Clean Fuels Program Expansion 2022 Rulemaking

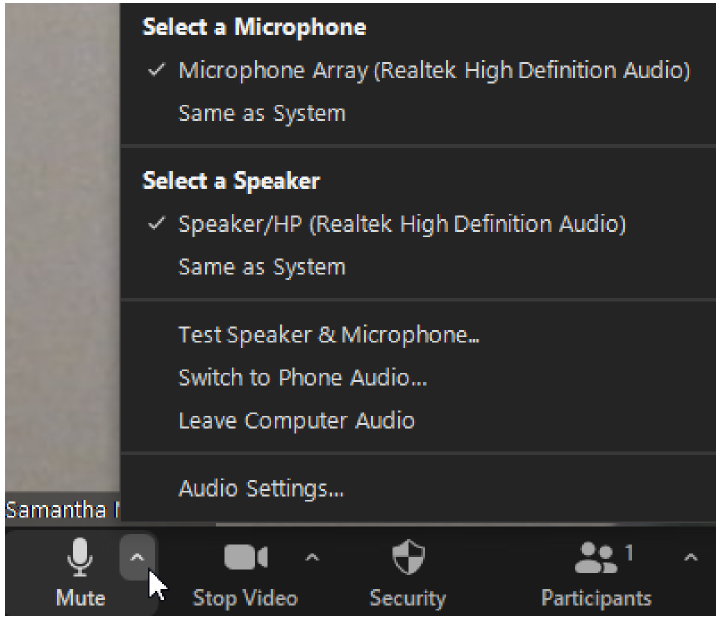
Rulemaking Advisory Committee Meeting #2

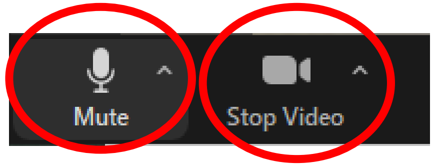
Jan. 26, 2022

Zoom Meeting Tips for RAC Members

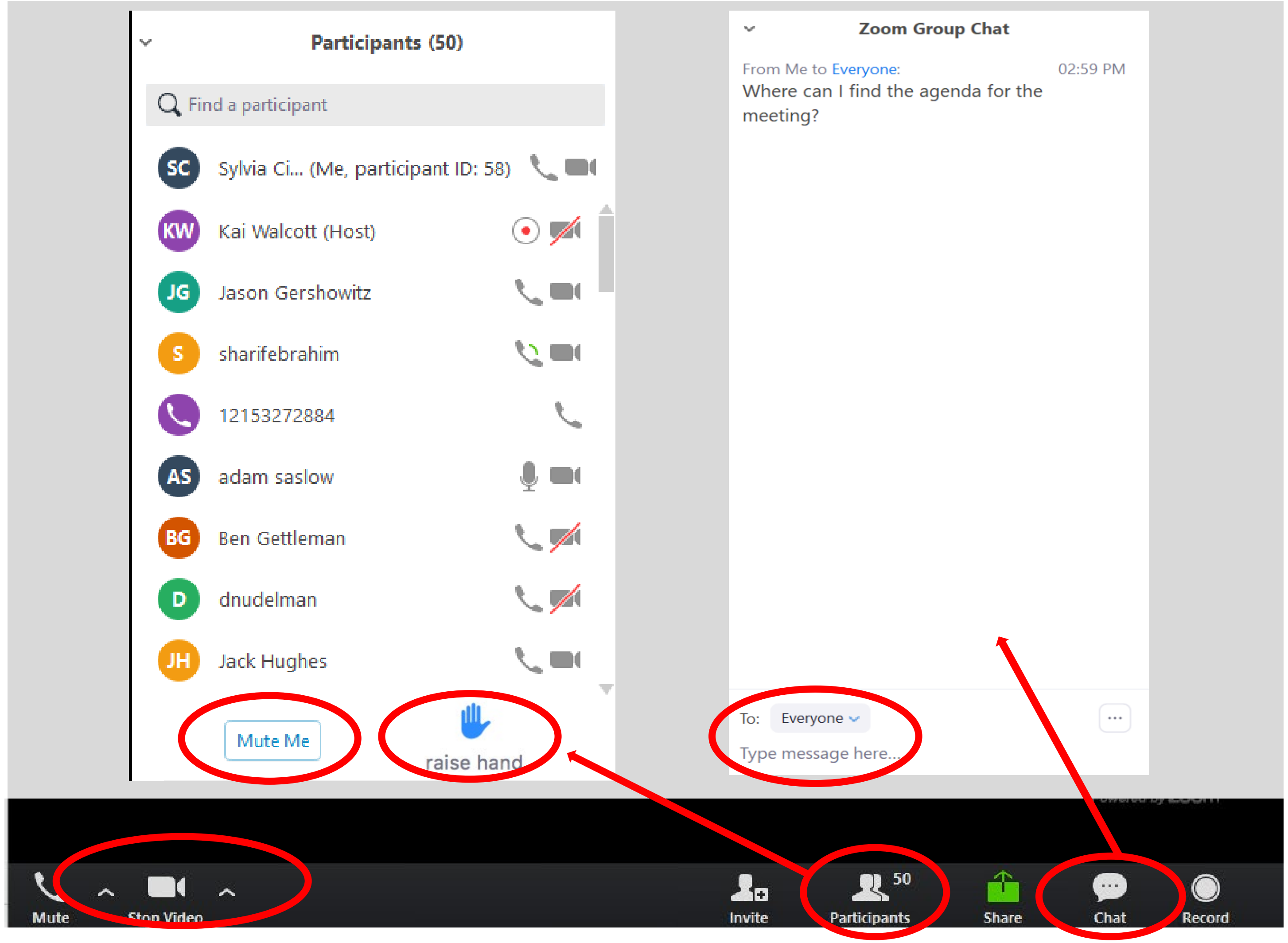
- Please see below webinar instructions and tips below:
  - If you have not already **connected your audio**, click on the arrow next to the microphone icon, then click “Join Computer Audio” **or** “Switch to Phone Audio” to connect your computer speakers or to view the conference line information.
  - Please **keep yourself on mute** when not speaking. To mute and unmute, either select microphone icon, or use your personal phone.
  - **Use video** if possible, to promote face to face communication. Click the video icon to turn on your webinar camera.

If you are experiencing technical difficulties, please send a text to Gillian Garber-Yonts at 206-617-7626.





Zoom Meeting Tips



- To raise your hand by phone, press *9.
- To unmute yourself by phone, press *6.

Public Comment Instructions

To make verbally ask a question or make a comment:

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- The facilitator will call on participants. You will receive an “unmute” request. Please accept it. If you are commenting by phone dial *6 to unmute.
- Please provide your name and affiliation.
- Attendees will be allocated reasonable time for public comment depending on the number of commenters.
- **If we run out of time and you have not had a chance to speak, you can still provide written comments after the meeting.**

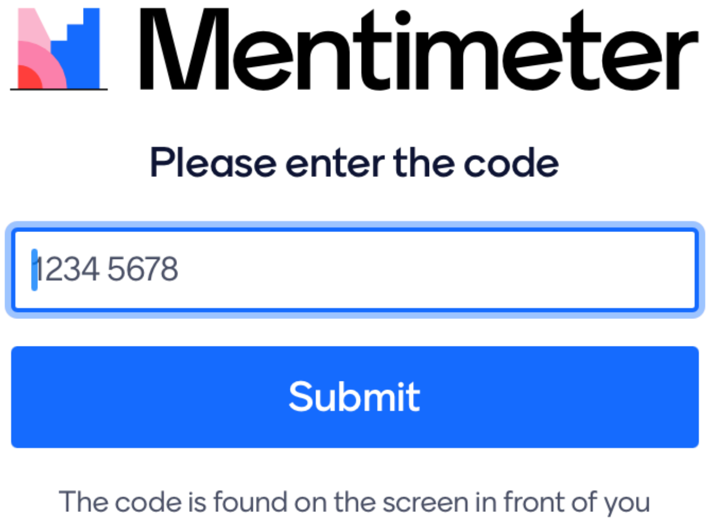
Meeting Guidelines

- Fully participate in Work Group meetings
- Come prepared for meetings
- Participate in an open and mutually respectful way
- Balance of speaking time
- Serve as a liaison to your larger community of interest
- Act in good faith

Attendees: What is your Affiliation?

RAC Meeting Attendees:

- Open a browser window on your cell phone or computer.
- Go to **Menti.com**
- Type in the code in the chat. Click “Submit”

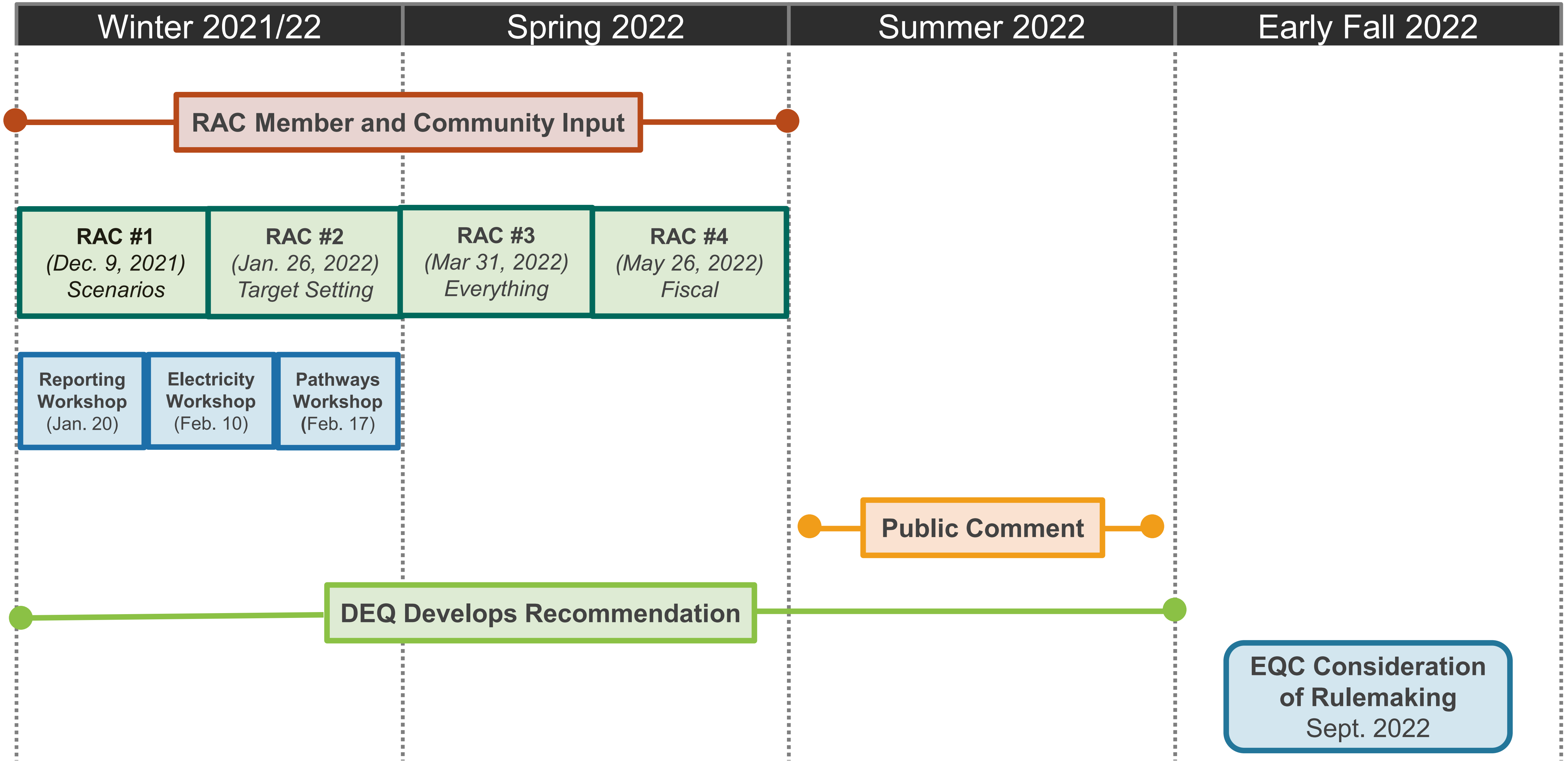


Meeting Agenda

Time	Topic
10-10:15 a.m.	Welcome and Introductions
10:15-10:20 a.m.	Brief Recap of RAC Meeting #1
10:20-11 a.m.	Presentation and Discussion: Target Setting
11-11:45 a.m.	Breakout Rooms
11:45 a.m.-12:45 p.m.	Lunch
12:45-2:15 p.m.	Report-out from Breakout Groups and Discussion
2:15-3:40 p.m.	Other Rulemaking Topics
3:40-3:50 p.m.	Public Comment
3:50-4 p.m.	Next Steps
4 p.m.	Adjourn Meeting

Brief Recap of RAC #1 Meeting

Clean Fuels Program Expansion 2022 Rulemaking Timeline



Considerations from RAC #1

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

Key Questions from RAC #1

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

Written comments received

10 written comments were received

- Greater than 20% by 2030 and 25% by 2035 are possible/feasible
- Targets should be at least 50% by 2030 and at least 90% by 2050
- With just minor increases in biodiesel blending, 40% should be achievable
- Consider a diversified portfolio approach for GHG reduction to help mitigate unforeseen impacts to the program and avoid restricting potential options
- New carbon emissions must be eliminated or reduced to the maximum extend feasible and as quickly as possible in order to address climate change effectively
- Risk of an oversupply of credits from electrification and renewable diesel would depress credit prices if the targets are set too low
- More aggressive targets would facilitate greater co-benefits, in particular reduction of harmful diesel PM
- Targets should be set to maintain competitiveness with California for lowest-carbon fuels, vehicles, and infrastructure investments

Presentation and Discussion: Target Setting

Assumptions in the Scenarios

Maximums for Scenario Assumptions	Scenario A (Electrification)	Scenario B (Biofuels)	Scenario C (Combination)
Ethanol:	• Ethanol blend increase began in 2026 to 12% and eventually reached 15% in 2030 and stayed there till 2035	• Ethanol blend increase began in 2026 to 12% and eventually reached 15% in 2030 and stayed there till 2035	• Ethanol blend increase began in 2026 to 12% and eventually reached 15% in 2030 and stayed there till 2035
Biodiesel (BD):	• BD blend rate stayed at 10%	• BD blend rate stayed at 10%	• BD blend rate stayed at 10%
Renewable Diesel (RD):	• RD blend rate increased from 5% in 2021 to 20% in 2029, and only the minimum required volumes were after 2030, which eventually decreased to 0% by 2034	• RD blend rate increased from 5% in 2021 to 67% in 2035	• RD blend rate increased from 5% in 2021 to 25% in 2030 and maintained that level through 2035
Zero Emission Vehicles (ZEV):	• Compliance with existing and new EV regulations resulting in over 900,000 LD EVs and over 67,000 MD/HD EVs or PHEVs in 2035	• Compliance with existing EV regulations resulting in over 400,000 LD EVs and less than 2,000 MD/HD EVs or PHEVs in 2035	• Compliance with existing and new EV regulations resulting in over 900,000 LD EVs and over 67,000 MD/HD EVs or PHEVs in 2035

Recent Actions

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

Breakout Groups

- RAC members were randomly assigned to groups
- Each group will have a DEQ or Kearns & West staff to facilitate the questions and ensure that all voices are heard
- Each group should appoint a note taker
- Breakout groups will not be recorded
- After an hour, we will break for lunch then reconvene to debrief on the breakout groups

Pre-Breakout Poll

Poll question: Rank, from highest to lowest, the priorities that are most aligned with your consideration of the future CFP targets

Choices:

- Greenhouse gas reductions
- Health benefits to local communities from reduced tailpipe emissions
- Investment in fueling infrastructure
- Commercialize fuels and vehicles that will lead to deep decarbonization
- Achieve short-term emissions reductions from the existing fleet through the greater use of biofuels

Attendees: What are your Priorities?

RAC Meeting Attendees:

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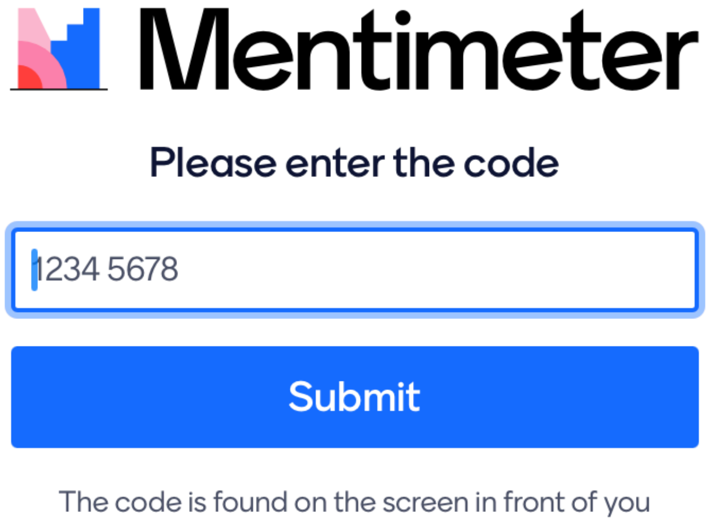


Breakout Group Questions

1. What priority did you rank highest in the poll and why?

2. What elements of the illustrative compliance scenarios do you like/dislike?

3. What are the outcomes you anticipate from the new targets? What outcomes do you want to see?

Clean Fuels Program Expansion 2022 Rulemaking

Breakout Group Discussion: *11-11:45 a.m.*

Lunch: *11:45 a.m.-12:45 a.m.*

The DEQ Clean Fuels RAC #2 Meeting will reconvene at 12:45 p.m. Thank you.

Breakout Group Report-Out

Breakout Group Debrief

- Report out from each breakout group
- General observations, common themes, concerns
- Safeguards that are already in place
  - Credit clearance market: a last chance market to buy credits after submitting their annual compliance report. For 2022, that price is $230.43 ($200 in 2018 dollars adjusted annually for inflation)
  - Annual fuel supply forecast: to determine whether fuel supply will be sufficient to generate alternative fuel credits to meet the applicable standards for the future compliance period
- Comments from the public

Other Rulemaking Topics

Order of topics

- Require additional documentation for non-prompt credit transfers
- Require electronic tracking for RNG attributes
- Consider additional credit generation post certification or verification of a fuel pathway
- Advance crediting for hydrogen vehicles or fueling equipment

Additional documentation for credit transfers

- To enable better monitoring of the credit market as it grows in value, DEQ is proposing that the seller must supply the contract that any credit transfer is being conducted under if the agreement was executed more than 10 days prior to the transfer

- This would allow DEQ to better understand the pricing on those transfers, which can be outside of the pricing of other transfers

Discussion

- Any questions or comments?

Require electronic tracking for RNG

- Currently, paper attestations must be kept between all parties in the chain of custody for RNG reported using book and claim.
- As the RNG industry matures and end uses expand through other programs (eg, SB 98), the risk of double-counting or multiple claims on the attributes increases
- Electronic tracking systems help mitigate these risks
- This would match the requirements for RNG claimed under SB 98

Discussion

- Any questions or comments?

Additional credit generation

- There are two proposals here, we'll start with the one for temporary fuel pathway codes (FPCs) and then go to differences between the certified and operational CI post-verification. We'll discuss both at the end of this section.

- Temporary FPCs are set conservatively high, as they're issued to facilities that do not have a certified CI yet, or in order to report gallons of a fuel where the producer has not registered with the CFP.

Additional credit generation

- The first proposal is for new fuel production facilities that we would true up the first few quarters of credit generation under a temporary with the certified CI

- DEQ staff have two concerns with this proposal:
  - It would mute the incentive to quickly submit a full or provisional pathway application
  - For new or significantly modified fuel production facilities with 90 days of data, the certified CI may move significantly as more data comes in and plant operations even out

Additional credit generation

- In the second proposal for facilities that have gone through third-party verification, DEQ would calculate additional credits if the actual operational CI is lower than the certified CI that was used for reporting.

- DEQ staff are questioning the workload, and are unsure at the volume of additional credits that this could create

Discussion

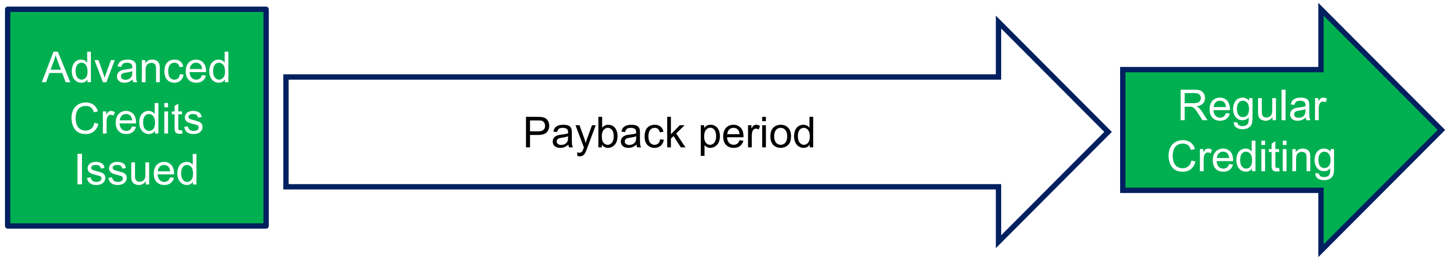
- Who would get the credits? The producer? The initial importer? Any entity that generated credits using that fuel pathway?

- 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 the second proposal, should producers not subject to verification have any ability to generate additional credits?

Advance Crediting

- The aim is to help lower the upfront costs of conversion to electric vehicles by issuing advanced credits
- Advanced credits are ‘paid back’ and then the vehicle begins generating credits normally



Regular hydrogen credit generation

- Hydrogen Credit generator: Owner of the fuel as it is being dispensed

- Hydrogen Carbon Intensities: Lookup table value (range: 13.11-205.38gCO2e/MJ) or producer-specific CI application

- EERs currently 2.5 for LDVs, 1.9 for HDVs and 2.1 for forklifts

Advanced Crediting: Hydrogen

- Adapting the advanced crediting provision for hydrogen as a fuel presents some challenges to work through (staff workload), as well as some considerations:
  - Is the current hydrogen credit generator (owner of the fuel as it is being dispensed) the entity that would apply for advanced credits?
  - What CI of hydrogen could be assumed?
  - Are the economics similar enough to battery electric that up to six years of advanced credit for a vehicle will be meaningful? Will lower CI hydrogen command a premium?

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Written Comment Instructions

To submit comment after the meeting:

- Please email comments to CFP.2022@deq.oregon.gov with “RAC #2 Public Comment” as the subject line **by the end of day on Friday, February 11**.
- Thank you for sharing your feedback.

Next Steps

RAC #2 → RAC #3 → RAC #4 → Public Comment

- Next Workshops:
  - Electricity Workshop on February 10
  - Pathways Workshop on February 17
- Next RAC meeting: **Wednesday, March 31**

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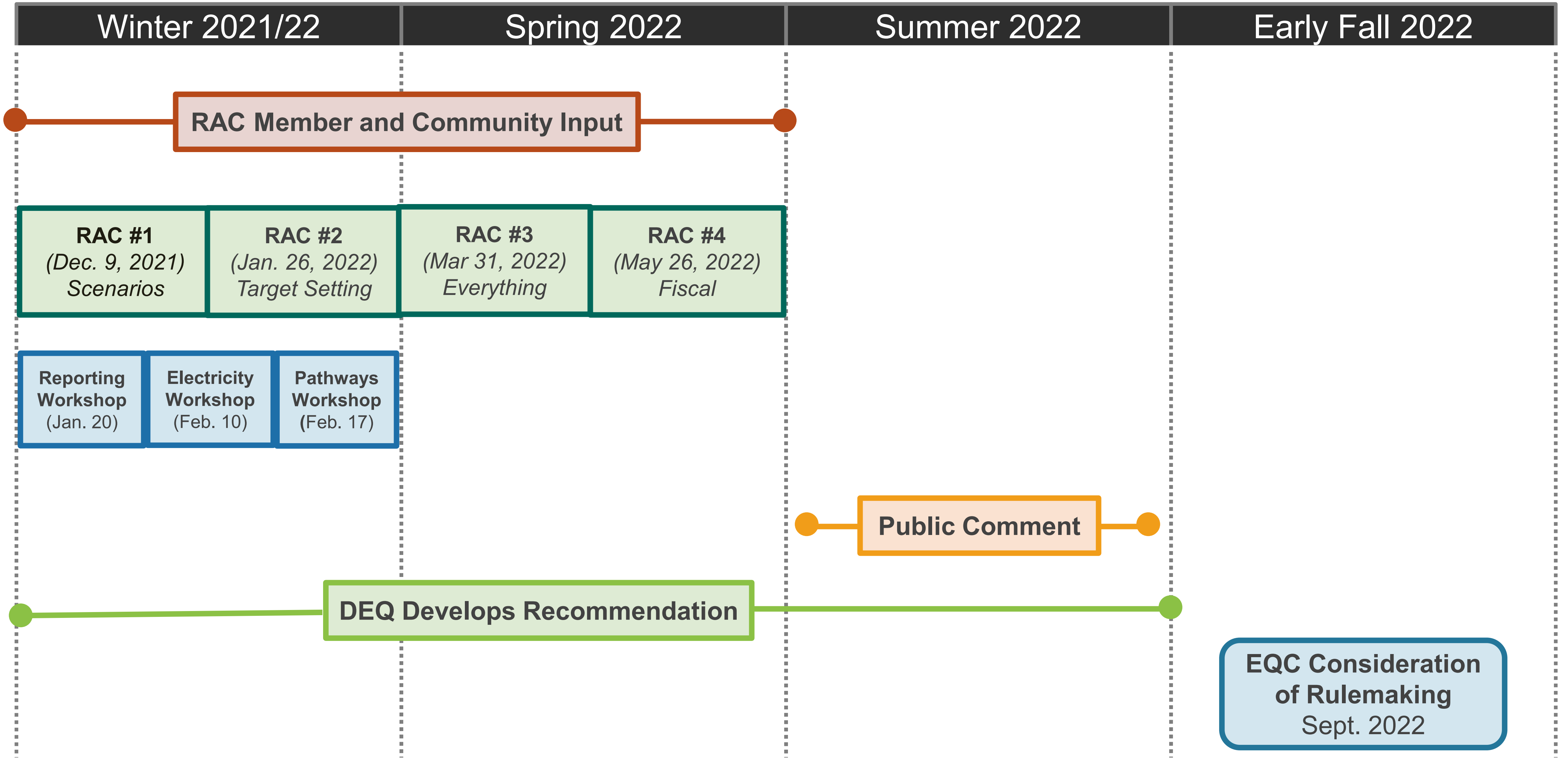

Thank you!