



THE BUREAU OF
**PLANNING &
SUSTAINABILITY**

City of Portland Bureau of Planning & Sustainability

Renewable Fuel Standard Technical Advisory Committee (RFS TAC)

Thursday, April 11, 2024

Minutes

TAC Members Present: Mark Bunch – Chair, Andrew Dyke – Vice-Chair, Jim Verburg, Marc Ventura, Matthew Jubitz, Paul Reed, Chris Efird

Facilitator: Marti Frank

Staff liaison: Pam Neild

Speakers: Megan Boutwell, Jordan Godwin, Jason Powell, Cory-Ann Wind

Registrants:

Susan Brouillette, Daniel Cappello, Haley Ellett, Kelsey Erickson, Lynda Gardner, Joseph Gardner, Ray Garza, Marli Heining, Marilyn Herman, Robert Hill, Andria Jacob, Jeannie Krieger, Michael Kuehn, Antonio Machado, Paul Melgaard, Jesse Nowicki, Adam Nunley, Molly OConnell, Karen Renwick, Meredith Sheild, Jenny Sigelko, Joseph Sorena, Jacquelyn Steen, Tom Umenhofer, Chris West

Minutes: Pam Neild

Call to Order and Introduction

Chair, Mark Bunch, called the meeting to order at 9:03 am. He welcomed TAC members and members of the public to the meeting.

Next, Pam read the conflict-of-interest statement and asked each member to state their name, title, and organization in order to take roll call. Mark stated that a quorum was present.

Two edits were made to the meeting minutes from January 25. Members voted to approve the amended meeting minutes.

Voting results: 7 – yeas, 0 – nays, 0 – abstentions

Next, TAC Member, Jim Verburg, announced he would be resigning his seat from the TAC after the meeting.

Welcome from BPS Director

BPS Director, Donnie Oliveira, thanked Jim for his contributions to the policy update process and for volunteering on the TAC. Next, he thanked the panelists and TAC members for attending the meeting to share their expertise. He acknowledged the city is going through incredible change and the important role that volunteerism plays in good governance. He encouraged the TAC to think boldly about how we might make this model work within and beyond city limits. Portland wants to continue to be a leader in climate, but we also want to do right by our partners. He encouraged us all to find a way to collaborate in doing business in the city.

Terminal Findings

Next, Pam Neild walked the TAC through a power point presentation with findings from interviews conducted with fuel terminal operators in the city. This presentation are available at [RFS Technical Advisory Committee Meeting - April 11, 2024 | Portland.gov](#)

The key themes discussed, and the perspectives/opinions shared were:

1. Compliance with Renewable Fuel Standard (RFS) requirements:
 - No respondents were concerned about complying with the 2024 15% biofuel content requirement. Some are already supplying diesel fuel at or exceeding 15%.
 - More concern was expressed about complying with the 2026 biofuel content requirement of 50%.
2. Sourcing biofuels within carbon intensity limits:
 - Some noted that one or more of the biofuels they currently bring in are above the carbon intensity limit of 40, requiring them to find alternate sources.
3. Operational challenges:

- Questions were raised about having sufficient tank capacity to segregate biofuels or biofuel blends.
- Concern about having enough capacity to receive sufficient volumes of biofuels given transportation modes.
- Perspectives were shared that making operational changes like repurposing tanks may not be simple due to permitting, capital investments needed, tank connectivity to transportation modes, etc.

4. Transportation modes for biofuel supply:

- A question was asked about how the biofuel products would be coming into Portland (water, rail, etc.) and if there have been considerations around new seismic stability standards impacting tank availability.

5. Overall ability to comply:

- While challenges were mentioned, no dealbreakers were expressed. The challenges were characterized as minor to moderate, and all respondents expected to be able to comply with adjustments to business practices.

6. Alignment with requirements outside Portland:

- A question was raised about whether compliance differs for these terminals when operating inside vs. outside of Portland, and if they can align their compliance approach.

Guest Presentations

The next four presentations were from invited speakers. All are available at [RFS Technical Advisory Committee Meeting - April 11, 2024 | Portland.gov](#)

PRESENTATION BY JORDAN GODWIN, OPIS

The key themes discussed, and the perspectives/opinions shared were:

1. Overview of the renewable diesel market and Opus pricing:

- Opus is a price reporting agency owned by Dow Jones/News Corp
- They assess prices daily based on market trades between 9am-5:15pm EST

2. Drivers of renewable diesel growth - Renewable Fuel Standard (RFS), Low Carbon Fuel Standard (LCFS):

- RFS RIN credits have been volatile, impacted by regulatory changes.
- LCFS has driven much renewable diesel growth by assigning lower carbon intensity scores for biofuels.

3. Renewable diesel's impact on surplus LCFS credits/prices:

- Renewable diesel has outperformed LCFS targets, generating surplus credits.
- This has caused bearish/lower LCFS credit prices recently, reducing compliance costs passed to consumers.

4. Opus renewable diesel pricing assessments:

- Priced at discounts to conventional diesel to account for tax credits and LCFS credits earned.
- Discount has averaged around 30 cents below LA/SF diesel prices.

5. Upcoming renewable diesel futures contracts:

- Futures are expected to increase market transparency and price discovery.
- One could draw parallels to successful RIN futures contracts.

Q1: Clarification on the fixed 37.93 carbon intensity (CI) proxy used for pricing.

A: It's a baseline target, an average score, that allows price assessments relative to the CI score of the specific product

Q2: How will expiry of the \$1/gal Blenders Tax Credit at end of 2024 impact pricing?

A: That \$1 credit value may get redistributed into other incentives like RIN or LCFS pricing to compensate

Q3: Differentiating pricing for Portland in-city sales vs out-of-state based on differing compliance?

A: Could be feasible to have separate assessments if trading volumes allow, by accounting for specific transportation modes, CI scores etc.

Q4: Is there potential need for summer/winter renewable diesel pricing if blending requirements differ?

A: Not something currently tracked, as major markets like LA run a summer blend year-round. There was discussion among TAC members about potential renewable diesel price differences occurring between summer and winter blends that could be pertinent to the Pacific Northwest .

Q5: Will there be early challenges getting robust Portland rack pricing due to low trading volumes initially?

A: Acknowledged that more trading activity would allow more robust price assessments over time.

PRESENTATION BY MEGAN BOUTWELL, STILLWATER ASSOCIATES

The key themes discussed, and the perspectives/opinions shared were:

1. Pacific Northwest diesel demand and renewable diesel/biodiesel supply outlook:

- Diesel demand is projected to slightly decrease from 2022 to 2035 in the Pacific Northwest region (Oregon and Washington combined).
- Biodiesel supply is expected to modestly increase to 11,000 barrels per day by 2025.
- Major growth is forecasted for renewable diesel supply, rising from 3,000 barrels per day in 2022 to nearly 80,000 barrels per day by 2035.
- The projections show the Pacific Northwest renewable diesel and biodiesel supply meeting 50% of regional diesel demand by 2030 and 68% by 2035.

2. Tracking new renewable diesel project announcements and assessing production capacity:

- Stillwater tracks announcements and conducts probability-weighted analysis on their viability.
- Their analysis shows North American renewable diesel production capacity aimed at peaking in 2026 at 507,000 barrels per day (7.7 billion gallons per year).
- Around 235,000 barrels per day (3.6 billion gallons) in 2024 is forecast to be advantaged for the U.S. West Coast/California markets.

3. Incentive stack for renewable diesel (tax credits, LCFS credits, RINs, cap-and-trade):

- The full incentive stack includes the Blenders Tax Credit, LCFS credits, RINs, and cap-and-trade pricing in California/Washington.
- For the example date shown in the presentation, Oregon's incentive stack was slightly higher than California/Washington due to higher LCFS credit pricing.
- When the Blenders Tax Credit expires in 2024, other incentives like RIN pricing may increase to compensate.

4. Factors to consider as the Renewable Fuel Standard ramps up:

- Modeling shows average carbon intensity for renewable diesel may increase over time due to competition for low-CI feedstocks.
- High volumes of low-CI fuels will grow the LCFS/CFP credit banks, lowering prices if targets aren't tightened.
- Adequate renewable diesel storage/distribution assets are crucial to avoid supply chain kinks that could impact pricing.

Q1: What is the lead time from project announcement to actual renewable diesel production?

A: It depends if it is a refinery conversion or a greenfield site, but generally 3-4 years based on examples like Phillips 66 (almost 4 years) and Marathon (around 3 years). A new greenfield project in Oregon would take significantly longer, around 6 years or more.

Q2: How will the Oregon Climate Protection Program (CPP) impact the incentive stack?

A: Since there's no auction price yet for CPP credits, it's hard to model the exact impact. There will likely be a price impact that needs to be accounted for and be comparable to other markets. The CPP carbon market is smaller than California's.

Q3: If California makes significant changes to LCFS volumes/targets, will Oregon match quickly?

Perspectives:

- It depends on what's happening with credit prices in Oregon - if they tank, regulators will need to take action to tighten goals and support prices, like California's process.
- Oregon did increase targets in the past based on assumptions about renewable diesel growth, but the actual ramp up exceeded expectations.
- With more states joining, the dynamics and demand for these fuels will change, which impacts supply/demand balance.

Q4: Any assumptions on shifting to sustainable aviation fuel (SAF) production?

A: Some renewable diesel capacity will shift to SAF, but not many announced plans yet as market is waiting to see renewable diesel saturation point first before economically adjusting to SAF. Regulatory factors also need to enable this shift.

Q5: How long will it take for a new state's program to impact overall supply?

Discussion:

- Not seeing a huge impact yet from Washington's program.
- A bigger impact is expected next year if major states like New York/New Jersey come online and shift supply dynamics to the East Coast from the Gulf.

Q6: What is your forward view on increasing average carbon intensity (CI) for renewable diesel over time?

A: Stillwater's modeling shows average CI going up as competition increases for low-CI feedstocks, unless there are technological breakthroughs. This is something for Portland to consider given its 40 CI goal.

Q7: What specific renewable diesel production is ideal for the Pacific Northwest market?

Perspectives:

- Products suited for this market may differ from California's needs.
- Locally produced or railed in from Rockies could work well.
- The new 45Z tax credit multiplier for SAF may draw lowest CI feedstocks toward that market instead.

PRESENTATION BY CORY ANN WIND, CLEAN FUELS ALLIANCE AMERICA

The key themes discussed, and the perspectives/opinions shared were:

1. Overview of approved fuel pathways and carbon intensities for renewable diesel and biodiesel in Oregon under the Clean Fuels Program.
 - The presentation included slides listing the approved fuel pathways with carbon intensities below 40 for renewable diesel and biodiesel from different facilities/producers.
2. Discussion of feedstocks used for approved pathways
 - The feedstocks are not explicitly listed but can sometimes be deduced from the pathway description or carbon intensity score. Common feedstocks mentioned include canola, used cooking oil, soybean oil.
3. Factors impacting what fuels/pathways are physically brought to the Oregon market
 - Having an approved pathway does not necessarily mean that fuel will enter the Oregon market.
 - Logistics and transportation capabilities play a major role in what fuels make it to Oregon.
 - The volumes that specific facilities can supply is not publicly available information.
4. Process for annual updating of approved pathways and carbon intensities.
 - Pathway holders must go through an annual process to confirm and get approved for updated carbon intensities for the following year based on operating data.
 - Facilities that get more efficient can get incrementally lower carbon intensities approved each year.
 - Higher carbon intensity pathways may be dropped if they no longer make economic sense.
5. Role of logistics/transportation in bringing fuels to the Oregon market.
 - Logistics like trucking, rail, and barges are maturing for supplying the Oregon market.

- Currently, Oregon is viewed as more logistically favorable for Midwest producers compared to California.

6. Trends toward incrementally lowering carbon intensities over time.

- As facilities improve efficiency, the approved carbon intensities for their pathways keep getting decremented lower year after year.

7. Impact of increasingly stringent carbon standards on pathway viability.

- As clean fuel standards require deeper carbon reductions in the future, higher carbon intensive pathways will naturally move out of the market over time.
- For example, a 30% reduction by 2030 could make soy/canola biodiesel pathways uneconomical.

8. Policy discussions in other states on low carbon fuel standards

- There are active conversations and bills being considered in states like New Mexico, Minnesota, Michigan, Illinois, New York, New Jersey, and Hawaii to adopt similar low carbon fuel standard programs.

Q1: Is there potential for facilities to use carbon capture and storage (CCS) to lower carbon intensities?

A: Yes, Oregon recently approved its first CCS pathway for an ethanol facility, which dramatically lowered the carbon intensity. For biofuels like biodiesel and renewable diesel, the opportunities for CCS may be lower but some are exploring it to take advantage of federal tax credits.

Q2: Is there a way to explicitly link feedstocks to the approved pathways?

A: Not currently, the feedstock is usually buried in the pathway description rather than having its own column. This would be a useful enhancement.

Q3: Is there potential to "balance" by combining higher and lower CI pathways to hit an average target CI?

A: Yes, that flexibility exists within the program.

Q4: For new low carbon fuel standard programs being considered in other states like the Midwest, is there interest in incorporating "climate smart agriculture" practices?

A: It makes a lot of sense for Midwest states to emphasize climate smart agricultural practices due to the importance of agriculture there and potential to capture localized environmental benefits. However, the details around implementation need to be worked out carefully in terms of data requirements, verification, and identifying the key high-impact practices to track.

Discussion: Incorporating climate smart agriculture could help address environmental justice and crop-based feedstock concerns that have arisen in places like California. Midwest states may prioritize this more highly than California given the importance of agriculture in their economies.

The presenter offered to follow up by providing the full data/spreadsheets on approved pathways and volumes to give a more complete picture.

PRESENTATION BY JASON POWELL, POWELL DISTRIBUTING COMPANY

The key themes discussed, and the perspectives/opinions shared were:

1. Supply and Pricing Concerns

- Concerns about large companies tying up renewable diesel supply, limiting availability for independent marketers.
- Risk of major oil companies deciding not to sell diesel in Portland due to regulatory hassles and investment costs.
- Potential for consumers to fill up on regular diesel outside Portland as demand and prices rise.

2. Cold Weather Issues

- B99 biodiesel can gel up in freezing temperatures, causing vehicle fuel system problems. Pam clarified the policy caps biodiesel at 20%, with the rest being renewable diesel up to 99%, which mitigates the cold weather issue.
- There was discussion and general agreement among TAC members that renewable diesel can also have cold weather issues when used at a high percentage.
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3. Certification and Compliance

- Need for retailers to have a way to certify to regulators that renewable diesel purchased meets policy standards and the importance of suppliers stating compliance on bills of lading. Pam clarified agreements between retailers and suppliers are part of the compliance options and that the compliance pathways have way for retailers to document renewable content and CI without direct fuel sampling.

4. Infrastructure Compatibility

- Retailers had to replace pump and tank seals in the past for biodiesel compatibility.

- This transition has already occurred and is not a major ongoing concern.

Q1: How much diesel is stored up by distributors and not used until winter?

A: At the retail side, tanks are ideally turning over every week or two. There are a couple of storage distributors in the city, but it's not a big issue.

Q2: Are there any concerns around retail site infrastructure compatibility with high renewable fuel blends?

A: Biodiesel has already scoured everything out, and seals that needed replacing have been replaced. Customers seem satisfied with R99 performance. The infrastructure transition has already been dealt with.

Q3: Will there be paperwork audits or physical fuel sampling to ensure compliance?

A: The city will not take samples for carbon intensity (CI) verification, but they reserve the right to sample for blend percentages. Retailers need to know what renewable fuels are in their tanks. The policy has compliance pathways for CI documentation without direct sampling.

Discussion: The importance of all entities registering and establishing agreements with suppliers based on the compliance options. It will be interesting to see how the market establishes these agreements and what restrictions may or may not arise.

The discussion covered various aspects of implementing the renewable fuels policy, from supply and pricing impacts to cold weather limitations, compliance pathways, and infrastructure compatibility. Jason Powell supports the program overall but emphasizes the need to work out logistical issues as it rolls out, with good communication between the city, suppliers, and retailers being essential.

Public Comment

No public comment was received.

Next Steps

The next RFS TAC meeting is set for **June 6, 9:30 – 11:00 am (PST)**. Meeting registration details will be posted the RFS TAC website at least one week prior to the meeting. The meeting is planned to take place on Zoom.

Pam will send meeting minutes along with a synopsis of data sources for TAC members to review prior to the next meeting. The June meeting will focus on refining the report outline.

The final meeting for 2024 is planned for:

- September 26; ZOOM (1.5 hours) Topic: review final report and refine next year's process.

The meeting was adjourned at 11:30 AM PST.

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