

Oregon Department of Environmental Quality

Target Setting for RAC Meeting #2

CFP Expansion 2022 Rulemaking

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Background

At RAC Meeting #1, DEQ introduced several factors to consider for target setting, including:

- How should we think about the CFP targets in relation to the state's GHG reduction goals?
- How should complementary programs/policies be considered (like the renewable fuel standard (RFS), ZEV regulations, clean energy requirements, etc.)?
- How do we use the illustrative scenarios to understand specific outcomes given the inherent flexibility of the program? For example, to achieve certain levels of low carbon liquid fuels improvements and use or to support ZEV deployment?
- What are the outcomes anticipated with the new targets? What are the pros and cons that we should consider and what weight or priority should they be given?
- How should co-benefits be weighed alongside the primary greenhouse gas reduction goals?
- Are there different considerations for the 2035 targets versus other years? How should the targets for interim years be set?

Additionally, we asked the following key questions during the meeting and specifically requested written responses to them after the meeting:

- Does setting targets through 2035 provide sufficient long-term certainty for investment decisions?
- What are the risks of setting the targets too low or too high?
- Are there any community needs and health impacts that we need to take into consideration?
- What are the supply chain considerations that we need to account for? Production capacities of different fuel types?
- What are the time horizons for potential commercialization of new fuels or vehicle technologies?

Written comments received

In written comments after the meeting¹, the following organizations provided specific feedback on target setting: National Biodiesel Board, Renewable Energy Group, NW Alliance for Clean Transportation, Oregon Environmental Council, Port of Portland, Renewable Hydrogen Alliance, and the Western States Petroleum Association.

The comments generally point in favor of adopting higher targets than 20% by 2030 and 25% by 2035. Insofar as specific targets were pointed to, the comments indicated those modeled in Scenario C^2 were the most appropriate.

¹ All written comments are available here: <u>https://www.oregon.gov/deq/rulemaking/Documents/cfp2022m1Com.pdf</u>

² The long-term illustrative compliance scenarios can be found here: <u>https://www.oregon.gov/deq/ghgp/cfp/Pages/longtermICS.aspx</u>

Scenarios of an expanded CFP

DEQ worked closely with ICF to design the mix of fuels to consider in the future, balancing carefully what is already adopted in regulation and what is likely to influence the future. For DEQ, this involved a review of programs and policies in states and countries to determine options to consider. Maintaining a fuel-agnostic approach, we incorporated policies in both liquid biofuels and emerging alternative technologies. The result was a set of three scenarios: (1) focusing on zero emission technologies, (2) focusing on biofuels, and (3) a combination of both. The first two scenarios aimed to achieve 25% reductions in lifecycle GHGs by 2035 while the third sought to identify what was possible when both biofuels and alternative technologies were considered.

As a reminder, the following are key highlights from the 2021 Illustrative Compliance Scenarios:

- The expanded Clean Fuels Program can be achieved through a diverse fuel supply. In other words, all the scenarios include a combination of ethanol, biodiesel, and renewable diesel from various feedstocks, electricity, renewable natural gas, and propane to achieve the carbon intensity reduction targets.
- Over-compliance prior to 2025 allows time for the increasing adoption of electric vehicles to build a healthy bank of credits that will carry the Clean Fuels Program to achieve its compliance targets through 2035.
- Current and additional light-, medium- and heavy-duty electrification policies plus expected reductions in the carbon intensity of electricity have the potential for significant credit generation and contribution to compliance of the expanded Clean Fuels Program.
- Renewable diesel is necessary for compliance as the primary drop-in fuel to generate credits and reduce deficits with the existing diesel vehicle fleet.
- The combined potential of renewable diesel plus electrification has the potential to exceed a 25% standard in 2035. The scenarios show that a critical period for compliance occurs during the late 2020s to 2030, when the carbon intensity reduction targets are increasing 2% per year, and the zero emission vehicle sales requirements are still ramping up. After 2030, the modeling shows electric vehicle policies beginning to replace diesel vehicles with ZEVs and producing significant credits for the program.

Scenario A shows how important the ZEV and clean electricity regulations are to achieving GHG reductions. Scenario B shows that even if the transition to electrification doesn't happen as planned, there are more than enough low-carbon liquid biofuels available to support aggressive targets. Scenario C, which is a combination of Scenarios A and B, results in a 37% reduction in lifecycle GHGs, or 48% reduction in tailpipe GHGs.

Initial thoughts from DEQ staff

Recent actions by the Environmental Quality Commission (EQC) have included adoption of the Climate Protection Program, the Advanced Clean Trucks rules, and the Landfill Methane Emissions Reduction rules and has demonstrated their commitment to achieving deep decarbonization. In particular, with the passage of the Climate Protection Program, the EQC chose to establish targets to achieve what the latest science says is necessary to avert the biggest impacts of climate change – 90% reduction in greenhouse gas emissions by 2050 with an interim target of 50% reduction by 2035. DEQ staff believe that the Clean Fuels Program, the signature program to reduce transportation-related emissions in Oregon, should be in alignment with this action.

The GHG reduction targets shown above are for tailpipe emissions. Since the CFP sets its targets for lifecycle emissions, those must be translated into tailpipe to make an apples to apples comparison. That will be different from scenario to scenario since the mix of fuels influences tailpipe emissions. One thing is clear: for an expanded CFP to align with and complement the CPP 2035 target, the CFP standards must be set higher than 25% by 2035.

Since the scenarios were published, several significant actions have been taken that either directly or indirectly affect the scenarios and support the assumptions that were made.

- The 2021 Legislature passed HB 2021 which requires retail electricity providers to reduce greenhouse gas emissions associated with electricity sold to Oregon consumers to 80 percent below baseline emissions levels by 2030, 90 percent by 2035 and 100 percent (i.e. 0 emissions) by 2040.
- The EQC adopted the Advanced Clean Trucks (ACT) rule which will require an increasing percentage of trucks sold to be ZEV beginning in 2024.
- The EQC adopted the Climate Protection Program (CPP) that sets statewide enforceable limits on greenhouse gas emissions from fossil fuels, including gasoline, diesel, and natural gas.
- The Oregon Department of Agriculture adopted rules that will allow up to 15% ethanol to be blended with gasoline (E15) in the state beginning in 2022.

Each of these actions makes certain aspects of the modeling conservative, even Scenario C that considered the totality of reductions possible with both expanded low-CI liquid fuels and ZEVs.

Breakout Groups

For the RAC #2 meeting, DEQ is seeking more specific feedback on what the targets should be – both the values and reasons for those values. We plan to break up the RAC into smaller groups and use the breakout function in Zoom for these discussions. RAC members were randomly assigned to groups. A facilitator (Kearns and West or DEQ staff) will be assigned to each group to make sure the discussion stays focused on the key questions and that all voices are heard. Each group should appoint a note taker who will represent the group for the report out; the breakout discussions will not be recorded. Members of the public will not be placed into these groups. After lunch, the full meeting will reconvene, and each group will report out and have an opportunity to provide feedback on the other groups ideas. Members of the public will also be able to provide comments.

Next Steps

Written comments will be accepted through February 11th. DEQ will consider all comments as it puts together a proposal that will be presented at RAC meeting #3 on March 31st.

Alternate formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email <u>deginfo@deq.oregon.gov</u>.