Summary
Pathways Workshop

**Date:** Feb. 17, 2021, 1 p.m. - 4 p.m.
**Location:** Zoom Webinar

**RAC Members in attendance**
- Mark Bunch, BP
- Brent Place, BP, Alternate
- John Thornton, Clean Future
- Nick Staub, Ed Staub & Sons, Inc
- Lindsay Fitzgerald, Gevo, Inc
- Floyd Vergara, National Biodiesel Board
- Nora Apter, Oregon Environmental Council
- Jana Jarvis, Oregon Trucking Association
- Greg Alderson, PGE
- David Breen, Port of Portland
- Curtis Powers, REG
- Sam Wade, RNG Coalition
- Jim Verburg, Western States Petroleum Association

**DEQ staff/facilitators in attendance**
- Cory-Ann Wind, Clean Fuels Program Manager
- Bill Peters, CFP Markets Analyst
- Kiara Winans, CFP Pathways Specialist
- Stephanie Summers, CFP Reporting Specialist
- Jamie Damon, Senior Facilitator
- Gillian Garber-Yonts, Facilitation Team

**List of handouts and presentation notes**
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Welcome and Introductions
Jamie Damon, Lead Facilitator, welcomed the RAC members and the audience to the DEQ Clean Fuels Pathways Workshop. She shared brief instructions on using the zoom webinar platform, reviewed the meeting agenda, shared an overview of the meeting guidelines, and provided instructions to the public on sharing their comments and questions during the meeting.

RAC members shared their name, affiliation, and their interest in the rulemaking process. RAC members were also asked to share the name of their alternate.

Jamie Damon covered the meeting ground rules and reviewed the Pathways Workshop agenda.

Cory-Ann Wind, Oregon Clean Fuels Program Manager, introduced herself as well as the Clean Fuels Program Project Team and provided an overview of the Clean Fuels Program Expansion 2022 Rulemaking Timeline.

Presentation and Discussion: Pathways
Minor Changes in the Rule Language

Kiara Winans provided an overview of the minor changes in the rule language for pathways (slide #10 presentation). The following are questions and comments received on this topic.

Question: Is the provisional language intended to add an option to support any extra needed material?
Response: That is correct.

Comment: We have a few members who have reported that the AFP locks up when they try to access certain areas.
Response: We were notified that this issue has come up on the AFP as well as the LRT sides of the OFRS. We have updated that and are continuing to modify. Please send an email with that issue to OregonCleanFuels@deq.oregon.gov

Comment: I have made this point in previous meetings. There is a need to update the underlying data sets that are built into GREET to support current scientific findings and observational data. The LCA should reflect the current science.
Response: We are going to discuss that topic at the end of the workshop today.

Question: The slide says that any other supporting materials can be requested. Is there an open-ended ability to ask questions?
Response: This is in the context of the annual fuel pathway report. If there is additional documentation that we need to request, it would be during that process. DEQ will communicate the review process timeline.

New Date Green-e Standard Requirement for Biogas to Electricity Projects

Kiara Winans, Clean Fuels Specialist, provided an overview of the new date requirement of the Green-e standard. She shared background details on the topic. (slides #12-18 presentation). Kiara asked the RAC members and the audience to respond to three discussion questions.
Is there an alternative to Green-e that provides a similar accounting and tracking function to prevent double-counting to support new and renewable electricity generation?

**Comment:** DEQ requires the use of a tracking system, Regus. RECs are tracked and retired. You can only retire a REC once in Regus. We think that is an adequate tracking system to prevent double counting.

**Response:** We care that the REC embodies the zero emissions or low carbon attributes. It can be the case that the low, or zero emission power can be counted apart from the REC. The Green-e helps with that. If we have additional policies on the renewable thermal side, there would be an increased need to check for double claims.

**Response:** My concern is the additional requirements that Green-e layers on.

**Question:** What is to prevent a project from going back to venting methane? That outcome needs to be prevented. From a policy perspective I struggle with this. There needs to be enough benefit to keep projects operational and avoid producers from venting methane.

**Response:** We will have more discussion on this.

**Response:** In the next two questions we will talk about alternatives and policy options.

**Does it make sense for CFP to allow biogas-to-electricity projects to participate in the program for a year or two before meeting the New Date requirements?**

**Comment:** If a facility does not need to repower then this doesn’t help. We are seeing situations where the investment takes a few years. We are working to make sure CRS will accept this. The digester projects are different than solar and wind.

**Response:** In the case of the repowering condition, would this compliance period allow for producers to generate enough revenue to meet compliance?

**Response:** It will be the sum total of the investments that will meet the 80% requirement. The facilities are looking for some certainty and are concerned about getting stuck in the middle and being told they don’t meet the threshold requirement.

**Response:** It sounds like some of the questions you are asking about are Green-e standard language and not CFP language. We don’t have the ability to change the Green-e language. This may be a conversation for Green-e.

**Response:** We are operating under a regulatory program but pointed toward a separate standard. The Green-e standard may leave the CFP out of sync for about a year.

**Response:** It is one of the commitments we make as far as implementing the program. We monitor the Green-e changes. There is the potential, because of the linkage, to have impacts to CFP. It is a relationship that we are aware of. The pros outweigh the cons.
Response: It is the added complexity that is causing concern. It puts uncertainty around investment projects. Green-e has stakeholders other than Oregon. Green-e is considering requirements for RNG. It is not clear if this draft rule will be pertinent to biogas-electricity. We are worried about the de-linkage.

Response: That is why we stay in communication with Green-e.

Response: They have a new standard draft revision out for comment where they are considering adding other requirements for RNG facilities. That is another concern.

Response: We are aware of some proposed changes. We are monitoring what the changes are. We will assess when a decision is made.

Response: I am pointing out that it puts uncertainty into a process.

**Given that biogas-to-electricity projects have a different New Date requirement than any other source of renewable electricity, is there a policy rationale to extend compliance with the New Date requirements to one or two years after registering in the CFP?**

**Question:** Is it that you have two separate dates? Can you further describe the proposal?

Response: At this point it is a question. If a project registers in the CFP to have their biogas-to-electricity projects reviewed within the CFP they would have two years to meet the New Date requirement for Green-e.

Response: If you are rolling out of Green-e eligibility this year, but you have registered in CFP you would have two extra years. I think we could support something like that. What is the goal?

Response: For this purpose, we ask that you look at the eight conditions. They have to meet certain efficiencies within the facilities.

**Question:** Is it correct that every 15 years you have to repower?

Response: That is just one of the conditions. There is a repowering condition that is one of eight. There are conditions that the Green-e requires. They have to meet a certain efficiency standard.

**Question:** Under that concept, would you have to repower the digester and the genset?

Response: They say facilities. It is the total capital of the system that has to be reinvested. There are a lot of nuances. One opportunity is the repowering. To meet their repowering condition there are things that can be done to be certified under Green-e.

Response: It sounds like we are focusing on the dairy swine piece. Landfills and wastewater projects are big digesters too. These are expensive systems. If it is the genset that is one thing, but if it is the whole system that is complicated.

Response: Yes, we understand that. It requires a more one-on-one review. The idea of extending this compliance is that those who could benefit would have an additional source of revenue.

Response: I would be surprised if two years generates enough revenue.
Response: We have a New Date requirement for every source of renewable electricity in the program of 2016 or later. We are looking to see if there are policy rationales to treat these systems differently. During the electricity rulemaking, the goal was to incentivize new and additional forms of renewable electricity supply to meet the increasing demands that electric vehicles will impose upon the grid. We already allow these types of projects to have a longer timeline. We also made an explicit policy decision that this is the kind of electricity we are treating this way. The year 2016 or later is the cut off for eligibility.

Response: I would be concerned that you lose generation capacity from the biogas facilities. I think this sounds like a decent financial barrier.

Response: We have been in touch with the Department of Energy. It is the summary of the available projects that is important as well, not just whether it is economically feasible. We are trying to figure out how we get more and better information to understand potential impacts.

Comment: The policy rationale here is that the small digesters are capturing methane which is a powerful global warming pollutant. These are projects that may have a 15-year PPA that is expiring. Based on power rates today, they need the CFP to be able to continue to capture methane. You have to meet the threshold of the fair market value and the whole facility. That can be a tough barrier.

Response: We understand the value of capturing the Methane. This throws out a creative option for bringing value to a project that can be updated. If you have another idea, we are open to options. This is an example of how you can use the credits to fund updates to meet the New Date standard. We are not choosing which of the criteria is the best. There are a lot of considerations to make these projects work. We want to incent all of these. We also have to balance what the role of the CFP is within our existing authority.

Response: It seems like a policy decision that you are either forcing into venting or going into RNG. A lot of these projects are smaller and not suited for RNG.

Comment: I am a policy manager with the Center for Resource Solutions. We are the organization that administers the Green-e team. A comment on question #1; one of the distinguishing features between Regus and Green-e, is that Regus isn’t a renewable energy standard or varication program. The Green-e program provides verification of renewable energy transactions relying in part on robust tracking systems like Regus, which verify generation data. The Green-e program requires an annual audit of sales against the Green-e standard and retirement information in Regus that ensures that Regus certificates were not double sold. It is another mechanism that guarantees that these RECs have their full environmental attributes. It also ensures that the megawatts or RECs are not counted by another state.

Comment: I am a dairy farmer in Oregon. We are a family-owned business that milks about 450 dairy cows and sell them out to local family-owned milk processing plants in Vancouver, Washington which distributes our milk through regional retail stores. I know manure produces methane, which is why in 2012 we did the right thing by installing our digester. We are one of just three facilities to invest in this technology, which was new at the time and required a dedicated plan of operation and a lot of time and money to keep it operational. Because of these issues, we are the only remaining facility left operating of the three. We don't just help reduce our carbon footprint, but we also reduce emissions for others in our community as well. We receive and process brown grease from local restaurants and bars, which normally would go into landfills to create more
methane emissions. We also work with a local biodiesel refinery out of Salem to process wastewater. One major barrier facing our operation and others will be renewable power purchase agreements that were signed around 10 years ago. We were originally offered about 10 cents per kilowatt, but we'd likely only get somewhere around 3 cents per kilowatt on a new purchase agreement. The Oregon Clean Fuels Program represents the only tool left available to help us keep the digester operating to capture and destroy harmful methane gas before it enters the atmosphere. The Department of Agriculture in Oregon had a biomass tax credit program which ended during the beginning of this year in January. We'd like to see a strong policy signal from DEQ and the Clean Fuels Programs to incentivize farms like mine across Oregon to reduce methane emissions. The CFP is important to us to support continued operations to digest on a small farm. The Green-e standard creates uncertainty in three ways that jeopardizes this vision of mine.

The Green-e standard currently only allows a 15-year project life because of the New Date. We did not anticipate being able to reset the Green-e New Date. When we put in our digester it was about $1.25 million and it is probably over $2 million now for the same type. The return on investment is fairly low.

Second, the Green-e standard is developed outside of the Oregon DEQ Clean Fuels Program rulemaking process. I'm busy running a small farm. It is a challenge for me to participate in the CFP stakeholders process and nearly impossible for small farmers, such as myself to engage in monitoring and participating in the Green-e standard development.

Third, businesses need strong policy indicators to invest in large and complex projects, such as on farm digesters that require significant financial investment and time, especially in light of rock bottom PPA electricity prices. The Green-e standard creates significant uncertainty into the future as the standard continues to evolve. On farm digesters, such as ours, are one of the best tools for fighting methane emissions while generating renewable energy. Methane is over 25 times worse than carbon dioxide in terms of global warming impact.

I hope Oregon and DEQ strives to reduce methane emissions wherever possible. The New Date requirement in the Green-e standard will prevent our project and many others from continuing to capture and destroy planet warming methane emissions. I hope DEQ recognizes the impact this standard presents to the Clean Fuels Program's ability to help reduce methane emissions across Oregon farms and existing biogas sources. We have looked at RNG, but it is such an expensive way to go, that it is prohibitive. That's why we continue to produce electricity.

**OR-GREET**

Kiara Winans, Clean Fuels Specialist, provided an overview of the OR-GREET background, proposal and context. (slides #26-36 presentation). The following are questions and comments received from the RAC members as well as members of the public.

**Comment:** We are supportive of this proposal. We feel that there will be some farms that are not suited for pipeline injection. Having a simplified process make sense.

**Comment:** We support this and think it will support the goal of increasing generation from low carbon fuels.

**Question:** For the unspecified power emission factor, is that updated on a periodic basis?

*Response:* Not at this time. We will need to keep tabs on that. It was revisited last year.

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Question: On OR-GREET, there are some science and modeling changes around indirect land use. Will that be looked at in this rulemaking?

Response: That will be discussed at another rulemaking process.

Response: There are some things that we have determined that need to be updated that are attached to OR-GREET. We have not had a discussion regarding what is a minor and what is a major update. The pieces that are determined to be major will be moved to a subsequent rulemaking.

Comment: A number of the updates we would ask for are relatively minor. There are inputs in OR-GREET that have been out of date for years. We would appreciate if DEQ would expedite the subsequent rulemaking as soon as possible. We would also ask you to roll in the minor and routine edits into this rulemaking. We will follow-up with comments on details.

Comment: We have noted some inconstancies in tailpipe emissions and the biogas energy efficiency.

Response: During the last rulemaking we adopted the 50% adjustment factor. We are going to keep that at this time.

Response: I provided a data set that I think is more reflective of real world conditions.

Comment: Thank you for today’s workshop. We have been thinking about the potential to have applicants pay a fee for an expedited pathway application. As the program becomes more sophisticated, we would support the ability to pay a fee to streamline the process. That would help applicants who are looking to apply in multiple states. If executed correctly this will pay for itself and have benefits down the road.

Public Comment
None.

Next Steps
Cory Ann requested that any further public comments be submitted by March 4, 2022. She shared that the DEQ Clean Fuels RAC #3 meeting will take place on Thursday, March 31.

Cory Ann thanked the RAC members and the audience for joining in the conversation. The meeting was adjourned.

Meeting Chat
Gillian Garber-Yonts: Today's meeting materials can be found on the DEQ Clean Fuels Program Expansion 2022 Webpage: https://www.oregon.gov/deq/rulemaking/Pages/cfp2022.aspx


Gillian Garber-Yonts: Call-in number: 1-888-475-4499 Webinar ID: 871 3690 8709

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Gillian Garber-Yonts: They can also register at this link and call-in information will be emailed to them: https://kearnswest.zoom.us/webinar/register/WN_ONlGxHarTkSl5LWzEfoZFg

**Alternative 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