

State of Oregon Department of Environmental Quality

Rulemaking Advisory Committee #1: Discussion Paper

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Background and overview

Governor Brown issued Executive Order 20-04 directing state agencies to take actions to reduce and regulate greenhouse gas emissions.

Whereas, climate change and ocean acidification caused by greenhouse gas emissions are having significant detrimental effects on public health and on Oregon's economic vitality, natural resources, and environment [...] DEQ and the EQC are directed to take the following actions:

Oregon's Clean Fuel Standards. Pursuant to its authority under ORS 468A.265 *et seq.* and other applicable laws, the EQC and DEQ shall take actions necessary to amend the low carbon fuel standards, and the schedule to phase in implementation of those standards, with the goal of reduction the average amount of GHG emissions per unit of fuel energy by 20 percent below 2015 levels by 2030, and 25 percent below 2015 levels by 2035.

Clean Fuel Credits for Electrification. The EQC and DEQ are directed to advance methods of accelerating the generation and aggregation of clean fuels credits by utilities that can advance the transportation electrification goals set forth in Senate Bill 1044 (2019). Governor Kate Brown, Executive Order 20-04¹

In this rulemaking, DEQ is focusing on the second item described above. The rulemaking is being conducted on an accelerated timeline so that we may have these electrification provisions take effect as soon as possible. Our current plan is to issue the Notice of Proposed Rulemaking in December of this year and take the proposed rule amendments to our Environmental Quality Commission (EQC) in the first half of 2021.

This rulemaking will not expand Oregon's Clean Fuel Program (CFP) to 25% by 2035, as described in the first item above. That rulemaking will follow in the second half of 2021 through the first half of 2022. Concepts introduced during this rulemaking that might take more time to agree on or determine implementation might be included in this second rulemaking.

Earlier this summer, CFP staff initiated discussions with various stakeholders to brainstorm ideas for how the CFP could better incentivize transportation electrification in this rulemaking. After consulting with our regulatory partners and considering how we might implement the concepts, the agency has narrowed the focus of this rulemaking to the topic areas and potential provisions described in this discussion paper.

This discussion paper is structured to describe each topic, discuss the key considerations that formed the agency's initial perspective on the issue, and, in some cases, a straw proposal for stakeholder feedback. Agency staff will also pose critical questions when we want specific input from the public and our rulemaking advisory committee.

¹ Quotes from pages 1 and 6: https://www.oregon.gov/gov/Documents/executive_orders/eo_20-04.pdf

1. General Provisions

There are a couple of general ideas that don't necessarily fit into one of the later groupings of topics. These items originate from conversations that CFP staff have had with stakeholders over the last several years of implementation. We present them for consideration in this rulemaking.

1.1 Increasing the frequency of residential Electric Vehicle (EV) crediting

Background: Residential EV credits are currently calculated and issued in the first quarter of each year for the prior year. DEQ staff receive end-of-year EV registration information from Oregon's Driver and Motor Vehicles (DMV) division, map the results to place EVs in their utility service territories, and then calculate and issue credits to individual utilities. Utilities will retain the discretion of when and how many credits they decide to monetize.

Considerations: As the population of EVs continues to increase and the credits generated from those vehicles become a larger fraction of the overall credit market, the more frequent calculation and issuance of residential EV credits will position the utilities better adapt to the supply and demand of the market. For Portland General Electric and PacifiCorp, their annual requirement to plan and report to the Oregon Public Utility Commission (OPUC) will remain intact. Still, the more frequent credit generation will give them more leverage in maximizing the revenue from their credits. For the smaller utilities who are not subject to similar annual planning requirements, increasing the frequency of credit generation may allow them to spread out the revenue throughout the year and be more agile in their programs.

Straw Proposal: DEQ proposes to issue credits to utilities twice a year, starting in 2021.

1.2 Directing revenue from the sale of electricity credits

Background: As the CFP is currently designed, the regulation does not include any regulatory requirement on how revenue from selling credits should be spent. Over the years, many stakeholders recognized that the value of electricity credits dramatically increased, and there should be a mechanism to ensure that the majority of those revenues be invested back into the transportation electrification ecosystem.

Considerations: While this conversation has primarily been focused on utility spending, in the future, should DEQ move forward with provisions to allow for incremental crediting (see Section 3.1), other parties could be impacted. In addition to utilities, automakers and EVSE could also be allowed to generate incremental credits (see Section 1.3) and be required to conform to specified allowable uses for expenditures. The permissible uses could be broad and help ensure that revenue realized from these credits is used to pay off costs associated with generating the credits in the first place or reinvested to further transportation electrification in Oregon. In writing this provision, DEQ could set principles for how revenue must be spent, or identify specific categories of projects. DEQ would coordinate with the PUC as we develop the list of allowable uses to remain consistent with the principles adopted in UM 1826.

To illustrate how this provision could work, we offer an example of how the California LCFS implements this concept. The California Air Resources Board (CARB) requires² expenditures to go to one of the following categories:

• Electrification and battery swap programs for school or transit buses.

² Page 35: https://ww2.arb.ca.gov/sites/default/files/2020-07/2020_lcfs_fro_oal-approved_unofficial_06302020.pdf

- Electrification of drayage trucks.
- Investment in public EV charging infrastructure and EV charging infrastructure in multi-family residences.
- Investment in electric mobility solutions, such as EV sharing and ride-hailing programs.
- Multilingual marketing, education, and outreach designed to increase awareness and adoption of EVs and clean mobility options and including information about:
 - o the environmental, economic, and health benefits of EV transportation;
 - o basic maintenance and charging of EVs;
 - o electric rates designed to encourage EV use; and
 - o local, state, and federal incentives available for the purchase of EVs.
- Additional rebates and incentives for low-income individuals beyond existing local, federal and state rebates and incentives including the Clean Fuel Reward for:
 - o purchasing or leasing new or previously owned EVs;
 - o installing EV charging infrastructure in residences;
 - o promoting the use of public transit and other clean mobility solutions; and
 - o offsetting costs for residential or non-residential EV charging.
- Alternatively, utilities, in coordination with local environmental justice advocates, local community-based organizations, and local municipalities, may develop and implement other projects that promote transportation electrification in disadvantaged and/or low- income communities and/or rural areas or for low-income individuals. These alternative projects are subject to approval by the Executive Officer. Applications submitted to the Executive Officer must include and will be evaluated for approval based on a complete description of the project, the demonstration that the project promotes transportation electrification in disadvantaged and/or low-income communities and/or rural areas or provides increased access to electric transportation for low-income individuals, and evidence that the project was developed in coordination with local environmental justice advocates, local community-based organizations, and local municipalities.

The California rules also require that between 30–50% of the spending in these categories are used for the primary benefit of, or primarily serving, disadvantaged, rural, or low-income communities.

Straw Proposal: DEQ could require that entities that receive base or incremental residential EV credits would report to CFP on an annual basis their credit revenues and how spending from those revenues fell within the allowable uses established by DEQ.

1.3 Incremental credits

To allow for non-contiguous renewable electricity, the program would need to differentiate between "base" credits and "incremental" credits. 'Base' credits are the residential EV credits currently generated for EVs that reflect the delta between the CI of gasoline versus the CI of electricity. 'Incremental' credits would be generated when an entity takes additional actions to lower the CI of electricity from the statewide grid mix. Specific to the situation presented here, the incremental credit represents the delta between the CI of the renewable electricity versus the statewide grid mix.

2. Encouraging New Types of Electric Vehicles

Background

CFP rules specify which fuels are subject to the regulation: gasoline, diesel, ethanol, biodiesel, and renewable diesel are required to participate while natural gas, propane, electricity, and hydrogen are voluntary. For those fuels to generate credits, which are the currency of the program, the rules also establish specific categories of vehicles and corresponding Energy-Economy Ratio (EER), which are values that reflect the varying engineering and system efficiency for different vehicles and powertrains. EER values can be found in Table 7 of the Oregon Administrative Rules 340-253-8010. The difference in the CI of the alternative fuel and the EER of the vehicle category determines how many credits are generated.

As new types of EVs enter the market, DEQ has received requests to add additional EERs to the rules. There are some default values adopted (e.g., heavy-duty/off-road applications electricity/battery electric vehicle or plug-in hybrid electric vehicle). As more data is available, those EERs might be conservatively low, and applicants might want specific EERs to realize the modified engineering and related efficiencies of the electric version fully. These requests fall into two general areas: better characterizing the category of vehicle covered by one of the existing EER values; and adding a new EER that creates a new category not currently established under the CFP rules (e.g., e-bike).

As DEQ staff discussed how to respond to the requests received, three main considerations emerged: (1) technical readiness of additional categories of vehicles that may merit a new or updated EER, (2) data availability and standardized methodology to evaluate new EER at category and subcategory levels, and (3) the administrative process needed to adopt a new EER or change an existing EER without having to go through a formal rulemaking.

2.1 Adopting new EERs

Considerations

There is a list of factors to consider when we receive a request for a new or modified EER including:

- The presence of studies that validate the commercial readiness of the vehicle category
- Case-specific EERs. An applicant may provide the minimum data to evaluate an EERs at a subcategory level (e.g., for a specific make or model) that fit within an established EER category.
- Data requirements (criteria and minimum data) and standardized methodology to assign new EERs at the category and subcategory levels.

Straw Proposal

Based on the list of factors described above, DEQ believes that EERs for the following vehicle categories could be added EERs in this rulemaking:

- Electric Ocean Going Vessel / Shorepower
- Electric Cargo Handling Equipment

Requests have also been made to include EERs for several micromobility categories such as e-bikes, e-trikes, and e-scooters. Still, insufficient data exists to pass the technical feasibility test at the moment. Similarly, requests have also been made to include EERs for several non-road vehicle categories including airport ground service equipment, airplane auxiliary power units, etc. DEQ will work with stakeholders to gather the minimum data needed to include in a rulemaking. Stakeholders are encouraged

to provide DEQ with recommendations regarding case-specific applications and data for further consideration in this rulemaking by no later than November 5, 2020.

2.2 Administrative process to adopt EERs

Considerations

Given the rapid pace of technology development and commercialization, DEQ is interested in adding a provision that would allow the agency to administratively issue EERs between formal rulemakings. To illustrate how this provision could work, we offer the example of how the California LCFS implements this concept. The California LCFS has a mechanism^[1] that uses the fuel pathway application process to issue an EER-adjusted CI for the specific vehicle category. Under that mechanism, an applicant requests a Tier 2 CI that takes into account a vehicle category-specific EER. The applicant must provide:

- A letter of intent to request an EER-adjusted CI and why the EER values currently included under the program do not apply.
- A detailed description of the methodology used, all assumptions made, and all data and references
 used for calculation of the proposed EER-adjusted CI value. The methodology used must
 compare the useful output from the alternative fuel technology to that of comparable conventional
 fuel technology.

The EER-adjusted CI issued under this process would be specific to the applicant and is not available to others.

If we create a mechanism to add EERs administratively, several details need to be clarified before proceeding as a proposal, including but not limited to:

- Should it only be used for applications where none of the existing EERs could apply, or are there cases where an existing EER may be sufficiently inaccurate as applied to a specific new type of vehicles that a new EER should be established?
- If we allow for applications that subcategorize existing EERs, what threshold of improvement from that EER should be required?
- Are there cases/applications that should be reserved for a formal rulemaking process?
- What level and duration of public comment would be necessary for administratively approved EERs?

In considering how DEQ could implement this concept, we must also consider that Oregon has multiple CIs for electricity, both a statewide grid mix and utility-specific mixes. This feature of our program creates another level of complexity that will increase the number of pathways that might need to be issued. For example, multiple EER-adjusted electricity CIs would need to be issued per vehicle category based on the utility that services where the vehicles are charged which is a considerable workload for CFP staff. On the flip side, formal rulemaking is also a significant workload for CFP staff in addition to the extended period of time until a new EER can be issued.

Straw Proposal

DEQ could create a mechanism to administratively issue new vehicle category-specific EERs as opposed to individual EER-adjusted CIs. Of primary concern here is the resources it would take DEQ to approve EER-adjusted CIs. DEQ will work with stakeholders on finding the right level of detail in the vehicle categories as it develops these factors.

^[1] https://ww2.arb.ca.gov/sites/default/files/classic//fuels/lcfs/guidance/lcfsguidance_20-04.pdf

3. Lowering the Carbon Intensity of Electricity as a Transportation Fuel

The CFP seeks to expand the production of lower-carbon fuels as their producers continuously reduce their lifecycle emissions. Oregon is fortunate to have several policies that will clean our electric grid over the next decade and a half. DEQ is also interested in creating additional incentives to have renewable electricity be the primary source to power our EVs via the CFP. This could include improvements to our methodology for determining the statewide mix, provisions that would direct renewable electricity to electric vehicles, and shift the time vehicles charge to times that would benefit the grid.

3.1 Calculating the statewide and utility-specific mixes

Background

As part of the 2017 CFP rulemaking, EQC adopted provisions that:

- Define the methodology for setting the statewide electricity mix each year as a five year rolling average of electricity emissions data reported into DEQ's Greenhouse Gas Reporting Program
- Allow for utilities registered in the program to request utility-specific mixes
- Allow for renewable electricity to be claimed if it is generated by a system that is directly connected to or behind the same meter as the EV chargers

These points could be updated to reflect recent advances in both the electricity and transportation fuel markets and the role that the CFP can play in further decarbonizing electricity as one of the transportation fuels of the future.

3.1.1 Changing the averaging period

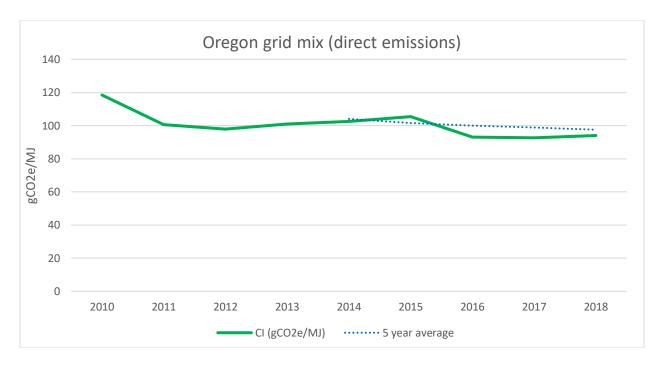
Background

The 5-year averaging period was established to smooth the year-to-year variability of emissions in Oregon's electricity created by the Northwest's hydropower system. The imminent closure of the Boardman coal-fired power plant along with the additional renewable resources demanded by the state Renewable Portfolio Standard are reasons DEQ will consider adjusting this long averaging period to better reflect the improvements from the retirement of fossil fuel power plants and the addition of renewable energy onto the grid.

Considerations

Stakeholders have several different perspectives on how the shut down of the Boardman coal-fired power plan should be treated in calculating of the statewide grid mix to enable a quicker reduction in the CI of electricity in the CFP. Some proposed to remove Boardman from the statewide grid mix CI calculation, beginning in 2021. As such, the statewide grid mix CI would be calculated based on the rest of the sources or replaced with an average or default value (with known assumptions).

Other stakeholders have proposed to change the averaging period from 5 years to a single year. In this proposal, the fossil sources will be removed much quicker and the CI of the statewide grid mix. It is important to recall that the CFP is a CI-based program and there is not much variation in the CI of Oregon's electricity grid mix over the last several years.



As you can see in the graph, the 5-year rolling average shows very little change over the last 5 years. Additionally, you can see that in the previous 10 years, the annual CI varies by approximately 25 gCO₂e/MJ. Using the same dataset we used to calculate the 2020 value, the impact of switching from a 5-year value to an annual value is small and would move it from 107.92 gCO₂e/MJ to 104.45 gCO₂e/MJ when we also include the indirect emissions associated with our electricity mix. When accounted for in our credit calculations, the difference in credit generation is 1.6%.

Straw Proposal

DEQ could move the grid electricity calculations to a single-year average starting in 2021. This approach will more accurately and quickly reflect the CI of electricity and avoid significant manual adjustments to reported data to forecast the effect of Boardman's retirement.

3.1.2 Adjusting what constitutes the statewide grid mix

Background

One thing that we could not anticipate in the 2017 rulemaking was how many utilities would opt-in for utility-specific CI. Since then, approximately 24 utilities have opted in to the CFP to generate residential EV credits on behalf of their EV-owning customers and chosen to use a utility-specific CI instead of the statewide grid mix. The most recent reports show that these opted-in utilities now account for approximately 26% of the state's load.

Considerations

Under the generally accepted principles of carbon accounting, overall averages of a sector should be adjusted if specific slices are specified. Because it was unclear during the 2017 rulemaking if a significant portion of the state's electricity demand would opt into utility-specific CIs, DEQ staff said they would monitor the adoption of utility-specific mixes and reopen the issue if needed.

DEQ also reminds stakeholders that the number of credits generated is a function of both the CI as well as the EER. The impact of adjusting the statewide grid mix to carve out the utility-specific grid mixes, using

the 2020 grid mix as an example, would move the CI from 107.92 gCO₂e/MJ to 137.53 gCO₂e/MJ. When accounted for in our credit calculations, the difference in credit generation is 13.8%.

Straw Proposal

DEQ could remove the utility-specific load from the statewide grid mix.

3.2 Allowing for non-contiguous renewable electricity

Background

There are two categories of EV charging in the CFP, non-residential charging (public, fleet, workplace, and multi-unit dwellings) and residential charging. Under the current CFP rules, only non-residential charging can generate credits for using renewable electricity if the renewable energy system is behind the same meter as the EV charger.

Stakeholders have requested that DEQ consider multiple ways to increase access to renewable electricity through utility green tariff programs and the retirement of renewable energy credits (RECs) associated with specific projects. There are several issues to contemplate with the broader allowance of renewable electricity into the program.

3.2.1 Which sources of renewable electricity should be eligible?

DEQ believes that renewable generators eligible for a zero carbon intensity score should be limited to those with no anthropogenic carbon emissions. Those generators that use biomass or biogas could be required to submit an application and receive a lifecycle CI score for their electricity. RECs used under this provision or by an eligible green tariff would need to be in addition to any other requirement or program.

Under Oregon's RPS, the following are eligible sources of renewable electricity:

- Wind energy
- Solar photovoltaic and solar thermal electricity
- Wave, tidal, and ocean thermal energy
- Geothermal energy
- Certain biomass products, including woody biomass and animal manure
- Landfill gas and other biogases
- Small hydropower

Of the above, wind, solar, geothermal, wave, and tidal electricity do not generate direct emissions and could be deemed categorically eligible for zero-carbon claims under the CFP.

3.2.2 Should there be a limit to the temporal eligibility of the renewable electricity?

DEQ believes there could be a time limit for when the renewable electricity is generated and then claimed against electric vehicle charging. This would match provisions in the rest of the program for liquid fuels. Limiting the temporal eligibility of RECs or renewable power delivered under a green tariff would help ensure that renewable energy is being generated contemporaneously with increasing demand for electricity from the transportation sector and create a stronger signal to invest in additional renewable electricity projects.

As a starting point, DEQ could propose limiting the eligibility of RECs to those generated within three quarters of the when the EV charging occurs. DEQ believes that the eligibility requirements for both

green tariffs and RECs should be identical in terms of which renewable electricity sources qualify, but recognizes that the temporal limitations discussed above may not be practical for currently-approved green tariffs and requests comment on this issue.

3.2.3 Who should be eligible to claim that renewable electricity is going into an EV?

DEQ believes that for non-residential charging, the current reporting entity would be the logical entity to be eligible to claim they are charging EVs. Entities would be required to document the amount of renewable electricity based on utility bills showing the chargers are receiving power under an eligible utility green tariff, or by demonstrating retirement of eligible RECs against the charging.

DEQ also believes that there could be a hierarchy for residential charging, so long as the entity other than the utility can demonstrate that they can accurately meter the charging and ensure that it is not occurring at a public charger³:

- The utility supplying electricity to the specific EV;
- The manufacturer of the specific EV; and
- Any other entity has third priority.

For automakers or any entity other than the utility, they would need to specifically register each EV by their Vehicle Identification Number (VIN) to avoid multiple entities claiming the same vehicle. Each charging session would need to be identified and geolocated to prove that it did not occur at a registered public or workplace charger. DEQ believes from discussions with stakeholders that the majority of the incremental credits are currently being claimed by automakers.

Other Considerations

In addition to the topics described above, DEQ seeks input on the following questions:

- Should there be additional requirements for eligible renewable electricity?
- Should DEQ adopt the definition of renewable electricity used in the state RPS, or is a more narrow definition appropriate?
- Should eligibility for renewable electricity generators be further restricted to those placed in service following the start of the CFP?
- Should RECs only be allowed from renewable generators that deliver power into Oregon or an electricity balancing area that covers at least a portion of the state?
- Should DEQ qualify green tariffs for use in the program?

3.3 Using smart charging to access lower carbon electricity

Background

Smart charging refers to the use of internet-connected vehicles or chargers where the times that the vehicle is actively charging when plugged in are targeted to periods of the day when the CI of grid electricity is at its lowest. The incremental crediting here would reward the smart charging system operator for the CI of the grid at those times of the day versus the statewide average mix.

Considerations

DEQ believes through discussions with stakeholders that efforts to move EV charging to times of the day that are lower carbon will likely benefit both the environment and electric grid operations. The higher CI forms of power generation are more likely to be fossil fuel-fired power plants that operate during times of

³ See §95483(c)(1)(B)(2) on page 38: https://ww2.arb.ca.gov/sites/default/files/2020-07/2020_lcfs_fro_oal-approved_unofficial_06302020.pdf

peak demand, and shifting EV charging away from those times will lower the impact of the additional demand for electricity that they will create.

However, we are currently unaware of a source of hourly or sub-daily electricity data that would allow us to estimate the CI of different times of the day in different periods of the year. Without that data for the state as a whole, DEQ could create a process where individual utilities could apply for smart charging/time of use CIs if they have sufficient information to support the creation of these values for their service territory or a balancing area that they control.

In order to move forward with this concept, DEQ seeks input on the following questions:

- Is there sub-annual CI data for Oregon? If not, then when will this data become available?
- Will that be substantively better than the current annual grid mix?
- Is there any estimate of how many chargers or EVs could potentially take advantage of this sort of provision?

4. Additional Credit Generation Opportunities in the CFP

Background

Most of the proposals received by DEQ centered on this topic. There is a coordinated effort amongst public and private partners to identify and fill in gaps in fueling infrastructure, fleet conversion, and efforts to educate Oregonians about the benefits of EVs. CFP plays a critical role in incentivizing transportation electrification in Oregon, and many stakeholders have been creative in thinking about how CFP can further advance that transition.

Considerations

DEQ's interpretation of ORS 468A.265(4)⁴ is that the agency and EQC do <u>not</u> have the authority to issue credits that do not represent real carbon emissions reductions under the CFP.

(4) "Credit" means a unit of measure generated when a fuel with a CI that is less than the applicable low carbon fuel standard is produced, imported or dispensed for use in Oregon, such that one credit is equal to one metric ton of carbon dioxide equivalent.

The agency values the environmental integrity of the program and that actual reductions in emissions were clearly envisioned when the program was established and throughout its statutory revisions. Likewise, EO 20-04 clearly pointed to the CFP to produce increasing emissions reductions from Oregon's transportation sector through 2035.

This means that previous discussions about credit multipliers or extra credits cannot be considered in this rulemaking. At this time, DEQ will pivot its efforts and focus on the mechanism to advance credits for future reductions.

4.1 Advanced Crediting

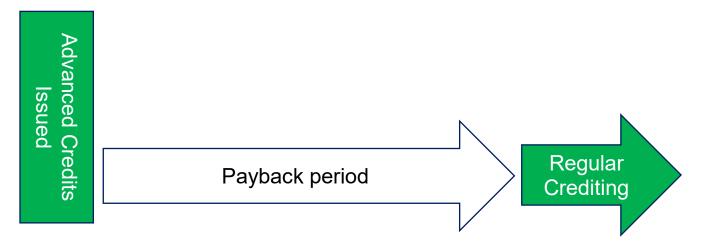
Background

Under this concept, a fleet could receive several years' worth of credits for a vehicle when it's bought and put into service in order to help buy down the purchase price of an EV. This concept is akin to a loan on the carbon reductions that the EV will achieve, where the fleet gets the several years of credits when it

⁴ Available at: https://www.oregonlegislature.gov/bills_laws/ors/ors468A.html

takes ownership of the vehicle and then pays back the emissions reductions by not generating credits from that vehicle until the amount of 'loaned' credits is paid back.

For example, if an EV would generate 100 credits per year and is expected to have a useable life of 15 years, then when it is put into service DEQ would advance the owner 5 years of credits for 500 total. The owner would continue to report charging normally for the vehicle, but during the 'payback period' DEQ would not allow credits to be generated from that vehicle. The 'payback period' would end when the vehicle has used enough electricity as a fuel that it would have generated the number of credits advanced to the owner. At that point, the vehicle would begin generating credits as normal.



4.1.1 General considerations

DEQ seeks input on the following questions:

- Should there be a limit on the total number of credits advanced per year?
- Should there be an overall limit on the number of advanced credits that can be issued to a single party?
- Are there other fleets whose vehicles could be included in this provision?
- What should the cap on the number of years of advanced credit generation be?
- Should there be a limit on how long the payback period is? If a vehicle or piece of infrastructure gets 3 years of credits and they haven't been paid by the end of 5 years, should they be required to purchase and retire credits against the remaining balance?
- Should the fleet proposal be limited to medium/heavy duty EVs or include light-duty EVs as well?
- Should anyone other than the vehicle or infrastructure owner be allowed to apply for advance credits?

4.1.2 Considerations for fleets

If DEQ moves forward with this proposal, fleets seeking to receive advance credits for their vehicle purchases would submit an application to DEQ prior to purchasing the vehicles with the following information:

- How many vehicles they plan to purchase
- A detailed estimate of the number of miles each vehicle will drive each year and the estimated number of kilowatt-hours each vehicle will be charged each year

- Information on how and where the vehicles will be charged, and if they will be charged using grid or renewable electricity, and if applicable the utility-specific CI for the territory
- A proposed number of credits to advance per vehicle, up to a capped number of years of advanced credit generation
- The timing of the vehicle purchases and when they are planned to be purchased and put into service
- Attest that they will remain the owner of the vehicle until it has paid back the advanced credits, or that if the vehicle is sold prior to the end of the payback period that it will buy and retire credits against the remaining amount

DEQ would review the application for completeness and determine if the estimated credit generation for the vehicles covered by the application is reasonable. If the application is approvable, DEQ and the applicant would agree that the applicant will be advanced credits when the applicant takes ownership of the vehicles and that the applicant will:

- Demonstrate proof of ownership prior to the advanced credits being issued
- Timely report the amount of electricity charged per vehicle each quarter
- Ensure the vehicle remain based in Oregon until it has generated enough credits to 'pay back' the advanced credits, or if the vehicle is sold to another entity or permanently moved out of state pay back the number of remaining advanced credits at the time of sale or movement by purchasing and retiring other credits

The applicant would inform DEQ when they take ownership of the EV covered by an agreement, and DEQ would then award the applicant the advanced credits. CFP staff and the applicant will keep track of the amount of charging and number of credits that a vehicle covered by this provision would have generated until the number of advanced credits has been paid back. At that point the vehicle would begin generating credits normally for the applicant.

4.1.3 Considerations for infrastructure

This provision follows the same basic structure as the straw proposal for fleets but would be limited to high-voltage public charging infrastructure. If DEQ moves forward with this proposal, the application and approval process would be similar, with the public charging operator:

- Estimating their first two years of charging utilization and credit generation
- Attesting that they will maintain operational chargers at the applied-for location for at least five years
- That they will be located in a place that makes them easily accessible to the public and that they will be open to the public
- Providing information on the source of electricity they will use, and if they intend to take advantage of any renewable energy provisions that may be added in this rulemaking.

DEQ would review the application for completeness and determine if the estimated credit generation from the public chargers is reasonable. If the application is approvable, DEQ and the applicant would agree that the applicant will be advanced credits when the chargers become operational and that the applicant will:

- Maintain operating chargers at the location
- That the chargers will remain open to the public
- That they will take common forms of payment, such as credit and debit cards
- If the site has more than 6 chargers, it will provide at least two of the common plug types.
- That they will report charging on a regular and timely basis to DEQ

- Any sustained outages will be reported to the agency
- That the chargers will remain operational until they have 'paid back' the advanced credits, or the applicant will pay back any remaining advanced credits if the charging site is shut down

Straw Proposal for advance crediting for public fleets

DEQ could allow credit advancing for transit agencies, school bus fleets, and other public fleets. They are prime candidates for this provision as they:

- Are owned or managed by the public and are accountable to elected officials or a board
- Their vehicles that are unlikely to leave the state
- Have dedicated and vehicle-specific charging equipment
- Run fixed and regular routes that make forecasting annual electricity use feasible
- Often operate near vulnerable populations and replace dirty diesel engines

Next Steps

DEQ will accept comments on any of the topics discussed. Please email them to: CFPE2021@deq.state.or.us

The next meetings are scheduled as followed:

Oct. 8, 2020: Breakout Meeting #1 – Encouraging New Types of Electric Vehicles Oct. 22, 2020: Breakout Meeting #2 – Lowering the Carbon Intensity of Electricity as a Transportation Fuel

Nov. 5, 2020: Breakout Meeting #3 – Additional Credit Generation Opportunities in the CFP Nov. 19, 2020: Economic and Fiscal Impact Analysis and Wrap-Up Meeting

Each meeting will initially be scheduled from 9:00 am – noon, but the 3 breakout meetings may be shorter. We will be holding these over Zoom and the meeting information will be posted on the rulemaking web page: https://www.oregon.gov/deq/Regulations/rulemaking/Pages/rcfpe2021.aspx.

Alternative formats

DEQ can provide documents in an alternate format or a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.