<table>
<thead>
<tr>
<th>Commenter</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Carbon Fuels Coalition</td>
<td>Comments on Agenda Item D – Options for Cost Containment</td>
</tr>
<tr>
<td>ChargePoint, Inc.</td>
<td>Agenda Item B – Opportunities for Additional Credit Generation</td>
</tr>
<tr>
<td>Clean Future, Inc.</td>
<td>Additional Credit Generation in the Oregon Clean Fuels Program: Electrified Parking Spaces / Truck Stop Electrification for Idle Reduction in Diesel Engines on Trucks and Transport Refrigeration Units</td>
</tr>
<tr>
<td>Coleman Oil Company</td>
<td>Written Comments for Credit Expansion and Cost Containment Measures</td>
</tr>
<tr>
<td>Climate Central</td>
<td>Earth’s CO2 Passes the 400 PPM Threshold—Maybe Permanently</td>
</tr>
<tr>
<td>Western States Petroleum Association</td>
<td>WSPA Comments on the Oregon Clean Fuels Program</td>
</tr>
<tr>
<td>AeroVironment, Inc.</td>
<td>Inclusion of Electric Forklifts in Clean Fuels Program</td>
</tr>
<tr>
<td>Senators Ted Ferrioli and Alan Olsen</td>
<td>Letter to DEQ Clean Fuels</td>
</tr>
<tr>
<td>Oregon Environmental Council</td>
<td>Additional Credit Generation</td>
</tr>
<tr>
<td>Oregon Environmental Council</td>
<td>Fuel Forecast, Cost Containment</td>
</tr>
<tr>
<td>Oregon Fuels Association</td>
<td>Comments to the ODEQ on the Opportunities for Additional Credit Generation and Cost Containment under the Oregon Low Carbon Fuel Standard (LCFS)</td>
</tr>
<tr>
<td>Low Carbon Fuels Coalition</td>
<td>Inclusion of Aviation Fuels in Oregon Clean Fuels Program</td>
</tr>
<tr>
<td>Renewable Products Marketing Group (RPMG)</td>
<td>Comments on Oregon’s Clean Fuels Program - November 2, 2016 Advisory Committee Meeting Agenda Items B - Opportunities for Additional Credit Generation and D - Assessing Options for Additional Cost Containment in the Clean Fuels Program</td>
</tr>
<tr>
<td>SeQuential</td>
<td>Recommendations for DEQ Advisory Committee November 2016</td>
</tr>
<tr>
<td>Union of Concerned Scientists</td>
<td>Clean Fuels Program 2017 Rulemaking Advisory Committee</td>
</tr>
</tbody>
</table>
As members of the 2017 Oregon Clean Fuels Advisory Committee, we are pleased to submit the following comments in response to Agenda Item D – Options for Cost Containment in the Clean Fuels Program, which was presented at the November 2, 2017 Advisory Committee meeting. These purpose of these comments is to highlight the objectives a cost-containment provision. They do not focus on specific design features of a cost-containment provision at this point. However, as a general matter, we believe that the cost-containment mechanism that is included in California’s Low Carbon Fuel Standard most effectively achieves the objectives articulated below.

In the event of a temporary shortfall in the supply of low carbon fuels, a well-structured cost containment provision should:

- Ensure the stable operation of the regulation and the fuel market while the shortfall is addressed
- Prevent retail fuel supply or price disruptions
- Ensure that regulated parties have a clear, predictable means of compliance
- Prevent credit prices from rising to unreasonable levels
- Maintain economic incentives needed to attract increased volumes of low carbon fuel to the market
- Ensure that flexibilities provided to regulated parties
  - are repaid with equal or greater environmental benefits over time
  - do not create perverse incentives to postpone the use of low carbon fuel or to avoid buying low carbon fuel credits available for compliance
- Function in a predictable and transparent manner

Thank you for the opportunity to offer these comments. We look forward to working with the Committee and the DEQ to ensure that the cost containment provisions in the Clean Fuels Program are designed and implemented in a manner that support achievement of the environmental and clean fuel goals of the program while also protecting consumers.

For additional questions or information, please feel free to contact:

Virgil Welch, AJW

Graham Noyes, Low Carbon Fuels Coalition
November 18, 2016

Cory-Ann Wind
Bill Peters
State of Oregon Department of Environmental Quality
Portland, OR

RE: Agenda Item B – Opportunities for Additional Credit Generation

Dear Cory-Ann and Bill,

Thank you for the opportunity to participate in the Oregon Clean Fuels Advisory Committee and to provide comments on Agenda Item B from the November 2 meeting.

ChargePoint is the world’s largest and most open EV charging network with more than 31,000 level 2 and DC fast charging spots, including more than 402 spots in Oregon. Every 4 seconds, a driver connects to a ChargePoint station and by initiating over 19.4 million charging sessions, ChargePoint drivers have driven over 467 million gas free miles.

Role of Utilities
DEQ has noted that it is working with the PUC to collaborate on SB 1547 implementation and investor-owned utilities’ participation in the Clean Fuels Program. ChargePoint supports utility investments in EV charging infrastructure and we expect that the IOU’s EV Plans due at the end of this year will outline exciting programs for advancing customer choice in EV charging. That said, as utilities in the state increase their role and consider joining this program, ChargePoint requests that DEQ clearly define the order of rights to generating and reporting Clean Fuels Program credits. Future revenue from the credits is important for allowing network operators to invest in new technology and services to customers and drivers. It could also be an important revenue stream for allowing a charging station operator to pay for ongoing network and billing services and maintenance for the stations. These opportunities should not be taken away.

We recommend the following:

1. For public non-residential charging stations, the network operator should have first right to generate credits. If the network operator does not join the Clean Fuels Program, utilities should have the ability to collect credits on those stations. This is the order of rights that currently exists in the California Low Carbon Fuel Standard program.

2. In order to avoid double counting, DEQ should adopt reporting requirements with locational data points such as longitude and latitude to pinpoint stations, rather than just site addresses, to ensure that if multiple networks occur on the same site, multiple networks or utilities can report. For example, an existing ChargePoint customer may choose to expand their charging stations and install additional stations under one of the utility programs, which may use a different network provider.

3. For private non-residential charging stations where access is restricted, the owner of the charging station should have first right to generate credits. If they choose not report, the private station owner should be able to designate the network operator through a customer agreement to collect credits on their behalf.
4. If utility-specific carbon intensity calculations are developed as indicated in the Agenda Item B whitepaper, then these values should be used by network operators or private charging station owners for stations located in those utility territories.

**Single Family Residential Charging**
In order to enable more residential charging to generate credits and reduce the administrative burden on DEQ, ChargePoint recommends that a rule be created requiring residents to report credits through a third-party aggregator. This aggregator should be the network operator if the stations since the data would already be readily available to the aggregator via cloud-based data. For non-networked stations, the aggregator could be a nonprofit organization or other similar entity. DEQ could qualify aggregators and post a list on its website. In all cases, the aggregator should be required to compensate the resident in some way, either directly or through in-kind equivalent ways, for credit generation and report to DEQ how this compensation occurs.

**Multifamily Residential Charging**
Multifamily residential charging can occur in different ways depending on where the charging station is located and what access controls are set. There are four different scenarios that could occur:

1. Shared, community charging in an Apartment
2. Shared, community charging in a Condo
3. Personal charging in assigned parking spots in apartment
4. Personal charging in deeded parking spot in condo

For simplicity, ChargePoint recommends that all multifamily scenarios follow the same rules as private charging stations, which would allow the property owner to generate credits or to designate the network operator of the charging stations to generate credits for the stations on their property. The potential revenue from these credits could be valuable for the property owner or network operator to maintain the stations and purchase more charging stations.

**Medium and Heavy Duty**
ChargePoint supports opportunities to add credit generation for transit agencies on medium and heavy duty vehicles. When developing these rules, if the charging infrastructure used to support these vehicles is public rather than “behind the fence” than credits be allocated based on the rules for light duty vehicles.

Sincerely,

Anne Smart
Director, Government Relations and Regulatory Affairs
ChargePoint
November 1, 2016

John A. Thornton
P.O. Box 23813
Tigard, OR 97281-3813
USA
web: http://CleanFuture.us

Cory-Ann Wind
Oregon Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204

Subject: Additional Credit Generation in the Oregon Clean Fuels Program: Electrified Parking Spaces / Truck Stop Electrification for Idle Reduction in Diesel Engines on Trucks and Transport Refrigeration Units

Dear Ms. Wind:

CleanFuture appreciates this opportunity to provide comment on additional credit generation in the Oregon Clean Fuels Program. CleanFuture recommends expanding credit generation for electricity to displace diesel fuel that would otherwise be used in idling diesel engines.

Idle Reduction Technology (IRT) reduces long-duration idling of the diesel engine by using electricity as an alternative technology. [1] According to EPA, long-duration truck idling results in about 1 billion gallons of fuel consumed, producing 11 million tons of carbon dioxide (CO₂), 180,000 tons of nitrogen oxides (NOₓ), and 5,000 tons of particulate matter (PM) per year. [1] The cleanest diesel engine is one that does not run.

Idle reduction technology is a verified idle reduction technology known as Electrified Parking Spaces (EPS) / Truck Stop Electrification (TSE). [1] The EPA defines Electrified Parking Spaces (EPS) / Truck Stop Electrification (TSE) as:

Electrification refers to a technology that uses electricity-powered components to provide the operator with climate control and auxiliary power without having to idle the main engine. This can be on-board equipment (e.g., power inverters, plugs), off-board equipment (e.g., electrified parking spaces or systems that directly provide heating, cooling or other needs), or a combination of the two.

An EPS system (also known as Truck Stop Electrification) operates independently of the truck’s engine and allows the truck engine to be turned off as the EPS system supplies heating, cooling, and electrical power.

The EPS system provides off-board electrical power to operate the following:

- Independent heating, cooling, and electrical power system;
- Truck-integrated heating and cooling system; and/or
- Plug-in refrigeration system that would otherwise be powered by an engine.

Idle reduction can save between 900 to 1,400 gallons of fuel each year per truck. [2] Idling diesel engines are epidemic, particularly affecting environmental justice communities that can
be near freight, goods movement, and port facilities with excessive diesel idling of heavy duty trucks and other equipment.

Mobile transport refrigeration systems powered by diesel engines are subject to long-duration idling. Transport refrigeration units (TRUs) are powered by diesel engines to refrigerate temperature-sensitive products transported in insulated semi-trailer vans, truck vans, shipping containers, and rail cars.

Substantial diesel fuel is burned by idling diesel engines in TRUs to keep temperature-controlled cargo at proper temperature. Idle reduction technology in transport refrigeration units can save 700 to 1,500 gallons of diesel annually per TRU. Electrification of these refrigeration units when parked offers the promise of substantially lower operating costs, engine wear, and reduced toxic air pollution with lower greenhouse gas emissions. Hybrid electric TRUs can be plugged-in while parked with grid-supplied electricity provided by electrified parking spaces. [3]

Moving perishable products requires TRUs to provide necessary cooling. In the normal course of goods movement, transport refrigeration units accumulate significant stationary engine run hours (engine idling hours) to pre-cool trucks and trailers, for controlling cargo temperatures during loading and unloading, and for temperature control while staging loaded trucks and trailers for dispatch.

Freight and goods movement facilities are commonly in urban areas for local food distribution. Environmental Justice Communities are often located nearby heavily traveled freeways, food distribution centers and warehouses, freight terminals, railyards, and ports; it is common for such goods movement facilities to be in disadvantaged communities. California Air Resources Board recognizes the higher exposure of disadvantaged communities to TRU idling in the “Initial Statement of Reasons for the Proposed Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities where TRUs Operate” staff report:

> The proposed Airborne Toxic Control Measure (ATCM) is consistent with the ARB’s Environmental Justice (EJ) Policy to reduce health risks from toxic air contaminants in all communities, including low-income and minority communities. Many communities are located near where TRUs operate, such as heavily traveled freeways, storage and distribution facilities, railyards, and ports. By reducing emissions of diesel PM, other known toxic air contaminants, and other air pollutants from TRUs and TRU gen sets, the proposed ATCM will provide air quality benefits by reducing exposure to and associated health risk from these pollutants near facilities where TRUs and TRU generator sets operate. These neighborhoods are frequently co-located with low-income and minority communities. [4]

Diesel idling in TRUs at freight and goods movement facilities is a common occurrence in the normal course of goods movement. TRUs commonly accumulate about half of a transport refrigeration unit’s diesel engine run hours at distribution centers in local distribution fleets. Furthermore TRUs produce more NO$\text{\textsubscript{X}}$ and other pollutants than many other diesel engines. The auxiliary engines installed on TRUs can emit over twice as much NO$\text{\textsubscript{X}}$ and particulate matter
compared to a truck’s main propulsion engine. A TRU engine can idle at distribution centers for 700 to 1200 hours per year.

Several Oregon businesses are implementing Electrified Parking Spaces for TRU idle reduction because of technical assistance received through EPA’s Pollution Prevention (P2) program. Portland State University, Drive Oregon, and CleanFuture are teamed to provide technical assistance to help businesses reduce idling in diesel-powered TRUs; resulting in several idle reduction projects scheduled for implementation in 2017.

Shorepower Technologies, a verified provider of Electrified Parking Spaces and Truck Stop Electrification, is located in Hillsboro, Oregon. Shorepower Technologies is a developer, manufacturer and installer of electrified idle reduction technology, and also a network operator of electrified truck stops. Expansion for electricity for idle reduction will create Oregon jobs.

Idle reduction is the most cost-effective emission reduction action. Truck Stop Electrification is the lowest cost mitigation strategy on a cost per ton reduced basis according to a US DOT report. [5] Another US DOT report affirms idle reduction strategies such as Electrified Parking Spaces to be the most cost effective in terms of NO\textsubscript{x} reduction with cost-effectiveness greater than diesel retrofits or heavy vehicle diesel engine replacements. [6]

**Recommendation:**
CleanFuture recommends expansion of Oregon’s Clean Fuels program to include Electrified Parking Spaces and Truck Stop Electrification for both trucks and TRUs. Last summer Oregon DEQ recognized truck stop electrification, electric forklifts and refrigeration units as possibilities for expanded credit generation [7]. Electric forklifts made the list, however trucks or refrigeration units were omitted. I respectfully request the Clean Fuels Program include electricity to displace diesel in idling trucks and TRUs which achieve the program’s goal to reduce carbon emissions.

Sincerely,
CleanFuture, Inc.

John A. Thornton

Cc: Jeff Allen, Drive Oregon
    Jeff Kim, Shorepower Technologies
References


Written Comments for Credit Expansion and Cost Containment Measures

Annie Stuart-Coleman Oil Company

Additional Credit Generation

The proposed addition of allowing credit generation for the use of electricity in light rail and street cars allows for more credit generation as well as supports the overall goal of the program since a cleaner fuel is being used instead of diesel. This should also help control the cost of credits by allowing more credits into the market that actually help reduce the amount of emissions, as opposed to other proposed cost containment methods that add artificial credits to the program, without the reduction in emissions.

Another potential opportunity for credit generation is diesel exhaust fluid (DEF). The use of DEF will only increase in coming years due to EPA regulations. DEF reduces pollutants from diesel vehicles, both on and off road, by being injected into the exhaust stream to reduce the Nox emissions in the exhaust. Production of DEF in Oregon and opportunities to import DEF into Oregon would support the goal of the program and should be allowed as a credit generation opportunity.

Additional Cost Containment

Current cost containment measures are a start, but I don’t believe they are sufficient to protect against high compliance costs. There are several additional cost containment measures that would support the overall goal of the program while providing cost containment measures.

- Investment Plan: The option to develop new technologies that would help reduce emissions in Oregon in the future not only meets the current goal of the program but potentially extends the reach of the program in future years. The way that this plan is handled in British Columbia seems to be effective. By not having set “plans” in place companies are able to create additional opportunities for emissions reductions that might not have been considered. There should be set rules for how the amount of paper credits are determined for the projects, as well as to make sure that similar projects are given similar credits. This could be done with an estimate of the future reduction in emissions produced by the investment as well as the monetary investment by the company and the length of the project from start to operation.

- Credit Clearance Market: This option allows for a stable price ceiling that allows companies to plan for the cost of compliance, as well as for credit generators to see the value in their credits. The opportunity to roll over deficits allows for companies with deficits to still adhere to the program. The roll over deficits should not be subject to an interest rate, they should however have a cap on when they should be filled, such as 2 years. Penalizing a company for a limited pool of credits, a factor beyond their control, would create a hostile environment in the program. Allowing for credits to be filled in a certain times gives companies time to purchase or create credits and follows the program goals. The market could also help even out the price per gallon of fuel to the consumers.
The cap on credits would prevent a spike in prices per gallon due to fear of abnormally high credit prices.

Methods that should be considered for additional cost containment should be in the spirit of the program, and not a pay to get out of jail card. The goal of the program is not to create revenue or punish those out of compliance. Using the methods above and avoiding alternative compliance payments and creation of paper credits would reduce emissions in Oregon, while limiting the cost of compliance.

If a specific credit price is used by the agency for a credit ceiling it should be variable. The price ceiling should be based on the availability of credits, the current emission goals (the ease of creating credits), the effect on businesses in Oregon and the effect that the price of the credits will have on consumers. A $200 credit in 2016 may only have a $0.0052 per gallon effect on the price of fuel for consumers, while a $200 credit in 2025 would have a $0.2425 per gallon effect on the price of fuel for consumers. (Illustrative purposes based on fuel importer generation of deficits in each year per one gallon of fuel). Given the price difference to consumers the result of a set price ceiling for 10 years is either an across the board spike in fuel prices to consumers in Oregon, or the reduction of businesses in Oregon due to not being able to comply with the program, neither of which results in achieving the goal of the program.

To: Bill Peters and Cory-Ann Wind Oregoncleanfuels@deq.state.or.us

The Alliance for Democracy of Oregon would like to share some thoughts as regards the hearings on this issue so far. We understand that DEQ is mandated to do this by the Oregon legislature, but we would urge DEQ to sufficiently clarify to the legislature that there are distortions and implications involved in a study thus limited to carbon. See below:

1. We are fundamentally opposed to the appellation of the word “renewable” to oil, gas, coal, biofuels, and especially the word nuclear.

2. One of PGE’s sources of electricity is the Columbia Generating Station in Washington State on Hanford Nuclear Reservation. This aging reactor cannot even remotely be considered a part of this deal on the low carbon side. It produces nuclear waste. The inclusion of nuclear energy should not be considered here in the Pacific Northwest, even under the ‘low carbon’ standard. The same goes for any new so-called “tiny” nuclear technology, which still produces toxic waste which cannot be disposed of safely.

3. AFD understands that Oregon DEQ is using projections and figures from Argonne National Laboratory, a division of the USDOE which has been shaping and reshaping GREET, a system which is constructed to “perform the life cycle analysis on fuel production, perform the life cycle analysis on materials production, and combine the two in order to estimate the cradle to grave impact of different transportation technologies. The Well to Wheel analysis represents therefore a subset of the cradle to grave as the energy and emissions associated with the manufacturing and recycling of the vehicles are not accounted for in WTW.” This is a quote from the GREET website. If this is the only way carbon emissions are measured, then this subset analysis does not cover the real impact of various fuel pathways.

4. The “system boundaries” within the subset of “well to wheel” insufficiently take into account vast environmental destruction on both ends. For example, various mono-cultures for ethanol production either in or out of the US yield tremendous habitat loss and pesticide run-off. Using forests and forest products to make ethanol and bio char (the Boardman plan) is equally destructive. What is the carbon sequestration capacity of what is being destroyed versus carbon output of the fuel produced?

5. The cumulative hidden water in these many production cycles of various fuels should not be underestimated, whether in the form of nuclear polluted water from cooling systems for nuclear, to hidden water lost to biofuel production and water pollution from pesticide and nitrogen run-off--pre-cradle to post-burial and especially to dispersal.

6. The Oregon Alliance for Democracy is very concerned that these toxic methods of fuel production (albeit “low carbon”) (now renamed “renewable”) are somehow being institutionalized in the context of these hearings.
Earth’s CO2 Passes the 400 PPM Threshold—Maybe Permanently

Carbon dioxide levels often hit lows in September, but now remain above a crucial benchmark

By Brian Kahn, Climate Central on September 27, 2016

In the centuries to come, history books will likely look back on September 2016 as a major milestone for the world’s climate. At a time when atmospheric carbon dioxide is usually at its minimum, the monthly value failed to drop below 400 parts per million.

That all but ensures that 2016 will be the year that carbon dioxide officially passed the symbolic 400 ppm mark, never to return below it in our lifetimes, according to scientists.

Because carbon pollution has been increasing since the start of the Industrial Revolution and has shown no signs of abating, it was more a question of “when” rather than “if” we would cross this threshold. The inevitability doesn’t make it any less significant, though.

September is usually the month when carbon dioxide is at its lowest after a summer of plants growing and sucking it up in the northern hemisphere. As fall
wears on, those plants lose their leaves, which in turn decompose, releasing the stored carbon dioxide back into the atmosphere. At Mauna Loa Observatory, the world’s marquee site for monitoring carbon dioxide, there are signs that the process has begun but levels have remained above 400 ppm.

Credit: Climate Central

Since the industrial revolution, humans have been altering this process by adding more carbon dioxide to the atmosphere than plants can take up. That’s driven carbon dioxide levels higher and with it, global temperatures, along with a host of other climate change impacts.

“Is it possible that October 2016 will yield a lower monthly value than September and dip below 400 ppm? Almost impossible,” Ralph Keeling, the scientist who runs the Scripps Institute for Oceanography’s carbon dioxide monitoring program, wrote in a blog post. “Brief excursions toward lower values are still possible, but it already seems safe to conclude that we won’t be seeing a monthly value below 400 ppm this year – or ever again for the indefinite future.”

We may get a day or two reprieve in the next month, similar to August when Tropical Storm Madeline blew by Hawaii and knocked carbon dioxide below 400 ppm for a day. But otherwise, we’re living in a 400 ppm world. Even if the world stopped emitting carbon dioxide tomorrow, what has already put in the atmosphere will linger for many decades to come.
“At best (in that scenario), one might expect a balance in the near term and so CO₂ levels probably wouldn't change much — but would start to fall off in a decade or so,” Gavin Schmidt, NASA’s chief climate scientist, said in an email. “In my opinion, we won’t ever see a month below 400 ppm.”

The carbon dioxide we’ve already committed to the atmosphere has warmed the world about 1.8°F since the start of the industrial revolution. This year, in addition to marking the start of our new 400 ppm world, is also set to be the hottest year on record. The planet has edged right up against the 1.5°C (2.7°F) warming threshold, a key metric in last year’s Paris climate agreement.

Even though there are some hopeful signs that world leaders will take actions to reduce emissions, those actions will have to happen on an accelerating timetable in order to avoid 2°C (3.6°F) of warming. That’s the level outlined by policymakers as a safe threshold for climate change. And even if the world limits warming to that benchmark, it will still likely spell doom for low-lying small island states and have serious repercussions around the world, from more extreme heat waves to droughts, coastal flooding and the extinction of many coral reefs.

It’s against this backdrop that the measurements on top of Mauna Loa take on added importance. They’re a reminder that with each passing day, we’re moving further from the climate humans have known and thrived in and closer to a more unstable future.

This article is reproduced with permission from Climate Central. The article was first published on September 27, 2016.
Ms. Cory-Ann Wind  
Oregon Department of Environmental Quality  
Clean Fuels Program  

Re: WSPA Comments on the Oregon Clean Fuels Program

Ms. Wind,

The Western States Petroleum Association (WSPA) is a non-profit trade group representing 25 companies that explore for, develop, transport, refine, and market petroleum products in Washington, Oregon, California, Nevada and Arizona. WSPA appreciates the opportunity to provide the Oregon Department of Environmental Quality (DEQ) our comments regarding the Oregon Clean Fuels Program (OCFP) as our member companies will be affected by the proposed 2017 OCFP rulemaking. Specifically, the comments presented herein focus on the cost containment methods and analysis in the OCFP. In addition, the white paper elements relating to opportunities for additional credit generation for the program are addressed.

General Comment

WSPA remains concerned that the Oregon CFP program may be infeasible. If a regulation is infeasible, policy makers should go back to the basic objectives of the regulation and fundamentally redesign it to address the regulated community’s concerns. At this time, it is difficult to see how re-evaluating cost containment provisions in the OCFP addresses the need for a fundamental reexamination of the feasibility of the program itself.

Specific Comments

Notwithstanding the concern expressed above, WSPA would offer the following suggestions for the program.

Cost Containment

At the minimum, a deferral trigger (or program pause) needs to be developed that is sensitive and specific enough to both prevent large deficits for individual companies and provide for a clear, certain compliance path forward to resolve those deficits. For example, the program could be held at current CI levels until sufficient credits are generated in the program to both offset deficits and to provide for a bank of a compliance margin going forward. (i.e., provide enough credits to support long term sustainability of the program). This allows for technologies and fuel pathways to catch up while not putting obligated party’s out of compliance with the program due to forces beyond their control.
OCFP is very aggressive, relative to California’s similar program. As a result, cost containment mechanisms need to be carefully thought out. WSPA recommends the following principles in the development of cost containment mechanisms:

- Reasoning that is based on sound science.
- Free market principles that provide a level playing field for all parties.
- Consider cost/benefit considerations to protect consumers.
- Consider the unintended consequences of the problem intended to be solved.
- Provide a clear and reasonable regulatory framework for stakeholders that must comply with any and all aspects of the rule.

WSPA also recommends considering the following basic elements of a cost containment mechanism:

- There should be a true relief valve from credit price spikes as some mechanisms just defer the risk to a later date.
- Avoid opportunities for hoarding or for “gaming” the system, such as in forced short sale markets.
- Fuel prices are complex and take too much time to evaluate. Costs should be based on those within the program itself, such as credit prices.
- A price-based mechanism should not displace existing fuel availability deferral mechanisms or compliance scenario program reviews.

Finally, once a credit market is established, WSPA recommends that Oregon Clean Fuels Program Advisory Committee reconvene to evaluate the options that were selected and review them in the context of how the program is operating.

**Opportunities for Credit Generation**

WSPA recommends that a guiding principle apply around the treatment of such opportunities for additional credit generation outlined in the White Paper: Such opportunities should be equitable with the treatment of gasoline and diesel within the program.

WSPA is not clear on whether the proposed options for credits generated in public transit are actually a result of real world carbon reductions as an outcome of the program, or are intended to provide credit for something that already existed. If the latter is the case, then one could argue that credit should be given for biodiesel or ethanol in diesel and gasoline that existed prior to the program.

DEQ focuses on credit generation from electricity and public transport, but there are opportunities within liquid fuels that could encourage credit generation beyond what is currently being incentivized. For instance, the existing rule does little to encourage the voluntary inclusion of exempted fuels for carbon intensity reduction.

Given that there are no refineries in Oregon, perhaps DEQ could explore a mechanism to recognize co-processed renewable fuels that enter a fungible supply and logistics system, much like the treatment of biogas or green electricity. Steps to recognize co-processed biofuels through such methods as mass balancing the co-processed fuel with an in-state obligation would be an ideal opportunity for the program to adapt to developing technology trends in the biofuels space while removing logistical and administrative barriers to encourage such initiatives.
Sincerely,

[Signature]

cc: Jessica Spiegel, WSPA
Hello,

I would like to recommend that you all include Electric Forklifts as credit generators for the Oregon Clean Fuels Program. Electric Forklifts have the following environmental and economic benefits to Oregon:

1. **Sustainability of Electric vs IC:**
   a. Energy Use – IC trucks use 4 times the primary energy of electric trucks
   b. Carbon Footprint – IC trucks produce 3 time the greenhouse gases as electric trucks
   c. Ability to use renewable fuels – Electric trucks allow the user to use many forms of renewable energy such as: wind, solar, hydro, etc.
   d. Water Pollution – IC trucks have a high potential to contaminate our water supply due to fuel and oil leakage and improper disposals
   e. Air Pollution – Local air pollution is zero for electric trucks while very high for IC truck. Environment in plants is much better for drivers when they use electric trucks. Air pollution does occur at the electric generation source if not renewable but will only get cleaner over time while IC truck get dirtier as they age
   f. Lifecycle – Electric trucks have a much longer useful lifecycle than IC trucks and IC trucks consume many more wearable parts (oil, filters, spark plugs, cooling system fluids, etc.) than electric trucks
   g. Waste Stream – Recyclability – Lead acid batteries are 100% recyclable

2. **Economic Benefits of Electric vs IC:**
   a. 70-80% lower fuel costs than comparable ICE trucks
   b. Approximately 30% longer service life than ICE trucks
   c. Up to 40% lower maintenance costs when compared to ICE trucks
   d. ZERO emissions

Thanks for your consideration.

Best regards,

Blake
--
Blake Dickinson
AeroVironment, Inc.
Technology and Apps Eng Director
Efficient Energy Systems
Cory-Ann Wind  
Oregon Department of Environmental Quality  
811 SW Sixth Ave.  
Portland, OR 97204

November 18, 2016

Ms. Wind:

We are writing to you concerning the Oregon Department of Environmental Quality’s proposal of “Opportunities for Additional Credit Generation” discussed at the Wednesday, November 2, 2016 Clean Fuels meeting.

We are disappointed in the progression of this program. It is clear from this proposal that the Department is unwilling to work fairly to find real solutions to the policy disaster that is the Low Carbon Fuel Standard.

By allowing the DEQ identified transit districts to obtain credits for existing programs, it is clear that the Department is not committed identifying a solution for carbon reduction. Instead, the Department is facilitating a large transfer of funds from consumers who own gas and diesel vehicles to mass transit. This is unacceptable.

This concept discriminates against rural communities and provides what is essentially a subsidy to metro areas. Working families should not be forced to foot the cost of urban pet projects that bring no carbon reduction. Oregonians deserve better.

We are opposed to this proposal.

Sincerely,

Ted Ferrioli  
Senate Republican Leader  
Senate District 30

Alan Olsen  
State Senator  
Senate District 20
November 11, 2016

Dear Cory-Ann:

Thank you for the opportunity to provide comments on **Opportunities for Additional Credit Generation in the Oregon Clean Fuels Program**.

The program is more important than ever. Globally, CO\(_2\) emissions have surpassed 400ppm concentration in the atmosphere. It has been millions of years since concentrations have been this high, and crossing this threshold makes it more difficult to limit warming to less than 2 degrees C. The amount of change already “locked in” guarantees more unpredictable weather, stronger storms, drought, and acidifying oceans. Oregon has already experienced more intensive, destructive and costly forest fires; drought; dangerous extreme heat days\(^1\); loss of snowpack; and fish kills. These have already harmed Oregon communities and economy.

In Oregon, the transportation sector continues to make up the largest share of the state’s greenhouse gas emissions, nearly 40%. Despite overall GhG emissions stabilizing in the last few years, transportation emissions increased from 21.9 MMT in 2014 to 22.1 MMT in 2015. This is a trend in the wrong direction.

<table>
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<tr>
<th>Total greenhouse gas emissions by sector including preliminary data for 2013 and 2014 (Million MTCO(_2))</th>
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<td><strong>Year</strong></td>
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<td>Transportation</td>
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<td>Electricity use</td>
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<td>Agriculture</td>
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<td>Total Emissions</td>
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\(^1\) Oregon Health Authority, Hazard Reports. (Summer months)
The Clean Fuels Program’s goal is to reduce the overall carbon intensity of Oregon transportation fuels. As such, it is important that the program be as comprehensive in scope as possible. The design of the program—which includes life cycle assessments—encourages continuous innovation. The more transportation sectors and fuel use types that are included in the program, the more innovation will occur and the more opportunities there will be for emission reductions and market transformation. For these reasons, we support inclusion of existing transit as well as new categories of fuel users, including forklifts and truck stop electrification.

Without transit programs in Oregon, the greenhouse gas impact from the transportation sector would be even greater than it is today. For example, TriMet’s fleet of diesel buses is Oregon’s largest diesel user. Without light rail and streetcars, the greenhouse gas impact would be much larger. According to TriMet, compared to driving alone, each mile one rides on TriMet emits 59% less climate pollution. Existing transit that runs on electricity will also deliver additional greenhouse gas benefits as the electric sector continues to decarbonize. Similarly, new lines, increases in service and ridership will continue to reduce the overall carbon intensity of fuels used in Oregon. We support inclusion of electric light rail and streetcars in the program, and look forward to continued conversations around how to do good carbon accounting for these uses. We also strongly support inclusion of electric transit buses.

We also support inclusion of electric forklifts, truck stop electrification, and electric delivery trucks (such as those used by Frito Lay in the Portland Metro area). Diesel combustion is a major source of particulate matter (PM), or black carbon. Black carbon is a greenhouse gas, and by some measure may be the second largest contributor to anthropogenic climate change. It is also a tremendous health threat. Diesel emissions cause up to 460 premature deaths in Oregon each year, and burdens Oregon with up to $3.5 billion a year in health costs and lost productivity.

We are excited about the opportunities for additional greenhouse gas reductions in a broader set of transportation segments in Oregon.

Sincerely,

Jana Gastellum
Program Director, Climate
Oregon Environmental Council

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2 AeroVironment provides charging equipment and could provide additional information.
3 Shorepower and Jubitz Truck Stops would be good points of contact for additional information.
Dear Cory-Ann:

Thank you for the opportunity to provide comments on Implementing the Fuel Supply Forecast Deferral and Options for Cost Containment.

**Fuel Supply Forecast**

In administering the Clean Fuels Program, DEQ should strive for program and market stability. Both regulated parties and clean fuel producers need certainty in order to plan investments and execute contracts. A yearly assessment, if it biased or too limited could create greater uncertainty. The fuel supply forecast should take into account all factors in the clean fuels program, including, but not limited to:

- Fuel supplies—We support the 10 “region” approach. It will also be important that contractors/DEQ proactively reach out to clean fuel trade groups and producers, rather than simply relying exclusively on publicly available data. Fuel developments may not always be fully public.
- Banked credits
- Opportunities for carry over
- New technology developments
- Vehicle stock—including changes in driving habits (such as more miles driven all-electric)

Meeting the goals of the Clean Fuels Program will require changes in the fuels sector, including new investments in infrastructure. For this reason, existing infrastructure should not be assumed to be what will be in place in the future. Changes will need to be made.

The main factor in assessing any shortages should be credit generation potential. Some low carbon fuels, such as biogas, may not have high volume but will have substantial credit generation potential.

In order to promote program and market stability, we strongly support that a deferral not be an “on/off” switch for the program or an entire fuel pool, but rather a change in the shape of the compliance curve.

If DEQ deems that a deferral may be necessarily, the clean fuels community needs ample time to evaluate and provide feedback on the fuel supply forecast. If a deferral is issued, DEQ should assess in future analysis, the potential to make up lost ground. In setting a deferral, DEQ should quantify the losses in carbon reductions and health benefits.
**Additional Cost Containment**

The Oregon Clean Fuels Program already has many cost containment provisions (e.g., fungibility between credit pools and the ability to bank credits). The program could certainly move forward with existing safeguards in place.

We look forward to a more robust discussion about additional mechanisms. OEC would like to re-emphasize that it is critical that mechanisms that are put in place support market and program stability. A performance-based, market-mechanism also has some self-correcting features: if credit prices rise, that serves as an incentive for more credit generation, which can then stabilize credit prices. The program must be able to accommodate some natural market dynamics.

Any new mechanisms that are put in place should not disadvantage Oregon relative to other jurisdictions. Mechanisms also should not create new barriers to linking with other jurisdictions in the future. Too strict a mechanism, or one with a very low cost cap, could artificially inhibit innovation. We do not favor approaches, like releasing more “paper credits” that weaken the environmental and health benefits of the program. We also do not favor the use of offsets. The transportation sector is responsible for the largest share of greenhouse gas emissions in Oregon and changes must be made within this sector. We would be interested in a DOJ opinion on alternative compliance payments that could be re-invested to further the goals of the program.

We look forward to more detailed discussion in future advisory committee meetings.

Sincerely,

Jana Gastellum  
Oregon Environmental Council

Meredith Connolly  
Climate Solutions
To: Cory-Ann Wind & Bill Peters, Air Quality Program, Oregon Department of Environmental Quality (ODEQ)

Re: Comments to the ODEQ on the Opportunities for Additional Credit Generation and Cost Containment under the Oregon Low Carbon Fuel Standard (LCFS)

November 18, 2016

Dear Cory-Ann and Bill,

Thank you for allowing us to comment on the implementation of the opportunities for additional credit generation and cost containment under Oregon's Low Carbon Fuel Standard (LCFS) program. Below please find points of significance to our members.

**ELECTRIFICATION OF TRUCK STOPS**

We are opposed. It will not help the stated goal of reducing the transportation fuels carbon intensity.

**AVIATION/MARINE OPT-IN FOR BIO CREDITS**

We are in favor of removing the exclusion for these types of fuels.

**LIGHT RAIL AND STREET CAR CREDIT GENERATION**

We are opposed to credit generation from these sources because it does nothing to reduce the carbon content of existing transportation fuels, and it probably has Oregon constitutional issues. However, if DEQ decides to allow these sources for credit generation, there has to be a baseline established that is consistent with that established for fossil fuels. Oregon stated the program with a baseline of E-10 for gasoline and B-5 for diesel. A baseline for light rail would have to be what existed at the time that the baseline for fossil fuel was established. Otherwise, this would do nothing to achieve the 10% carbon reduction goal. In fact, it could become a disincentive to the development, production or importation of other low carbon fuels.

Thank you in advance for your consideration of our comments.

Sincerely,
Paul Romain, Danelle Romain & David Rocker, Representing the Oregon Fuels Association

Mark Gram, Jubitz Corporation

Jeff Rouse, Carson Oil Company

Ralph Poole, Campo & Poole

Oregon Fuels Association

www.oregonfuels.org
The Low Carbon Fuels Coalition (LCFC) appreciates the opportunity to participate as a member of the Advisory Committee (AC) to the Oregon Department of Environmental Quality (DEQ) improvements rulemaking regarding the Clean Fuels Program (CFP). The LCFC represents a broad range of clean energy companies including producers and developers of biodiesel, ethanol, renewable natural gas, waste-derived fuels, and other low carbon fuel industry participants. The Low Carbon Fuels Coalition tracks regulations and legislation, advocates for policies that benefit the entire low carbon fuels industry, and facilitates industry success through consensus and coalition building.

The initial AC meeting was held on November 2, 2016. The meeting summary requested comments on the addition of aviation fuel to the CFP. The LCFC supports the inclusion of alternative jet fuel (AJF) in the CFP for a wide range of policy reasons including the following:

1. Authorizing AJF to generate CFP Credits on an opt-in basis would enable Oregon to more easily achieve GHG and criteria pollutant policy goals.

2. If AJF were not able to generate CFP credits, there would be an economic incentive for production facilities not to produce alternative jet fuel.

3. AJF delivers comparable GHG and criteria pollutant benefits as renewable diesel into the most challenging sector: commercial aircraft.

4. Due to the demands of flying, the aviation sector requires a liquid fuel solution in order to substantially decarbonize airline transport.

I have conferred with aviation industry stakeholders who participated in the initial CFP rulemaking on this issue, and have been advised that aviation fuels were previously discussed. The following regulatory approach was discussed as a method to allow credit generation from aviation fuels:

*Aviation fuel is currently exempt from the program. Regulated parties, credit generators and brokers may voluntarily include aviation fuel in the program under OAR 340-253-1010. To do so, DEQ will have to approve an individual CI for such fuel under OAR 340-253-0400 prior to being allowed to participate in the program. DEQ will follow up with stakeholders to flesh out the details of this issue.*

The LCFC is supportive of such an approach and is available to serve as a resource for further dialogue with the industry on this issue.

Best Regards,

Graham
November 18, 2016

Ms. Cory-Ann Wind
Oregon Department of Environmental Quality
Clean Fuels Program
811 SW Sixth Avenue
Portland, OR 97204-1390

RE: RPMG Comments on Oregon’s Clean Fuels Program - November 2, 2016 Advisory Committee Meeting Agenda Items B - Opportunities for Additional Credit Generation and D - Assessing Options for Additional Cost Containment in the Clean Fuels Program

Dear Cory,

We would like to thank you for giving Renewable Products Marketing Group (RPMG) the opportunity to serve on the Oregon Clean Fuels Program (CFP) Advisory Committee as part of this rulemaking process. We are supportive of DEQ’s efforts to develop a scientifically robust and sustainable program to reduce the carbon intensity of Oregon’s transportation fuels. This first Advisory Committee meeting was an introduction to the important topic of Cost-Containment, and per your request, we have focused this letter on the issues surrounding Agenda Items B and D. Though these two topics are intertwined, for ease of review we have commented on them individually.

As noted by DEQ there are several primary ways to address cost containment in the CFP— 1) Consider the flexibilities to make it easier and cheaper to comply, 2) Implement deferrals (RPMG previously commented on this methodology), and 3) Artificially manage the price of credits such that it is not unreasonably high. From an elevated policy level perspective, RPMG believes that allowing for innovation and technology to lead the way in achieving additional GHG reductions in the transportation fuel sector is far preferable to deferrals and/or artificial price manipulations.

Agenda Item B - Opportunities for Additional Credit Generation

The main focus of this item/slide deck was about electricity and electrification. Although an important component of the program, RPMG believes that the potential to expand credit generation should not be limited to electric vehicles (EVs) in urban areas of the state. We recommend that DEQ acknowledge that there are additional opportunities for liquid biofuels to produce GHG reductions, and actively work to incent innovation and technology to reduce carbon intensities. Potential options include the use of innovative/renewable sources of facility power, carbon capture and storage, and/or soil carbon accumulation crediting. The reductions achievable through lowering liquid biofuel CIs can be material to the program’s success. Just focusing on EV technology and infrastructure marginalizes these potential benefits and ignores the significant commitment and achievements already put forth by the biofuels community.

Agenda Item D - Assessing Options for Additional Cost Containment in the Clean Fuels Program

RPMG agrees that the current CFP regulation contains numerous cost containment provisions, including:

- Performance-based standards that are inherently flexible, and technology- and fuel-neutral;
• Market-mechanisms to incent lower Cl fuels;
• Fungible credits between the gasoline and diesel pools;
• Long-term banking of credits do not expire and can be banked;
• 10% carry over provisions;
• Three deferral options; and
• Initial multi-year compliance period.

A common theme of the above list are market components. Placing direct or artificial limits on credit prices has the impact of limiting potential investments in technology and innovation. RPMG believes it is a preferred policy approach to let the markets dictate the price of credits.

The three methods noted in the presentation that provide a ceiling or firmer price cap (forgive or delay compliance obligations, alternative compliance payments, or the adding to the supply of credits above certain price levels) do not move the program toward its policy goal and are not recommended to be pursued by DEQ. Another concept presented was that of the California Credit Clearance Market model. This concept is not actually a price ceiling, but rather an opportunity to purchase credits at a maximum set price. RPMG does not believe such a system in Oregon will be an effective cost-containment mechanism nor would it advance the goal of incenting lower carbon fuels into the marketplace.

Several “key questions” were asked of Advisory Committee members focused on the bigger picture of cost containment. The primary question is whether or not the existing regulation, and its existing mechanisms, are sufficient to prevent unacceptably high compliance costs. We think there is enough incentive in the market to provide lower Cl fuels and compliance strategies such that artificial regulatory price caps are not needed. Oregon’s CFP will benefit from the evolution in innovation spurred by neighboring programs. This will provide a stronger supply of lower Cl credits, even if the lowest of the low is first received elsewhere. Putting a price cap on credits will reinforce market signals to send credits elsewhere.

Additionally, if cost containment mechanisms are indeed incorporated into the program, they should only be triggered prospectively and re-evaluated on the shortest timeframe practicable. Letting a deferral or cost containment mechanism roll forward automatically would send a very strong negative market signal.

Linking the Oregon Clean Fuels Program with other low carbon fuels programs could be advantageous to the market if it adds to liquidity and flexibility. But this should only occur if/when each potential partner can show that their individual programs are adequately achieving reductions on their own. Without such an evaluation, one program could see their credits being diverted elsewhere.

RPMG stands ready to assist DEQ, in any way we can, and will continue to engage in this important rulemaking effort.

Sincerely,

[Signature]

Jessica Hoffmann
Regulatory and Compliance Manager
SeQuential's Recommendations for DEQ Advisory Committee November 2016

Cost Containment

• Cost containment strategies that SQ is in favor of:
  
  a) Price ceiling. Simple & effective. We recommend following CA's model on this with the exception that perhaps the OR ceiling be set at a higher value than CA’s?
  
  b) Clearance Market modeled after CA’s system.

• Cost containment strategies that SQ is not in favor of:
  
  a) Alternative Compliance payments
  
  b) Credit Window
  
  c) Reinvestment Plan
  
  d) Credit Multiplier

Expanded Credit Generation

• Generally, we are supportive of increasing the ways in which credits can be generated but have some concerns:
  
  a) Credit value dilution caused by to many credits available in the market. We understand the estimates for additional credit generation through expanded opportunities such as electrification etc., are fairly low. We should still have some price protection in place for unexpectedly low values. We do not want to actively reduce credit values to the point that they are not meaningful in stimulating future renewable energy projects.
  
  b) What is a reasonable baseline for these additional sources? Projects funded & developed after some particular time? 2012? And then only in cases where it can be proved that either a direct substitution for fuel type or reduced vehicle miles traveled resulted. We recognize that this is a difficult task. We simply ask for a reasonable and transparent rationale.
  
  c) Slippery slope: concerned that once you get away from generating credits from actual low carbon fuel production that is becomes harder and harder to define.

Follow up Questions/Concerns:

• Extended initial compliance period for importers of finished fuels? Why is this all the way out to 2018? Can we shorten this? Seems like with the CA program in place that fuel importers have had time to adjust etc.

• Forecasted Emergency Fuel Supply: should this be changed to a credit supply? Especially given that other sources beyond liquid fuels will be able to generate credits.

• Renewable Diesel (RD) needs to be changed to a regulated fuel type and no longer treated as Opt in only
  
  o RD has seen a surge in use by a number of OR’s largest municipal fleets such as the City of Portland and the City of Eugene.
These fleets are using this imported RD because it is seen as a more sustainable & renewable choice compared to the petroleum baseline or even OR made biodiesel.

The RD currently being imported into OR is not reporting any CI value to DEQ.

The same RD producers & importers that are bringing RD into OR are also importing RD in CA where there is a more mature Carbon market and they are required to report CI values.

The lack of CI reporting may lead to a logical conclusion that the RD importers are not reporting a CI value because if they did the RD would have a CI value greater then the baseline and thereby generate deficits.

Why is RD still being treated as an Opt In fuel type? What triggers a fuel type moving from Opt In to regulated?

- Can a regulated party that doesn't have deficits buy credits for banking and resell at a later date?
Cory-Ann Wind and Bill Peters, Clean Fuels Program
State of Oregon Department of Environmental Quality

November 23, 2016

RE: Clean Fuels Program 2017 Rulemaking Advisory Committee

Dear Cory-Ann Wind and Bill Peters:

Thank for the opportunity to participate in the Clean Fuels Program 2017 Rulemaking Advisory Committee. As requested, below is some additional input on the discussions and materials presented in October.

Opportunities for Additional Credit Generation

The transportation system is entering a period of transformation with more diverse fuels, vehicles, and modes of travel becoming increasingly important. The Clean Fuel Program should accommodate all kinds of fuels and transportation alternatives. For 50 years, from 1958 until 2007, petroleum accounted for more than 95% of the energy used in the U.S. transportation sector, but since 2008 the share of transportation energy has started to fall, mainly because of the fourfold increase in biofuels since 2005. Realizing a low carbon transportation system will require more than biofuels, and the flexible performance based approach of the Clean Fuels Program will ensure that many competing strategies to cut transportation fuel emissions can flourish simultaneously.

The transportation system of the future will be more heterogeneous than it is today, with increased vehicle electrification, expanded public transit choices, bicycling, car sharing, ride hailing and other flexible transportation options that will change the vehicle and fuel mix. It is critical that the Clean Fuel Program aims to be comprehensive and supports emissions reductions from cleaner fuels used in all parts of the transportation system, including public transit and goods movement. It is also important to accommodate the different fueling locations of electric vehicles.

In the Advisory Committee Meeting in October, there was some suggestion that an additionality test would be appropriate, so that only additional travel by electric powered transit, above some baseline, would be eligible for credit generation. This is inconsistent with the goals and design of the program, which aims to reduce emissions from the entire transportation sector. All the fuels used in cars and trucks are subject to the Clean Fuels Program regardless of when the vehicles were placed into service, so it would inconsistent and counterproductive to add such a consideration for electricity, which is one of the cleanest fuels.

By design, the Clean Fuels Program will reduce the total costs of using cleaner fuels and through this mechanism support the vehicles and systems that use cleaner fuels, such as electric powered transit. While much of the transit equipment existed prior to the implementation of the Clean Fuels Program, this is no reason its fuel should not be eligible to participate in the Clean Fuels Program. If the Clean
Fuels Program makes it more cost effective to operate some legacy systems than others, this will send a clear signal about where to make future investments. Moreover, support for cleaner existing options can occur not only through vehicle replacement and new investment, but also through subtle changes in mode shift as additional revenue for clean fueled transit improves the system and draws more ridership.

If a very large number of credits relative to the size of the fuel market were generated by existing electric rail and other clean fuels users, it could dilute the benefits of the Clean Fuels Program. This dilution effect should be evaluated, but my expectation is that credit generation by these new entities is unlikely to significantly affect the overall stringency of the program, so the dilution effect is likely minimal. However, the effect of these credits can be quite significant when viewed in the context of individual investment decisions about cleaner fuel vehicles.

It would not make sense to create a separate lower baseline CI for electricity, as this would reduce the incentive to shift away from gasoline and diesel towards cleaner fuels which is the goal of the Clean Fuels Program.

**Implementing the Forecasted Fuel Supply Deferral**

The approach laid out to gather data to assess a fuel supply deferral is sound. Reviewing up to date information on the vehicle stocks, fuel and feedstock availability, and fuel distribution and retail infrastructure and carbon intensity values as described in the ICF memo are all necessary inputs to a sound, data based decision.

One topic we discussed in the meeting was how to treat banked credits. This is a very important consideration and an area where judgement rather than a mechanical response will be needed. It is natural to anticipate that credit generation in the early years of the program would result in credit banking, which would be drawn down in later years. The illustrative compliance scenarios in Figures 2 and 3 of the 2014 ICF Updated Compliance Scenarios reflect the expectation that rational behavior of regulated entities would be to over comply and accumulate banked credits in early years and draw down these credits starting in 2022. Thus, one would not necessarily expect that fuel availability in later years would necessarily meet the obligation for those years absent banked credits. Instead it is reasonable to expect a combination of banked credits and new credits would be used for compliance in those years.

It would be damaging to the goals of the program to defer the program based on a shortfall in new credit generation compared to demand on a year by year basis. If the program deferred compliance without regard for banked credits, early credit banking already underway would lead to a constant oversupply of credits, which would depress the price of credits and discourage new entrants from bringing low carbon fuels to market. Bringing new low carbon fuels to market often takes several years, so policy implementation should allow credit prices to rise and banked credits to be drawn down over a several year period without short term intervention to reduce demand. Feasibility of compliance should be based on assessment of the balance of fuel supply, physical, infrastructure and market constraints, and the banked credit pool, and should consider whether the extent of the banked credit drawdown threatens to destabilize the program.

Stability of the program should be the key goal. Even the potential for short term deferrals undermines stability by making it harder to predict demand. The exercise of the deferral mechanism should be a last
resort, reserved for short term unanticipated disruptions to the system, for example the sudden unanticipated failure of a major part of the fuel distribution system that restricts the ability to distribute key clean fuels. The decision on whether a deferral is necessary should consider other program flexibility elements such as the ability to trade credits, bank credits, expand the pool of credit generators, and any additional cost containment mechanisms that may ultimately be adopted.

Assessing Options for Additional Cost Containment in the Clean Fuels Program

The materials developed by DEQ staff and discussed at our first meeting provide a sound basis for further discussion of cost containment at forthcoming meetings. In our October meeting, we discussed several different goals that could motivate additional cost containment measures. These ranged from keeping credit prices low to minimizing compliance costs for regulated entities and avoiding an increase in consumer fuels prices. While these are all relevant considerations, it is important to recognize their limitations. Credit prices are the marginal cost for the small share of compliance that regulated parties seek outside of their own fuel supply chains. Compliance costs will generally be passed through the supply chain, and for consumers, any costs and price volatility associated with the clean fuels program will be small compared to the cost and price volatility associated with gasoline and diesel fuel as oil prices fluctuate. A fundamental goal of the Clean Fuels Program is to create the market conditions in which clean fuels can expand steadily, driving down costs through learning and supporting innovation while reducing transportation pollution. This process will take several years, and credit prices provide a mechanism to ensure that demand for clean fuels grows regardless of the external factors that affect the price of oil, gasoline and diesel. If oil prices are high, low carbon alternative fuels will likely be relatively competitive even with relatively low Clean Fuels Program credit prices. In this case, consumers will face high fuel costs despite low credit prices. If oil prices are low, credit prices may rise to motivate the same level of clean fuel development, but despite higher credit prices consumers will see lower fuel prices, because lower prices for gasoline and diesel overwhelm the cost of clean fuels (or credits) that account for a small share of the overall cost of fuel. The key point is that a narrow constraint on metrics like the credit price may not be the best way to protect Oregon citizens from any costs or price instability from fuel costs, to say nothing of the harms of climate change.

The key goal of the cost containment mechanism is to enhance the stability of the program, to provide all market participants confidence that the Clean Fuels Program will proceed as planned. Stability is important for clean fuel producers making investments that take several years to bear fruit. Stability is important to obligated parties assessing their compliance strategies investment decisions, partnerships and plans. Stability is important to fuel distributors and retailers making decisions for long lived equipment for clean fuel distribution. And stability is important to people or institutions making decisions about vehicle purchases that run on cleaner fuels. If adequate clean fuels are at some point unavailable at any reasonable price, this would lead credit prices to skyrocket, which would eventually require an intervention in the program. The perceived risk of sudden policy change introduces uncertainty that can undermines investment. A well-defined cost containment protocol clarifies what would happen if adequate fuels and credits are unavailable, which reduces policy risk and supports clean fuels investment.

Many things are likely to change in the transportation fuels market by 2025, and so adjustments may be required as market conditions evolve. But the structure for the any additional cost containment should seek to preserve a stable incentive to invest in clean fuels production, distribution and use. Cost
containment measures that are too easily triggered or redundant can depress the confidence in the development of this market, and so as new flexibilities and cost containment measures are added, it will be important to assess whether other flexibilities in the program should be adjusted. Specifically, the supply deferral is likely to become redundant and counterproductive and should be considered for elimination as other cost containment strategies are implemented.

Sincerely,

Jeremy Martin, Ph.D.
Senior Scientist and Fuels Lead
Clean Vehicles Program
Union of Concerned Scientists
1825 K Street NW, Suite 800
Washington DC 20006-1232