fuel distributors, there are no additional requirements for reporting, recordkeeping or other administrative activities including costs of professional services for small businesses.

3. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.

The proposed rules offer mostly minor updates to existing requirements and have no additional requirements for equipment, supplies, labor or administration for small businesses.

4. Describe how DEQ involved small businesses in developing this proposed rule.

The rulemaking advisory committee contained members of the small business community.

Statement of racial equity impact

Racial equity impact

The scope of this racial equity impact statement is this rulemaking; it does not re-assess the existing CFP. The proposed rules involve changes to numerous provisions of the CFP and the expansion of the carbon intensity reduction targets through 2035. Each change or new provision may have an individual impact while also having an overall, cumulative impact.

Pollution from the transportation sector is the largest contributor of greenhouse gases and most criteria pollutants to the air in Oregon. While the CFP is primarily a lifecycle greenhouse gas reduction strategy, the lower-carbon fuels that replace the high-carbon ones also reduce tailpipe emissions and can be a highly effective strategy to address the localized impacts of air pollution. Communities that are adjacent to or near transportation facilities and corridors are disproportionately impacted by those emissions and are traditionally lower-income and have a higher percentage of Black, indigenous, and other peoples of color residents. These environmental justice communities have been historically overburdened by transportation emissions and expansion of the program's targets will benefit these most vulnerable Oregonians by decreasing the air pollution to which they are exposed.

These environmental justice communities are being impacted by climate change first and hardest⁶, as evidenced by last year's heat wave. Climate change and air pollution represent additional cumulative impacts that exacerbate the disparities between different racial groups in Oregon. Lower-income Oregonians are disproportionately non-white⁷, and are less able to adapt to hotter summers, increasing pollution from wildfires, and are more likely to work in frontline occupations. Frontline workers, and especially those that work outdoors such as farmworkers, who are majority-Latin American in Oregon, bear disproportionate exposure to the negative impacts of climate change and worsening air quality.

⁶Oregon Health Authority Climate and Health in Oregon report:

https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/CLIMATECHANGE/Documents/2020/Climate%20 and %20 Health%20 in %20 Oregon%2020 %20-%20 Full%20 Report.pdf

⁷ US Census Bureau's American Community Survey,

https://data.census.gov/cedsci/table?q=United%20States&t=Income%20and%20Earnings&g=0400000US41&tid=ACSST5Y2020.S1903

The UC Davis study on the Air Quality Impacts of Oregon's Proposed Clean Fuels Program Changes clearly signal that the health of Oregonians will benefit from the expansion of the program. The study shows a clear air quality improvement in the vicinity of major roadways and that disadvantaged communities, including lower-income and BIPOC populations are more likely to live near major roadways and be exposed to vehicle pollution.

Given the results of the study, the CFP is clearly working to mitigate many of the issues listed above and could have a positive impact on racial equity. For example, many transit agencies are looking to electrify their buses and provisions in CFP will make that less costly and accelerate that fleet conversion. In the short-term, those diesel buses can also transition from petroleum diesel to renewable diesel and reduce tailpipe emissions. Both actions will benefit the communities who rely more heavily on public transit and live near their depots. Similarly, many school districts are looking to electrify their school buses, or switch from petroleum diesel to renewable diesel, or even from fossil propane to renewable propane. The reduction in pollution will greatly benefit the school-aged children who take those buses, the drivers, and the community where they serve.

DEQ is also keenly aware that switching from a gasoline or diesel-powered vehicle is costly and low-income Oregonians may be delayed in that transition. While an expanded CFP will add to the cost of gasoline and diesel, it also creates incentives for higher blends of biofuels that will bring down the cost of those fuels. Higher gasoline and diesel costs will disproportionately impact lower income Oregonians but increasing the availability of lower-cost alternatives can also benefit those same communities. E15 can be used in most cars and B20 in most trucks with no changes and both will be cheaper than the E10 and B5 that is currently mandated. Renewable diesel will also be able to replace petroleum diesel completely at a competitive cost. Other DEQ programs such as the Charge Ahead Rebate and Clean Vehicle Rebate Program are aimed at lowering the cost of electric vehicles to low- and moderate-income Oregonians while CFP works with electric utilities and charging service providers to bring down the cost to fuel them.

As described above, there are costs associated with having to comply with the proposed targets, but there are also significant benefits too. As such, DEQ finds that the proposed rules will impact racial equity in the state, both positively and negatively. Throughout the development of the proposed rules, DEQ has attempted to design the change to maximize the benefits and mitigate the costs.

Documents relied on for this document

Document title	Document location			
List of CFP registered parties	DEQ 700 NE Multnomah St. STE 600 Portland OR 97232			
Clean Fuels Program 2022 Expansion Rulemaking web page	https://www.oregon.gov/deq/Regulations/rulema king/Pages/rcfpe2021.aspx			

Advisory committee

DEQ appointed the Clean Fuels Program 2022 Expansion rulemaking advisory committee to provide input on:

- the proposed rules
- the fiscal and economic impact statement
- the racial equity statement

Review of fiscal and economic impact

As ORS 183.33 requires, 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 adverse impact on small businesses; if so, then how DEQ can comply with ORS 183.540 reduce that impact.

The committee will review the draft fiscal and economic impact statement and will share its findings with DEQ staff, who will document those comments and findings.

Review of racial equity impact

As ORS 183.335(2)(a)(F) requires, DEQ asked for the committee's input on how adoption of this rule will affect racial equity in this state.

The committee will review the draft racial equity impact statement and will share its findings with DEQ staff, who will document those comments and findings.

Housing cost

As ORS 183.534 requires, DEQ evaluated whether the proposed rules would have an 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. DEQ determined the proposed rules would have no effect on the development costs because the proposed rules only affect transportation fuels used in Oregon.

Alternative formats

Documents can be provided upon request in an alternate format for individuals with disabilities or in a language other than English. To request a document in another format or language, call DEQ in Portland at 503-229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696; or email deginfo@deq.state.or.us.