Clean Fuels Program Expansion 2022
Rulemaking

Electricity Workshop

Feb. 10, 2022
Zoom Meeting Tips

- 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.
Comment instructions

To make verbally ask a question or make a comment:

- If you have joined by Zoom, click “Raise Hand.”
- If you have joined by phone, press *9 to raise your hand.
- 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.
- We will do our best to balance hearing from as many parties as we can on a topic while getting through all of the topics in this workshop.
- If we run out of time and you have not had a chance to speak, you can still provide written comments after the meeting.
How is this different than a RAC meeting?

- 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

• DEQ and the facilitator will seek to prioritize calling on RAC members, but this is an open discussion.
• Comments on other topics or the broader rulemaking should be reserved for next week’s RAC meeting.
# Meeting Agenda

<table>
<thead>
<tr>
<th>Item</th>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>-</td>
<td>12:45 p.m.</td>
<td>Webinar Setup and Login</td>
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<tr>
<td>A</td>
<td>1 p.m.</td>
<td>Welcome and Introductions</td>
<td>All</td>
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<td>B</td>
<td>1:10 p.m.</td>
<td>Review Agenda</td>
<td>Kearns &amp; West</td>
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<tr>
<td>C</td>
<td>1:20 p.m.</td>
<td>Presentation and Discussion: Electricity</td>
<td>DEQ</td>
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<td>D</td>
<td>2:20 p.m.</td>
<td>Wrap-Up</td>
<td>Kearns &amp; West</td>
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<td>Public Comment</td>
<td>Kearns &amp; West</td>
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<td>F</td>
<td>2:45 p.m.</td>
<td>Next Steps</td>
<td>Kearns &amp; West</td>
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<td>G</td>
<td>3 p.m.</td>
<td>Adjourn Meeting</td>
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DEQ Introductions

• Cory-Ann Wind
• Kiara Winans
• Bill Peters
• Stephanie Summers

• Please send all comments or questions to the rulemaking inbox: cfp2022@deq.oregon.gov
# Clean Fuels Program Expansion 2022 Rulemaking Timeline

<table>
<thead>
<tr>
<th>Winter 2021/22</th>
<th>Spring 2022</th>
<th>Summer 2022</th>
<th>Early Fall 2022</th>
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<tbody>
<tr>
<td><strong>RAC Member and Community Input</strong></td>
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<tr>
<td><strong>RAC #1</strong> <em>(Dec. 9, 2021)</em> (Scenarios)</td>
<td><strong>RAC #2</strong> <em>(Jan. 26, 2022)</em> (Target Setting)</td>
<td><strong>RAC #3</strong> <em>(Mar 31, 2022)</em> (Everything)</td>
<td><strong>RAC #4</strong> <em>(May 26, 2022)</em> (Fiscal)</td>
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<tr>
<td><strong>Reporting Workshop</strong> <em>(Jan 20th)</em></td>
<td><strong>Electricity Workshop</strong> <em>(Feb 10th)</em></td>
<td><strong>Pathways Workshop</strong> <em>(Feb 17th)</em></td>
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<td><strong>DEQ Develops Recommendation</strong></td>
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<td><strong>EQC Consideration of Rulemaking</strong> Sept. 2022</td>
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Energy Economy Ratio (EER) Topics

• New EER for electric Ground Support Equipment (GSE)

• Refining the Ocean-Going Vessel definition
Energy Economy Ratio (EER) Definition

• **The EER is a** dimensionless value that represents the efficiency of fuel as used in a powertrain as compared to a reference fuel, as listed in Table 7 under OAR 340-253-8070 for gasoline and gasoline substitutes and in Table 8 under 340-253-8080 for diesel fuel and diesel substitutes. An alternative-fueled vehicle travel distance divided by the travel distance an internal combustion engine vehicle using the same amount of energy is another way for assessing a potential EER.

• **Note:** The alternative fuel's carbon intensity (CI) value is divided by its EER to obtain the EER-adjusted CI value to represent emissions from the use of alternative fuel per MJ of conventional fuel displaced, and accounting for the efficiency of the fuel-vehicle combination.
Adding Electric Ground Support Equipment

- There are two ways for stakeholders to request a new EER: through an administrative process and through a rulemaking process. Both processes require the stakeholder to meet the current requirements in the rule, **OAR 340-253-0460**

In this rulemaking,

- DEQ has been reviewing a report submitted to us by the Port of Portland (PDX) and one submitted to the California Air Resources Board last year by the California Airports Council (CAC) for electric ground service equipment (eGSE)

- DEQ believes there is sufficient data to support adding EERs for this equipment.
## Comparison of Proposed eGSE EERs

<table>
<thead>
<tr>
<th>Org. Body</th>
<th>Application</th>
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<th>Diesel</th>
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<td>PDX</td>
<td>Baggage tractor</td>
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<td>PDX</td>
<td>Belt loader</td>
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<td>2.88</td>
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<td>PDX</td>
<td>Narrow pushback</td>
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<td><strong>CAC - specific categories</strong></td>
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<td>Baggage tractor</td>
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<td>CAC</td>
<td>Belt loader</td>
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<tr>
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<tr>
<td>CAC</td>
<td>Mobile</td>
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CAC refers to California Airports Council  
PDX refers to Portland International Airport

Office of Greenhouse Gas Programs – Oregon Clean Fuels Program
Forklifts and Cargo Handling Equipment

- **Electric forklifts have an established EER value designated under OAR 340-253-8010: 3.8.**

- Cargo handling equipment and electric medium- and heavy-duty trucks, buses, light-duty cars and trucks already have established EERs. These applications should use the established EERs.

Reference OAR 340-253-8010, Table 7
Key Questions

• Should there be a single EER for this mobile equipment across both gasoline- and diesel-replacing eGSE?

• Or if we adopt two EERs based on if the prior equipment was gasoline or diesel, how will DEQ and the credit generator keep track?

• If we have two EERs, what if the equipment is not replacing existing equipment?

• The default credit generator is the owner of the charger. Is there any reason why someone other than the charger owner should be the credit generator for this equipment?
Refining the eOGV definition

• The current definition of electric ocean-going vessel (eOGV) should be more specific to vessels used to generate the energy-economy ratio based on quantifications such as length, weight, or engine size.

• This expanded definition is the definition used in the review process of the data used to establish the eOGV EER (2.6).

• **Proposal**: Expand the definition to include the following criteria:
  – vessel greater than or equal to 400 feet in length overall
  – vessel weighs 10,000 gross tons or greater
  – vessel propelled by a marine compression-ignition engine with a displacement of greater than or equal to 30 liters per cylinder.
Refining the eOGV definition

• Any other vessels that do not meet these criteria can be considered through an administrative process, **OAR 340-253-0460**

Any questions or comments?
Topic: Considering Changes to Residential Credits
Considering Changes to Residential Credits

• Stakeholders have requested that we review certain situations where vehicles are being charged at residences to consider breaking them out from the current residential charging bucket for credit generation

• We will first review how residential EV charging credits currently work and then discuss the situations that stakeholders have raised
Residential EV Charging Credits

• Residential EV charging credits go to the utility if they are opted into the program, otherwise they go to the backstop aggregator.

• Residential EV charging credits are calculated by DEQ using DMV data and data from studies and reported data that establish average daily charging.
Charging Take-Home Fleet Vehicles

The first scenario is for take-home fleet vehicles.

• If fleets charge their EVs at a workplace, then it is considered non-residential charging and the owner of the charger gets the credits.

• However, if the EVs are sent home with employees and charged at their homes, then it would be considered residential charging and the utility or backstop aggregator would get the credits.
  – Should the fleet be eligible for credits if the vehicles are charged at employee’s residences? Does the fleet own the charger?
  – Will the fleet owner have data to show much charging has occurred at a residence?
  – In order to avoid double-counting, how would these vehicles be identified and pulled out of the regular residential charging calculations? Can the fleet register the specific VIN or plate of the EVs with the program? Something else?
Charging at Residential Workplaces

The second scenario is for working from home.

- More businesses are being operated out of homes. When an electric vehicle is used for work purposes who should generate the credits?
  - How would you determine what charging is for work purposes as opposed to personal purposes?
  - In order to avoid double-counting, how would this charging be separated from the rest of the residential charging?
Written Comment Instructions

To submit comment after the meeting:

› Email comments to CFP.2022@deq.oregon.gov with “Reporting Workshop Meeting Public Comment” as the subject line by the end of day on Friday, February 18.

› Thank you for sharing your feedback.
Next Steps

- Comments due: February 25
- Next Workshop:
  - Pathways Workshop next Thursday on February 17
- Next RAC meeting: March 31
Thank you!