1. Consider advance crediting for hydrogen vehicles and equipment

Stakeholders have requested that we consider making hydrogen vehicles and equipment available for the advance crediting provision adopted in the last rulemaking for electric vehicles.

**Background:** The advance crediting provision (OAR 340-253-1100) can be thought of as a loan – a new vehicle that uses a low-carbon fuel applies for and is awarded several years of credits up-front. The revenue from the sale of those credits can then be used to offset any additional costs that may be associated with that vehicle. That loan gets paid back on a quarterly basis as credits that would be normally generated are used to draw down that balance until it has paid back the entirety of the advanced credits.

**Discussion:** Adapting the advance crediting provision for hydrogen vehicles or fueling equipment poses a few challenges that need to be considered including:

- Producing hydrogen has a wide range of carbon intensities that are associated with it where there are a limited number of them for electricity.
  - What assumptions should DEQ make in calculating advance credits when it is possible to have different sources of hydrogen throughout the timespan of the advance crediting payback period?
  - Should the agreement with the applicant limit the sources of hydrogen used to those within a specific CI range or below a certain cap?
  - How would DEQ monitor the CI of the hydrogen used once the advance credits are issued?
- The timespan for advanced credits for electric vehicles is up to 6 years. In establishing that in rule, DEQ used feedback from potential fleets that the amount of revenue generated by 6 about years’ worth of advance credits would be what is needed to influence a fleet’s next purchase.
  - Given the economics of hydrogen, would advance credits have a similar influence?
  - How many years’ worth of advance credits would be needed for hydrogen?
- The eligible credit generator for electricity is the owner or operator the charging equipment for an electric vehicle, which will often be the same entity applying for advance credits. However, the eligible credit generator for hydrogen is the owner of the hydrogen fuel as it is being dispensed which is not as ideal in the advance credit situation.
  - How often will the owner of the hydrogen fuel when it is being dispensed be the same as the owner of the fuel cell vehicle being applied for here?
  - Is the owner of the fuel when it is being dispensed the correct credit generator for hydrogen, or should the fuel be treated more akin to RNG?
  - Does it make sense for the applicant for advance credits for hydrogen to be different than the credit generator?
  - Who would get the advance credits?
  - Would we need to limit this provision to fuel cell vehicles that would only fill from dedicated dispensing equipment and would not use public hydrogen dispensers?
  - In the case of hydrogen produced at central facilities and transported to filling equipment, is there a risk that the fuel producer may successfully demand to be the owner as it is being dispensed in order to generate normal CFP credits and that would interfere with paying back advanced credits?
2. Consider modifications to credit generation for changes to carbon intensities or against the operational CI post verification

**Background:** DEQ received two proposals during the listening session related to this topic. Under the current rule, the program only allows credits to be generated when a valid and accurate quarterly report is filed and the currently certified CI for a fuel must be used to calculate the correct number of credits to be generated.

The certified CI received by a fuel producer is a cap on how high their operational CI is allowed to go – if the operational CI is higher than the certified CI, at least some of the credits would be illegitimate and the fuel producer may face an enforcement action. Because of that, fuel producers are encouraged to use conservative assumptions in their pathway application or add a margin of safety that raises the CI to ensure that the operational CI remains below the certified CI.

**Discussion:** There are two situations where stakeholders are seeking the ability to modify the generation of credits due to changes in CIs:

1. In some cases, especially in new production facilities, the fuel producer will request the use of a temporary pathway since there isn’t enough operational data to apply for a permanent (requires 24 months of data) or provisional (requires 3 months of data) pathway. The temporary fuel pathway is set intentionally to be a conservatively high CI to protect the program and encourages fuel producers to swiftly file for a provisional or full pathway.

   In almost all cases, the certified CI has been lower than the temporary and stakeholders have asked to modify the rules to allow for a true-up. For example, if the temporary CI is 45 gCO2e/MJ and the certified CI is approved at 35 gCO2e/MJ, then the fuel producer is proposing that DEQ would calculate the delta in credit generation between the two CIs and award those credits.

   There will likely be variability in the carbon intensity over the course of ramping up a production facility. Energy inputs and yields will vary until steady-state operation is achieved but how long will that take? Moving from the temporary CI to the provisional CI should be straightforward as it will almost always be lower. But what happens if the operational CI is higher than the provisional CI?

   DEQ staff is concerned that allowing credits to be trued up in this fashion would blunt the incentive for fuel producers to speedily collect the needed data and submit a fuel pathway application. Temporary fuel pathway codes can be used for up to two quarters per approval, but they are meant to be temporary, and this proposal would dilute the main financial incentive to quickly submit a full or provisional fuel pathway application as the conservatively high CI values of the temporaries result in less credit generation for most facilities than their producer-specific values will.

2. Beginning 2022, annual pathway reports for the largest fuel producers are required to go through third party verification. In some cases, this will result in a verified operational CI that is lower than the certified CI for that reporting year. Normal credit generation uses the certified CI but stakeholders are proposing that DEQ calculate the delta in credit generation between the certified CI and the verified operational CI and award those credits.

   DEQ staff feel that this provision could be implemented and would result in some number of credits being generated for a prior compliance year in the latter half of the following year when verification is complete. However, calculating the delta in credits between the certified and verified operational CI for each fuel pathway code for each fuel production facility would take significant staff time if this process cannot be automated.
DEQ is requesting feedback on the following questions:

- Who would get the credits? Some producers are registered in the program while others are not. Since CFP cannot require out-of-state producers to register, some have voluntarily opted in while others have not. In the case where the out-of-state producer has not opted to register, who is next in line to get the credits? The initial importer? Any entity that generated credits using that fuel pathway?
- Should there be a significance threshold for this proposal? In other words, should additional credits be generated only if the operational CI is at least 1 gCO2e/MJ lower than the certified CI? What should that threshold be?
- For proposal (2), should producers not subject to verification have any ability to generate additional credits? Smaller producers are still required to submit an annual pathway report and what if that report indicates a lower operational CI compared to the certified CI. Should they also generate additional credits?

3. Requiring an electronic tracking system for renewable natural gas claims

**Background:** As the renewable natural gas (RNG) industry continues to mature and there are additional sectors starting to demand and use it as a replacement for fossil natural gas, the agency believes it is time to require the use of an electronic tracking system for RNG claims. Currently CFP accepts paper attestations for RNG reported using book-and-claim accounting, which requires that all entities that own the fuel at any time prior to it being reported to the CFP attest that the volume being claimed in Oregon has not been used elsewhere, and all environmental attributes are retired when the CFP claim is made (see OAR 340-253-0640(1)(d)).

Requiring the use of an electronic tracking system is already required by the Oregon Public Utilities Commission when gas utilities retire RNG they purchase under SB 98. The only RNG tracking system DEQ is currently aware of for North America is the Midwest Renewable Energy Tracking System’s (M-RETS) Renewable Thermal Tracking System. M-RETS operates the renewable electricity tracking system used for many Midwest renewable electricity portfolio standard programs and voluntary market claims, and DEQ believes the system and its standards are robust and can accurately capture and track renewable natural gas production, injection, and the retirement of the environmental attributes from set volumes of gas.

**Proposal:** CFP proposes to require that all RNG volumes reported using book-and-claim accounting to be made using an electronic tracking system starting in with the 2023 reporting year. Mirror the REC retirement provision on the electricity side and require that the retirement reports for RNG claims be submitted as supplemental documentation with each quarterly report.

4. Require additional documentation for credit transactions

**Background:** The credit market in the Clean Fuels Program has grown significantly in size and value over the last several years. In order to enhance DEQ’s ability to monitor the market on an ongoing basis, DEQ is proposing to begin requiring that the contracts that certain credits are transferred under be submitted to the agency when the credit transfer is being recorded in the Oregon Fuels Reporting System. The California Air Resources Board currently requires a similar level of documentation.

**Proposal:** DEQ is proposing to require the contract a transfer is being conducted under be submitted for any transfers of credits that occur ten days after the contract was signed. This would allow DEQ to better understand current credit pricing, as transfers that occur under contracts with a longer lead time may have non-standard pricing or other terms that affect the $/t valuation of the credits being transferred.

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 deqinfo@deq.oregon.gov.