

MEMO

To: Kyle Diesner, Portland Bureau of Planning and Sustainability
From: Marti Frank, Efficiency for Everyone
Date: June 13, 2023
Re: Renewable Fuel Standard Rulemaking: Guidance on the Carbon Intensity Requirement

As part of its Renewable Fuel Standard (RFS) rulemaking process, the City of Portland Bureau of Planning and Sustainability (BPS) asked Efficiency for Everyone (E4E) to collect input from a variety of stakeholders including the Oregon Department of Environmental Quality, the Oregon Department of Agriculture, and members of the fuel industry. This memo summarizes the findings and focuses on stakeholders' guidance to the City in implementing the carbon intensity (CI) requirement in the updated RFS, which sets a maximum CI value of 40 for renewable fuels.

In May and June 2023, E4E conducted 13 interviews with stakeholders identified by BPS. Stakeholders represented four perspectives: government agencies, fuel importers, fuel distributors, and fuel retailers. The conversations lasted between 15 and 60 minutes and were held via Zoom or phone.

The conversations with fuel industry stakeholders lifted up specific implementation recommendations which are discussed below:

- Section I discusses two approaches to determining CI value, “absolute” vs. “average”
- Section II describes two possible compliance paths, the “book and claim” path and the “product transfer document” path
- Section III provides additional background on the rulemaking process and explains the City’s focus on the CI standard

I. Absolute vs. Average CI Value

The need to define how the City will evaluate the CI value of renewable fuels is separate from the determination of compliance pathways, and the chosen definition will apply to both of the pathways listed below in Section II.

There are two distinct ways in which the rules could define the CI value of renewable fuels. The “absolute CI” would require that all qualifying renewable fuel have a CFP fuel pathway with a CI of 40 or below. Fuel with above-40 CI could *never* be used to meet the City’s requirements.

In contrast, the “average CI” approach *would* allow above-40 CI fuel to be used to meet the requirements, provided a sufficient volume of below-40 CI fuel was also used such that their weighted average yielded a CI value of 40 or below.

Interviewees were mixed as to whether they would prefer the absolute vs. average CI approach. Some felt the 40 CI maximum was reasonable and believed they would not have a problem supplying cost-competitive renewable fuels at or below the 40 CI maximum. Others preferred the flexibility inherent in the average CI approach because it would allow them to adapt to supply and price fluctuations, for example, by allowing them to buy higher-CI value fuel for a short period of time if low-CI fuel became unavailable or experienced a price spike.

The two approaches to defining CI are summarized below.

CI definition #1: **Absolute CI**

The City could define CI as the value assigned to the fuel by the CFP's fuel pathway. This would require *all qualifying fuel* to have an assigned fuel pathway at or under 40 CI.

Key advantage: Simplicity

No calculations are required and the compliance period is irrelevant because fuel must always be under the CI maximum.

Key challenge: Lack of flexibility

Does not allow fuel importers to adapt to changing market conditions like supply shortages or price increases because fuel with an assigned fuel pathway CI value over 40 can *never* be used to meet the City's requirements.

CI definition #2: **Average CI**

The City could define CI as the weighted average of CI values from multiple CFP program fuel pathways. This would allow the market to use fuel from multiple pathways to meet the City's requirements, even if some of the fuels used had fuel pathways with CI values over 40.

Key advantage: Flexibility

Allows for the blending of below-40 CI fuel with above-40 CI fuel. Allows importers to adapt to changing market conditions by importing above-40 CI fuel if/when under-40 CI fuel is unavailable or higher cost, provided the overall weighted average CI will be at or below 40 over the entire compliance period.

Key challenge: Complexity

Complicates the reporting process because it requires reporting entities to calculate a weighted average CI value. Also requires designation of a compliance time period over which fuel CI values will be averaged (stakeholders recommended the compliance period be the calendar year), which may be different than the reporting period (stakeholders recommend reporting be quarterly).

II. Two Possible Compliance Paths

Path A: “Book and Claim” or “Inventory” Accounting

What is it?

The term “book and claim” is an accounting approach that decouples the environmental attributes from the physical product, thus allowing the environmental attributes to be transferred separately from the product itself. Perhaps the most well-known use of book and claim account is in the form of Renewable Energy Credits (RECs) for electricity. A household that purchases RECs through its utility’s green energy program is buying a certificate or a credit which ensures that the specified amount of renewable electricity has been produced and added to the grid - even though the electricity the household uses may have come from other sources. California’s LCFS and Oregon’s CFP also employ this approach. One interviewee used the term “inventory accounting” to refer to this process.

How could it work for the RFS?

The City could use a book and claim reporting approach to ensure that a sufficient volume of low-CI renewable fuel is imported to Oregon to satisfy Portland’s diesel consumption, regardless of where the low-CI fuel is actually sold. This is also referred to as decoupling, in that a fuel importer claims credit when they bring low-CI fuel into the state, rather than at point of sale.

What reporting is required?

The reporting burden for the book and claim approach is on the **fuel importer**. There are three data points required:

- (a) Importer’s total volume of diesel fuel imported into Oregon in a given time period
- (b) Percent of diesel fuel sold in Portland
- (c) Minimum percent renewable fuel required by the RFS

The calculation for the number of gallons of low-CI renewable diesel required is:

Volume imported (a) x Percent sold in Portland (b) x Minimum percent renewable (c)

Example:

100 gallons (a) x 20% (b) x 15% (c) = 3 gallons

In the example, the fuel importer brought 100 gallons of diesel fuel into Oregon, 20% of which were sold in Portland. In this period, the RFS required that 15% of diesel fuel be a low-CI renewable fuel. This importer would be required to show that it imported at least 3 gallons (100 x 20% x 15%) of low-CI renewable fuel.

Advantages

- *Relatively simple reporting.* The required reporting leverages data (imported fuel volumes by fuel pathway) that importers are already tabulating and reporting to the CFP.
- *No burden on distributors and retailers.* Because reporting is performed by fuel importers, there are no reporting requirements on distributors and retailers.

Challenges

- *Volume of fuel sold in Portland.* The percent fuel sold in Portland may be difficult or impossible for some importers to calculate with precision. In these cases, the importer and the City would need to agree on a “deemed value” for the percent of fuel sold in Portland. One simple approach to setting the deemed value would be to assume the volume of diesel fuel sold in Portland is comparable to that sold in the rest of the State on a per capita basis and calculate the required volume on Portland’s share of the State’s population – 15.1% in 2021 (Portland population: 641,162; Oregon population: 4.246m).
- *Avoiding double-counting.* If another entity in the State (for example, another city) were to place similar requirements on fuel importers, the City would need to coordinate with that entity to ensure importers did not double-count their low-CI renewable fuel volumes.

Implementation considerations

Reporting and enforcement periods. Stakeholders prefer the City align with the State CFP, which requires quarterly reporting and has an annual compliance period. This requires the reporting entities to submit reports on fuel volumes sold every quarter but would allow for an average CI value (if used) to be calculated on one year’s fuel imports/sales. Stakeholders noted that, should an average CI value be allowed, a one-year compliance period allows for more flexibility to obtain low-CI fuel at competitive prices.

Implementation steps

- 1) Create a reporting template. If the average CI approach will be allowed, suggest creating two templates: a simple template for importers choosing to count only ≤ 40 CI fuel vs. a more detailed template for importers choosing to use the average CI approach
- 2) Assign a “percent fuel sold in Portland” to each importer. Suggest a customize approach in which importers can either suggest a percent based on their estimate of sales volumes in Portland or use a “deemed” value based on per capita consumption. Also recommend setting a schedule for updating the “percent fuel sold in Portland” value on a regular basis.

Explanation for the recommendation

Of all the approaches discussed with stakeholders, the book and claim method had the broadest support among interviewees. Importers felt it would be straightforward for them to comply and distributors preferred that importers do the compliance reporting.

Path B: Product Transfer Documents

What is it?

“Product transfer documents” (PTDs) is the general term for the paper trail that documents the transfer of ownership of fuel from one entity to the next. The Oregon DEQ, in [ORS 340-253-0600](#), requires that the CFP fuel pathway be included on all PTDs, except “For transactions of clear and blended gasoline and diesel below the rack where the fuel is not destined for export” (Section 2b). This means that, at present, the CFP fuel pathway code is not required on PTDs below the rack.

How could it work for the RFS?

The City could require that all PTDs include the fuel pathway code, including those for transactions below the rack, which the Oregon Department of Environmental Quality currently exempts from this requirement.

What reporting is required?

No reporting would be required. Enforcement could be carried out through inspections of PTDs at retail, to verify that PTDs for renewable fuel listed a fuel pathway code that had an assigned CI value of 40 or below.

Advantages

- No reporting to the City would be required.

Challenges

- Can only be implemented in cases where fuel is not co-mingled at the rack, i.e. stored unblended. Even in these (perhaps) rare cases, software used by importers, terminals, and distributors may make the addition of this data field difficult.

Explanation for recommendation

Most stakeholders were skeptical that they would be able to include the CFP fuel pathway on their PTDs. For some fuel importers, the continuous blending of fuel at the terminal means that a single truck-load of fuel may contain fuel from multiple CFP fuel pathways, making it difficult to calculate the weighted average CI value of the fuel being lifted at any point in time. Many others, including terminal operators, importers, and distributors, expressed concern about their ability to add the fuel pathway code(s) to their PTDs because of the continuously changing fuel content of the tank and potential software limitations. There were a minority of stakeholders who believed adding the fuel pathway code to the PTDs would be both feasible for them and also the most simple approach to enforcing the maximum CI value. These included fuel suppliers whose imports include fuel from only one CFP fuel pathway and/or who store unblended fuel in dedicated tanks, as well as a distributor who believed there were no software barriers to adding this field to PTDs.

Compliance Pathways Diagram

Figure 1 provides a visual representation of compliance paths A and B and shows what would be required of fuel industry stakeholders in the importer, distributor, and retailer roles. The diagram also notes where reporting requirements differ when a CI averaging approach is used. The City could decide to implement either or both of these compliance pathways, depending on the feedback gathered during the public comment period.

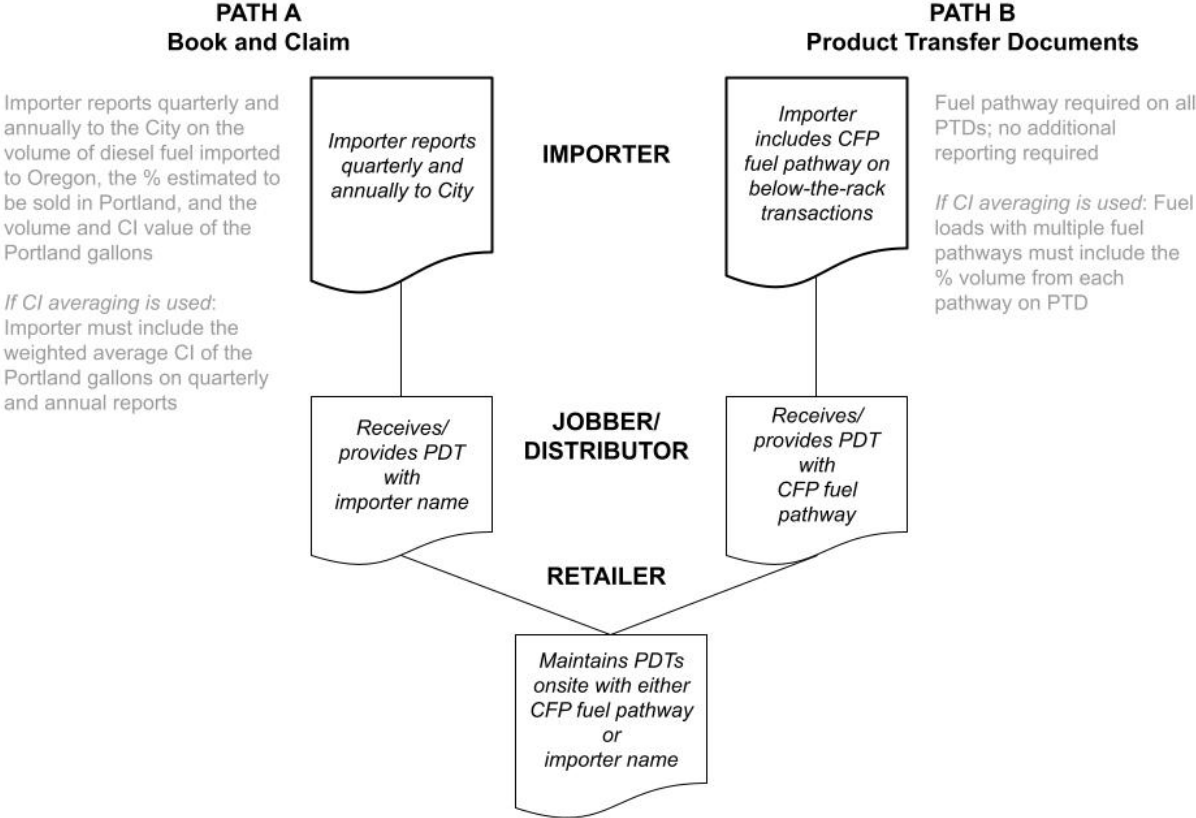


Figure 1. Two Compliance Paths for the updated 2023 RFS

III. Additional Background on the Rulemaking Process

In preliminary discussions with Oregon Department of Environmental Quality and Oregon Department of Agriculture, the City determined that several areas addressed by the 2007 RFS rules are now covered by other State or Federal agencies. As a result, the updated RFS rules could eliminate these sections entirely, or simplify them by referencing the relevant State or Federal rules. The only area in which new rules needed to be written related to the updated policy’s CI standard. Table 1 shows the actions the City determined were appropriate for each section of the 2007 RFS rules.

Table 1. Proposed actions to for each rule section during the 2023 RFS update

Section	Proposed action	Explanation
Authority, Purpose and Scope, Definitions, and Requirements <i>Introductory sections that generally restate code language</i>	Revise	These sections will be updated to reflect code updates and add any new definitions as needed
CI Standard and Compliance options <i>New section addressing compliance of CI Standard</i>	Add	Draft new section with input from stakeholders
Specification Standards <i>Refers to fuel quality requirements already regulated by Oregon ODA</i>	Delete	Covered by ORS 646.905-990
Certification and Blending <i>Biofuel certification, blending and inline injection requirements already regulated by Oregon ODA</i>	Delete	Covered by ORS 646.905-990
Testing and inspections <i>How to collect and test fuel samples, and conduct inspections onsite, including review of records</i>	Revise if needed	Generally, no changes anticipated, except minor revisions to align with state practices
Record Keeping and Reporting <i>Requirements for record keeping and reporting to the City</i>	Revise if needed	Update if needed depending on CI Standard Compliance method
Labeling <i>Dispensers and storage tanks</i>	Delete	Covered by Federal Trade Commission Fuel Rating Rule
Enforcement <i>Violations/penalties</i>	Revise	Minor changes to reflect code updates

Because the CI standard was the only substantially new policy area in the updated RFS, the City asked E4E to focus its industry stakeholder interviews on the potential approaches for implementing this policy element.