October 6, 2021 Stakeholder Meeting Summary
Clean Fuels Program Rule, Chapter 173-424 WAC

Agenda and presentation slides are available on the Clean Fuels Program Rule rulemaking web page.

Key Rulemaking Issues Identified for Stakeholder Comments

- Carbon intensity standard – Should there be a reporting-only year for staff and stakeholders to become familiar with reporting requirements and the reporting IT system? What should be the carbon intensity reduction standard trajectory?
- Fuels subject to this regulation – Which classification should we follow?
    - Fuels subject to regulation versus opt-in fuels as in California rule
    - Regulated fuels versus clean fuels as in Oregon rule
    - Other
- Exemptions
    - What should be the low volume threshold below which fuels are exempt from the rule?
    - What should be the process to qualify for an exemption?
    - Are additional exemptions necessary in the rule?
- Credit-generating activities
    - Which credit-generating activities should we include in the initial rule?
- Credit generation rights for refueling infrastructure
    - Should we divide credit generation (for example, between base and incremental credits)?
    - What should be the criteria for assigning first right for credit generation?
    - Comments on refueling infrastructure and vehicles or applications: first credit generating right, measurement accuracy, capacity-based versus performance-based credit, setting cap/limit for credit generation, revenue-spending requirements
- Capacity-based credit for DCFC and H2 refueling infrastructure
    - Should Ecology limit capacity-based credits in this initial rulemaking?
    - What should the limit be?

Stakeholders' Comments and Staff Responses

Rulemaking processes, timeline, and documents and records

- Will you provide a summary slide or sheet that details the areas in which Ecology would like feedback?
    - **Response:** We have summarized above the key areas identified for stakeholder input. The last part of the presentation slides (slides 36-47) also contain the rulemaking issues for stakeholder input. This meeting summary also highlights areas for stakeholder input as part of a response to comments below. However, stakeholders may also give us their comments on other topics besides those that Ecology has identified in the slides or this summary.

- When will Ecology make the first draft of the regulation available, in advance or the day of the stakeholder meeting?
    - **Response:** We plan to send out draft rule language and other meeting materials two or three days ahead of the stakeholder meetings. We will send out the summary of each meeting about 10 days to 2 weeks afterward and will post it on the rulemaking web page.
- Will you have a public workshop and comment as well for the economic analysis work that you will be conducting?
    - **Response:** We plan to make the ex-ante economic analysis report that the law requires Ecology to do through an independent consultant available for public review and comment. This report will analyze the probable costs or cost savings attributable to the clean fuels program over the program implementation period (2023-2038). In addition to the independent analysis, Ecology's staff economist will produce a Preliminary Regulatory Analysis report, based on the final draft rule that we will post on the rulemaking web page, with the CR-102 form and rule proposal. It will be available for public review and comment during the formal public comment period that starts in July 2022.
- When in the rulemaking process would input on those specific rulemaking issues (topics) be most helpful/effective?
    - **Response**: We encourage stakeholders to send us comments within a two-week period after each stakeholder meeting so that we can address them in the next version of the draft rule. April 10, 2022 is the final deadline for providing input that we will address in the final draft rule that we plan to propose in July 2022. A few days after April 10, 2022, the regulatory analysis team will start analyzing the impact of the rule. After that, we will not have an opportunity to make changes in the rule before it is formally proposed. The next opportunity to make changes in the proposed rule will be in response to input received during the public comment period in July and August 2022.
- Appreciate comments or questions without the "sales" pitch
    - **Response:** We remind stakeholders to provide their comments or questions focused on the clean fuels program rule, and to avoid using the stakeholder meeting for marketing.
- We encourage Ecology to post the comments that you receive online so that we can see comments from others. That way, we can work as collaboratively as possible to help Ecology get to the right outcome on this program.
    - **Response**: The rulemaking web page has a link to all the comments (look for "comment online and read others' comments" on the rulemaking web page) that allows stakeholders to submit their comments and read others' comments. We will also continue to prepare summaries of the stakeholder meetings. We think these will help stakeholders have all the information to meet their goals in this rulemaking.

Relationship between Clean Fuels Program (CFP) and other climate change-related programs

- Will the CFP/LCFS/CFS be on top of the state's new CO_2 cap-and-trade system or will reductions from the LCFS count as reductions in the cap-and-trade system?
    - **Response**: Any emissions reduced because of the clean fuels program would fall under the cap-and-invest program. Both the clean fuels program and the cap-and-invest program are working toward the same goal of reducing statewide GHG emissions, although one aims at reducing transportation emissions and the other targets reducing emissions across the entire economy. They are complementary programs.

- How will you measure additionality? For example, Amazon has already committed to going 100 percent EV. Will they be able to apply for Clean Fuels Program credits even though they have already made the commitment and are not adding any additional CO_2 reductions?
    - **Response**: The law does not give us authority to consider additionality when awarding credits for vehicle charging or refueling. This program's credits depend on the carbon intensity and amount of fuels dispensed in Washington. Thus, we are not planning to have specific requirements for additionality. In the above scenario, Amazon would be eligible to claim credits for the EV charging infrastructure they own, if they choose to register and meet the requirements in the rule.

Interstate programs and interagency interaction

- Can we only buy and sell credits in Washington, or can we use credits purchased from other states like in California, too? Can we use California credits in Washington?
    - **Response**: Currently, we do not envision linking the clean fuels program with other states like California and Oregon. Thus, credits from other states, including California and Oregon, would not be eligible in Washington. Similarly, credits from Washington are not eligible for compliance in California and Oregon. Program linkage would require mutual agreement among jurisdictions and may require new statutory authority. The regulators from California, Oregon, Washington, and British Columbia have regular meetings to discuss issues like this, and could consider exploring the concept of program linkage in the future.
- Would the credit value for a given amount of fuel be similar in different states having a similar clean (low carbon) fuels program?
    - **Response:** We are going to prepare a Washington-specific GREET model (WA-GREET) or spreadsheet to calculate the carbon intensities (CI) of transportation fuels. The CI value of a fuel depends on the way the feedstock and fuel are produced, stored, transported, etc., regardless of where they are produced. The law directs us to harmonize this rule with the similar programs in California and Oregon. We also have the authority to deviate if we have good reason to. Thus, there is no guarantee that our CI values for fuels would be the same as the other states'.
- Will the regulations apply to local government operations?
    - **Response**: The regulation applies to fuel suppliers. If local governments are operating as fuel suppliers with fuel volumes above the minimum thresholds, they will have compliance obligations. Local governments will also have the option to opt-in and become credit generators if, for example, they provide electric vehicle charging.
- To what level is Ecology engaging CARB's LCFS staff directly on lessons learned from the California LCFS program?
    - **Response**: Oregon, California, Washington, and British Columbia are all members of the Pacific Coast Collaborative, which has a low carbon fuel standard working group that has been going on for a number of years. We are also engaging with staff from Oregon and California on a regular basis.
- My understanding is that Ecology is primarily a regulatory and technical assistance department. Your presentation emphasized that this is a market-based system. As this has both state economic and business financial impacts, what state expertise will be part of the rulemaking decisions? Washington Commerce or Enterprise Services?

    - **Response**: The law requires Ecology to conduct an economic, ex-ante, analysis. We will do this by hiring an independent consultant to estimate the potential cost and cost savings that result from implementing the clean fuels program from 2023-2038. This is in addition to the standard regulatory impact analysis that we do in-house for every rulemaking. Moreover, the law requires the Department of Commerce to do annual fuel supply forecasts to project the availability of fuels necessary for compliance with clean fuels program requirements. Currently, we are working to set up an interagency agreement with the Department of Commerce to implement this part of the law. We will also take your comments for further consideration.
- **Comment**: We encourage Ecology to learn from the experience of California regarding refrigerated containers. Refrigerated containers have to be registered and then are sent all over the world. We need to think about how to reduce some of the bureaucracy and streamline some of the requirements based on the California experience.

Preparation for program implementation

- Is Ecology aware of the delayed rollout of the state's clean building standard due to the obstacle of contacting affected property owners (county assessors' databases)? Is there anyone in Ecology who is focusing on the implementation of the rule to start the program implementation by the statutory deadline?
    - **Response**: Debebe Dererie is the rulemaking lead, so he is responsible for ensuring that we have a rule adopted by the deadline. Joel Creswell is the implementation manager; he is working on implementation. Abbey Brown is on the implementation team leading the technical elements of the program. Thus, we are planning for both the rulemaking and implementation simultaneously.

Transportation fuels subjected to regulation

- You mentioned that entities must have zero deficits in their account at the end of a compliance year. Who are the regulated entities?
    - **Response**: Regulated entities would be suppliers of regulated fuels above the minimum threshold. One of slides showed the list of regulated fuels in California and Oregon. We will have a similar list for Washington. The statute allows entities to carry over small deficits at the end of the compliance year. We will define what a small deficit is in this rulemaking. We also have exemptions for some fuels and fuel uses.
- Has Ecology defined the regulated fuels baseline year in the development of a Washington-specific CI?
    - **Response**: The statute established 2017 as the baseline year.

Carbon intensity standard

- What do the numbers in slide 41 indicate? Are they incremental CI reductions per year? It would be interesting to see the actual CI standard per year. What is number 141.5?
    - **Response**: The numbers for each year indicate the expected carbon intensity reduction in that year compared to the baseline year, 2017. The actual carbon intensity standard for a type of fuel will be the product of these numbers and the 2017 (baseline) carbon intensity value of the fuel, which will come after the contract work on WA-GREET. The numbers in the last row show the cumulative effect of the alternatives in terms of the reduction percent-years between 2023 through 2038 (i.e., the sum of percent

reductions in the years between 2023 to the end of 2038). For example, the 0.5 percent reduction in 2023 will also continue to occur in the years between 2024 and 2038, and thus have a cumulative reduction of 8 percent-years in the program implementation period. Similarly, the 0.5 percent reduction in 2024 will continue for 15 years and thus have a cumulative reduction of 7.5 percent-years. Thus, the maximum carbon intensity reduction allowed in the law becomes 141.5 percent-years.

- How does Option 2 still add up to 141.5 if you only apply the 2023 standard in the fourth quarter rather than the whole year?
    - **Response**: Under Option 2, all the 0.5 percent reduction would happen in the fourth quarter of 2023, even though there would be no CI reduction in the first three quarters of 2023. Thus, the maximum CI reduction allowed in the law would happen in the year. The fourth quarter needs to have 2 percent CI in the fourth quarter to have the same level of impact as 0.5 percent CI reduction throughout the year. This way, Option 2 would have a cumulative CI reduction of 141.5 percent-years.
- If 2023 is only a reporting year, does that delay credit revenue by one year as well?
    - **Response**: In Option 1, there will be a 0.5 percent CI reduction, but it defers the compliance obligation assessment until 2024. So, essentially the credits and deficit would be assigned based on the 0.5 percent carbon intensity reduction, but regulated parties would not be obligated to eliminate their deficits at the end of the 2023 compliance year. They would be obligated to clear their 2023 and 2024 deficits at the end of the 2024 compliance year. That would not have much impact on the accumulation of credits and deficits.
- Did Ecology consider an option similar to what the Oregon Clean Fuels Program did?
    - **Response**: We consider Option 1 to be similar to what the Oregon Clean Fuels Program did. Our understanding is that Oregon deferred the compliance obligation of 2015 to the end of 2016.
- Do you have an estimate of what the credit will be worth to start, as California's credit price is different from Oregon's?
    - **Response:** We are planning to do an economic analysis through an independent consultant as required by the law to estimate the economic impact of the clean fuels program. We anticipate the analysis will shed light on the credit price.
- Delays in program implementation can result in delays in credit generation projects. Ecology should avoid that, if possible. If there are delays in phasing in the requirements, Ecology should consider not delaying the generation of credits under the program and starting up the credit markets. There are people that are ready and able to start developing projects to generate those credits, and we cannot afford to wait in terms of getting those GHG reductions.
    - **Response**: Consistent with the experiences of Oregon and California, we recommend getting time to resolve potential issues related to reporting requirements and the reporting system in the first year of program implementation. This requires deferring the CI compliance obligation in 2023. Under Option 1, we are assigning credits and deficits in 2023, but delaying the compliance obligation until the end of 2024. Thus, we think this will not have much impact on the accumulation of credits and deficits. The other option is to make no CI reduction in 2023 and compensate the CI reduction loss in 2034 through 2038.

WA-GREET Model

- Who will be the contractor that will work on the WA-GREET model?
    - **Response**: The contract solicitation has not yet gone out.
- Is there going to be an open bid for Ecology to select the consultant/contractor who will work on the WA-GREET model?
    - **Response**: Yes, there will be a bid and that solicitation should be posting relatively soon.
- How is Washington planning to customize the GREET Model?
    - **Response**: We will be asking the contractor to come up with a model to estimate the carbon intensities for fossil fuels in Washington, which will be different from fossil fuels in California because of the differences in feedstocks, production facilities, and transportation modes and distances. We will also be asking the contractor to take a more detailed look at the differences between the fuel markets in Washington, Oregon, and California.
- We hope the consultant that Ecology hires will not copy California's numbers. Some key areas to pay attention to and that we grappled with include refinery efficiency, Energy Efficiency Ratios for EVs, fuel cell vehicles, and natural gas trucks. With ten years since the beginning of California's LCFS program, I hope Washington can build on the progress. For example, I have encouraged CARB to update the EER for passenger EVs to 2.5 instead of 4.0 because gasoline vehicle efficiency is improving, etc.
    - **Response**: We will pay attention to these areas of the model. Stakeholders will have an opportunity to review and comment on the draft WA-GREET model.
- Will Ecology adopt its own method for calculation or will it adopt an existing process for indirect land use?
    - **Response**: We will be asking the contractor who is putting together the WA-GREET to research and make a recommendation. We are aware that different jurisdictions handle this differently and there are different models for estimating the indirect land use change. We will propose the rule based on the contractor's recommendation following their research.
- Concern about the early embrace of the GREET model and creating Washington-GREET. CA-GREET is a huge, almost unnavigable excel spreadsheet and it does not make the CI estimates clear. Nor does it help the CI to be state-of-the-art. Instead, the substance of each computation is hidden from anyone who is not part of a very tiny pool of contractors who actually know how to navigate the model. It is understandable for Ecology to choose GREET to harmonize with the other states. However, there are some thoughts about how to make it better. Has Washington already decided to use GREET, or is it worth the time and effort for those of us who might want to see something different or simpler?
    - **Response**: Ecology has almost completed the planning for developing carbon intensity using the GREET model. Ecology is required to harmonize with the other states and we have limited resources to put in place a methodology for carbon intensity calculation. It is quicker to start using a model that already exists instead of building a new one. However, we welcome your comments about how to do it better. If we cannot incorporate it into the initial rulemaking, we will certainly consider your comments in future updates.
- **Comment**: We encourage Ecology to consider the value of the carbon intensity for solar and wind electricity pathways. When we modified the USDOE GREET model for California, it showed a value of zero for solar and wind. New data have since emerged to show those values should

be in the 5 to 10 grams CO_2e/MJ range. Additionally, solar and wind have indirect greenhouse gas emissions associated with them. Estimates of these indirect values are similar to the values for indirect land use change for biofuels. When Ecology selects its contractor, these are items I recommend to be considered to improve the accuracy of the full fuel cycle analysis using GREET.

- **Comment:** We are interested in decarbonizing fuels sourced from farmers that modify their practices to reduce emissions associated with their growing. It looks like Canada has headed this way and California is interested in doing this a little later. We encourage Ecology to consider this in the development of WA-GREET.

Refueling Infrastructure

- Do you anticipate awarding credits to EV charging stations in gas stations or is the credit available for anyone, like employer-provided charging stations?
    - **Response**: We have not yet established such level of detail. We will work out such details in this rulemaking with your input. In other states, the vehicle charging infrastructure owner is the first in line to claim credit from EV charging, whether it is a gas station, workplace, or other entity. We are open to stakeholders' comments on these issues.
- What will the carbon intensity value for the electric grid be set to? California uses 2014 values. Will Washington use 2014 also?
    - **Response**: We will determine the carbon intensity of grid electricity through this rulemaking. We would like to get stakeholders' input on this. The options we have are to use a statewide average or utility-specific values. We have not considered other options; but welcome your input.
- What is the rationale for capping DC fast charging? Are there similar caps in Oregon and California programs? The concern is how it affects further investments in heavy-duty charging infrastructure to reduce heavy-duty diesel.
    - **Response**: We have authority to cap the capacity-based credits, but not the performance-based credits. Thus, the rule is not going to cap the credit for the actual electricity dispensed to vehicles. The rationale for capping capacity-based credits seems to be because the capacity-based credit does not directly tie to the amount of fuel dispensed. If we do not cap the capacity-based credits, it may lead to excess charging capacity and thus excess credits flooding the market.
- You mentioned fueling battery electric and hydrogen buses as eligible credit-generating activities. Will the current rule consider other electricity-powered transit modes like light rail, trolleybuses, and streetcars to be eligible for credit generation?
    - **Response**: We believe it is within our authority to allow credit for fixed guideway systems like light rail and trolleybuses.
- Who gets credits for commercial and non-residential EV charging (e.g. charging station owners, utilities)?
    - **Response**: The law requires us to establish mechanisms that allow for assignment of credits to an electric utility for residential charging within its service area. However, it does not require assigning all credits from residential charging to the electric utility. For non-residential charging, there is a lot of flexibility in who claims the credits. In other jurisdictions, it is typically the owner of the charging infrastructure that has the first right to claim those credits. We welcome stakeholders' input on this topic.

- How will the program allow the use of renewable energy for low-carbon electricity usage? What are the requirements for on-site use (e.g., keeping the RECs), requirements for off-site use (e.g., use of unbundled RECs and qualifications for RECs, retirement requirements for RECs, requirements for utility RE programs/tariffs)?
    - **Response**: We welcome stakeholders' comments about how we should account for the renewable attributes of electricity and how we would factor that into the carbon intensity that we assign to electricity.
- Considering that manufacturing, warehousing, and distribution facilities are often located in disadvantaged communities, will the electricity provisions include equipment types other than on-road vehicles? This may include materials handling equipment, cargo equipment, reefer units, shore power, etc. If so, will Ecology consider leveraging the EER work and values already established by California and then followed by Oregon?
    - **Response**: This is within our authority. We would like to get stakeholders' comments on this topic.
- **Comment**: As presented in the slides, Washington has many opportunities for electrification of transportation, and that would allow generation of credits from charging because of clean electric grid and an already high adoption rate. We also agree with the principle of harmonization with Oregon and California programs. However, we encourage Ecology to put a lot of focus in creativity and stakeholders' engagement to utilize the unique opportunities in Washington to go further than our neighbors do. This creativity needs to focus around credit generation, credit revenue, reinvestment for those charging equipment owners, and equity. This will allow us to meet the greenhouse gas reduction goals and improve access to transport electrification toward equitable outcomes for Washington residents.
- **Comment**: We encourage Ecology to consider allowing eligibility of both on-road and off-road electric vehicle applications, such as forklifts. Ecology has an opportunity to accelerate electrification of vehicle applications that conventional vehicles still dominate, but have commercially-available alternatives. As has been shown in California and Oregon, LCFS/CFP greatly reduce the total cost of ownership and help fleet managers overcome financial barriers to electrify these types of equipment. Ecology may want to consider unique energy efficiency ratios and fuel reporting requirements for these off-road applications.
- **Comment**: We strongly encourage Ecology to consider including a book-and-claim accounting mechanism to allow for credit generation from low carbon intensity electricity. This mechanism has the dual benefit of accelerating the adoption and encouraging more renewable energy generation throughout the state. The California program has designed robust, yet simple, reporting requirements to ensure that additional greenhouse gas benefit of low carbon electricity is accurate and verifiable. Both base and incremental credits should be generated at charging infrastructure level.
- **Comment**: We strongly encourage Ecology to move forward with smart charging provisions. We want to make sure that the low carbon intensity incentive that you are sending aligns with the need to incentivize off-peak charging. California has an hourly CI approach for smart charging. We would suggest considering an avoided marginal capacity approach and structuring it around incentivizing charging off-peak to influence the charging behavior.
- **Comment**: We have reservations about incremental credits. Renewable Energy Credits (RECs) warrant careful consideration in Washington to avoid double counting, and aligning with the requirements under Washington Clean Energy Transformation Act (CETA, Chapter 19.405 RCW). There are many requirements around RECs. Since Washington is on the path to 100 percent

clean or non-emitting electricity, we do not recommend incremental credit provisions at this time.

- **Comment**: We recommend that Ecology not use the default emissions rate for electricity to be equivalent with the emission rate for a simple cycle combustion turbine. The reason for using the simple cycle combustion turbine as default emission rate for electricity was that it was the source of dispatched electricity. However, as we transition to 100 percent clean electricity, we will see more and more storage (battery, pumped, or hydrogen storage) coming online. We encourage the use of a variable default emission rate for electricity that is reviewed often to reflect the changing resources used for dispatched electricity.
- **Comment**: The CI for electricity seems to be unique for each utility, and uses data from the fuel mix disclosure and other sources. I would encourage Ecology to include contract pass directly from renewable natural gas production or hydrogen production.

Capacity-based crediting

- DCFC credits: What does capacity-based credits mean? Do you base those credits on the kilowatt capacity of the charger without regard to use? Would that add to or substitute for credits based on the total electricity delivered by the charger system?
    - **Response**: California has an existing and widely-used capacity-based crediting program for direct current fast chargers and hydrogen refueling infrastructure. For a limited period, which depends on return-on-investment considerations, one can claim credits based on the capacity of the infrastructure to dispense fuel (electricity or hydrogen). They subtract the credit for the fuel dispensed by the infrastructure from the eligible capacity-based credits. Thus, infrastructure that is generating capacity-based credits would never receive credits for more than 100 percent of its capacity for that limited period. We will determine in this rule how our capacity-based credit system works. We will try to harmonize our rule with California's as directed in the statute.
- Given that performance is the objective of the law, is there some compelling reason for Ecology to permit capacity-based credits?
    - **Response**: We do not have discretion over this. The law requires us to allow the generation of credits based on capacity for ZEV refueling infrastructure. We plan to do this as required. However, we have the discretion to limit the capacity-based credits for this infrastructure.
- **Comment**: Earlier, there was a comment that implied that anybody who built a station would be eligible for capacity-based crediting. Actually, there are a number of requirements to meet to be eligible for capacity-based crediting. For example, the station has to be public accessible, which would prevent Amazon charging infrastructure built for their internal operations from qualifying.
- **Comment**: There are some requirements for capacity-based crediting in California that I would encourage Ecology to reconsider, as they are not relevant today. For example, the fast charging infrastructure provision includes a requirement that the station have at least one CHAdeMO connector, which is a standard that we do not expect in North America in the future.
- **Comment**: Currently, the hydrogen refueling infrastructure pathway applies to light duty fueling stations and I would strongly encourage Ecology not to include that limitation. In the future, the hydrogen-refueling infrastructure should be open to medium- and heavy-duty applications as well.
- **Comment**: I strongly encourage Ecology not to place EV spending requirements on proceeds from EV-based credits, if private companies generate the credits. It creates a barrier to

participation for fleets and it does not seem effective at promoting additional electrification when private companies generate those credits.
    - **Response**: We do not believe the statute gives us any authority to place requirements on how private companies (other than electric utilities) spend their credit revenue.
- **Comments**: Some types of capacity-based credits could conflict with the intention of the legislation. For example, Oregon DOJ advised DEQ not to move forward with capacity credits because they do not represent real carbon emission reductions under the clean fuels program, and therefore conflict with the definition of a credit.

Biofuels

- The law requires building biofuel production capacity in Washington. Are there provisions to support or incentivize this development?
    - **Response**: Yes, we expect the clean fuels program to increase the demand for biofuels. To the extent that their carbon intensities are lower than the standard, they will be eligible to generate credits that generate revenue. That credit revenue is the incentive for the production of biofuels with lower carbon intensity. The law also requires a study to provide recommendations toward improvement of the siting and permitting processes for clean energy industrial facilities, including biofuel production facilities.
- Will co-processing of renewable diesel or SAF qualify for the in-state biofuel production requirement toward CI reduction beyond 10 percent?
    - **Response**: We welcome stakeholders' comments about what should count toward the in-state biofuel threshold to reduce CI beyond 10 percent.
- In slide 23, with your goal to build biofuel capacity in Washington, are you giving incentives or grants to producers to help build that capacity?
    - **Response**: The clean fuels program itself does not provide any direct funding or grants. However, other programs in Ecology or other agencies may provide direct funding or grants.
- In slide 25, are you considering granting alternative credits to renewable fuel producers to incentivize them to pursue upgrades to lower the CI of their fuels? If yes, would plants outside Washington be included?
    - **Response**: We have authority under Section 6 of HB 1091 to offer credits for investments and activities that support the deployment of machinery and equipment used to produce gaseous and liquid fuels from nonfossil feedstocks. That is a broad statement. We think it could apply to investments in upgrading or lowering the carbon intensity of such fuels. We will take the question of in-state versus out-of-state under future consideration.
- **Comment**: Is Washington considering some sort of sourcing, like a geographic requirement, to identify where an environmental attribute is generated or a deliverability requirement for renewable natural gas that would qualify to generate credits?
    - **Response**: We are open to your comments about whether we should include geographic sourcing or deliverability requirements.
- **Comment**: Carbon sequestration technologies have the potential to add jobs to Washington in the agricultural and forestry sectors, particularly around forestry residue collection. This would have a dual benefit of fire prevention and achieving the goal of increasing biofuels production by 15 percent using feedstocks in Washington. As allowed in Section 6 of HB 1091, Ecology should consider all measureable and verifiable offset projects in the clean fuels program to meet the science-based aggressive statewide greenhouse gas emission limits. The California Air

Resources Board (CARB) incorporates carbon sequestration technology into its low carbon fuels standard (LCFS). As Section 7 of HB 1091 encourages harmonization of the program with California and Oregon's programs, Ecology should include carbon sequestration technology in its program. However, progress has been slow in California because the rule includes only carbon sequestration technologies that were current at the time the rule writing, but not technologies that were developed after. Since the CARB rule has been in effect, many new technologies have emerged and more are on the horizon. This space of carbon removal technology is rapidly evolving. Therefore, we would encourage Washington to adopt rules that can include emerging or future technologies in its clean fuels program, in a technology neutral fashion.

Credit generating activities

- Will Washington award credits for fuels supplied to marine, aviation, and other exempt fuels?
    - **Response:** Yes, it is possible to generate credits for exempt fuel uses such as marine vessels, aviation, and locomotives.
- Will credit generation from exempt fuel uses such as marine vessels, rail, aviation, etc. be based on the full volume of fuel dispensed in Washington, or will the reporting entity be required to delineate the amount of fuel consumed in Washington?
    - **Response**: We typically look at fuel offered for sale in Washington. It is the point of sale that is relevant, not where the fuel is used. We do not think it would be any different for fuels for marine or locomotives.
- What year is the base year for establishing CI at a facility? If we start a project before 2023, could credits be awarded "coming out of the gate" or does the project need to be implemented after the program starts?
    - **Response**: If this refers to project-based crediting such as a refinery investment credits, we will establish the eligible project start date through rulemaking. Our starting point is California's provisions for refinery investment credit. We welcome stakeholders' recommendations about how you want it to work in Washington, including the start date for eligible investment projects.
- How will Ecology allow credit generators to apply for new EERs for equipment or vehicles that enter the market (i.e., electric tractors, construction equipment, cargo handling equipment, ground support equipment, etc.)?
    - **Response**: We welcome stakeholders' comments about how we should handle that.
- Will Ecology require additional reporting in Washington for crude type and usage in order to determine aggregated fossil fuel CI values? If so, will this be per California with periodic reviews?
    - **Response**: The law gives us authority to require periodic reporting of information by persons associated with the supply chains of transportation fuels. We welcome stakeholders' comments about this topic.
- **Comment**: Consistent with the requirements in Section 6(1) of HB 1091, particularly those in (b) and (c), I would encourage Ecology to include provisions that allow credit generation for investments in the development of production facilities, hydrogen and renewable natural gas, and refueling infrastructures not by electric utilities. These are large infrastructure investments that will take time to install and operate. Thus, I would encourage early incentives and direction.
- **Comment**: We strongly encourage Ecology to consider if there is another way to fund the program instead of a direct fee mechanism. We found out that getting fleets (especially small and medium sized fleets) to opt-in is difficult, even after aggressive education on our part. The

pay to play approach is counterproductive to the intent of the program. Thus, at minimum, Ecology may need to consider a fee exemption for small credit generators.

Reporting IT System

- Will Ecology be using and/or licensing similar software to California and Oregon for registration (e.g., AFP) and reporting (e.g., LRT), or will you make your own?
    - Response: We are adapting code from the California LCFS IT platform for our use in Washington. We have California's source code and our IT staff are working on updating that for compatibility with Washington systems. We have the option to customize as needed.

Credit aggregator

- One of the slides mentioned that Ecology **may** create a backstop aggregator for unclaimed credits. What factors would influence that decision?
    - **Response**: The law does not establish specific factors to consider for having a backstop aggregator. However, we are given general directions like harmonizing the program with other state's programs, and making the system efficient and effective. Oregon has a backstop aggregator that aggregates and uses unclaimed credits. Currently, the aggregator is Forth Mobility, which is a nonprofit dedicated to transportation electrification. That is clearly aligned with the goals of the Oregon clean fuels program. If we follow Oregon's example, we would do something similar and require that the backstop aggregator have a mission that is aligned with the goals of the program.