



State of Oregon Department of Environmental Quality

Written Stakeholder Comments

Oct. 29, 2020 Long-Term Illustrative Compliance
Scenarios Meeting

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16 November 2020

TO: Oregon DEQ, Colin McConaha, Office of GHG Programs
Cory Ann Wind, Clean Fuels Program (CFP)

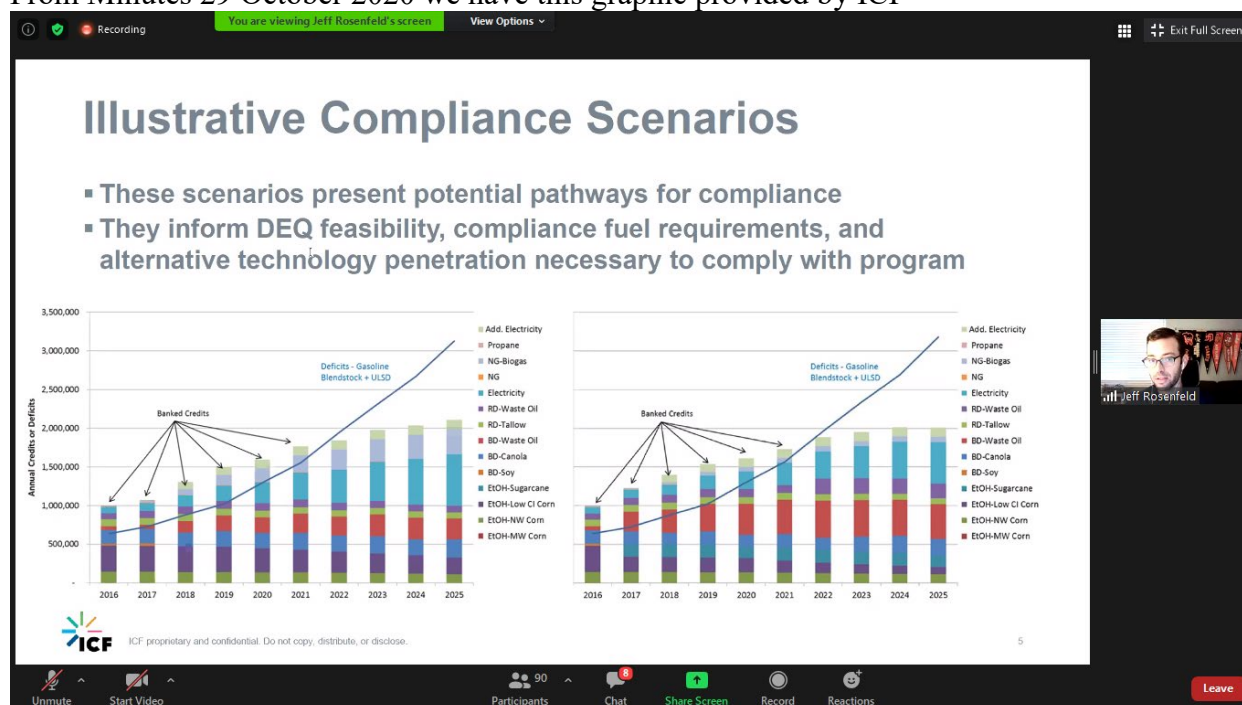
SUBJECT: EMAIL - ICF Study to Expand Clean Fuels in Oregon

References

- 1) DEQ RFI on Inputs and Assumptions, <https://www.oregon.gov/deq/ghgp/Pages/modelingstudy.aspx>
- 2) Letter from Better Energy to GHG Programs and CFP, 21 October 2020, "The clear advantages of low CI fuels"

We regard the DEQ Clean Fuels Program (CFP) as having a great chance of assuring the attainment of the GHG Executive Order 20-04 stated goals, since the CFP is well underway.

From Minutes 29 October 2020 we have this graphic provided by ICF







"Left is alternative technologies scenario that adds electricity and methane. Right side is scenario with more bio-fuel."

This is the ICF slide presentation from 29 October 2020

<https://www.oregon.gov/deq/ghgp/Documents/ICFm1Pres.pdf>

The CARB E3 Study asserts that feedstocks for biofuels are limited. We know that biofuel CI is not zero and its consumption does not reduce emissions, while it defeats the carbon capture needed to attain decarbonization.

Figure 2: Four Categories of Renewable Natural Gas That Could Be Used Within Existing Distribution Infrastructure

Waste biogas	Gasification of biomass	Hydrogen	Synthetic Natural Gas
			
Sources: Municipal waste, manure	Sources: Agriculture and forest residues	Sources: Electrolysis + zero-carbon electricity, or steam methane reformation with carbon capture and sequestration*	Sources: Renewable hydrogen + CO2 from biowaste (bi-product of biofuel production) or direct air capture
Constraints: Very limited supply	Constraints: Limited supply and competing uses for biofuels	Constraints: Limited pipeline blends (7% by energy, 20% by volume) without costly infrastructure upgrades**	Constraints: Limited commercialization, low round-trip efficiency

*This analysis did not model SMR + CCS for hydrogen production.

**This analysis did not evaluate conversion of the gas system to 100 percent hydrogen, which would require replacement of end-use devices and gas pipeline upgrades.

Source: E3

See the full E3 report here: <https://ww2.energy.ca.gov/2019publications/CEC-500-2019-055/CEC-500-2019-055-F.pdf>

So ICF is already assuming methane sources despite having constrained feedstocks, and biofuels despite having constrained feedstock resources. Why assume compliance scenarios already known to be limited? There are better scenarios with less constraints. The referenced letter of 21 October 2020 describes a renewable energy scenario with CI = 0, and this scenario has the best chance of attaining the GHG EO goals. Prioritize the study of fuels with CI=0 (or closest to 0) - since obviously these will help us reduce overall emissions the most; though other fuels may be necessary to help in the transition, with attention to the prospect of this scenario in achieving the better part of the total GHG EO carbon reduction goals.

This is a more important scenario that maximizes renewable energy (zero CI) as coal generation declines in 2030 (in accordance with SB 1547), acknowledging that biofuels are feedstock limited and do not significantly reduce State physical carbon emissions. So why not a scenario for 30% reduction of transportation mass carbon in 2025 and 45% in 2030?

So far there is an assumption that Carbon Intensity life cycle emissions for biofuels exclude the emissions from biofuel consumption, and these emissions are actually comparable to other carbon fuels. This assumption results in a CI metric that is not a mass emission metric like metric tons of CO2. So comparisons across the range of studied fuels are easier, please assume all calculations in the study are to be converted to one common metric (mass carbon), and that a conversion of CI to mass carbon emissions be established with a math expression for the conversion on record, for baseline scenarios and new program scenarios. There is no such

conversion on record at the CARB Low Carbon Fuel Standard dashboard,
<https://ww3.arb.ca.gov/fuels/lcfs/dashboard/dashboard.htm>

After sequestered carbon is delivered as biofuel, combustion releases this carbon like all fossil fuels and is assumed to be added to other carbon emissions.

A listing of normative parametric standards that should be assumed for any GHG emissions study is offered here.

	Normative Standard	Supporting Rationale
1	Decarbonization std: metric tons of CO2	Carbon Intensity is not a mass emission metric
2	Methane (CH4) 20-year GWP = 86	The window to decarbonize is now, not 100 years from now
3	Statistical distribution 95%ile	Analysis and interventions must be all-encompassing
4	Discounted cash flow basis = 0%	Future dollar values are NOT to be discounted as if there is even a market for destroyed resources and extinctions
5	Decarb goal: 2030, 45% of 1990	Every agency must quantify their mass emissions from 1990
6	Clean Fuels goal: 2030, 20% of 2015	Quantify average CI and CFP mass emissions in 2015
7	Oregon Cost of Inaction on climate: \$6B in 2020	\$21B later. http://www.nreconomics.com/reports/2018-08-13_CC_Costs_to_OR.pdf
8	Return on Investment: 1.9%	I-Bond interest (safest investment)

The opportunity to contribute to the conduct of this study is outstanding, and your consideration is most appreciated.

Prepared by Tracy Farwell, Sustainability Desk, [Better Energy LLC](#)



Pam Brady

Director
Government and Public Affairs



BP America Inc.
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November 13, 2020

Ms. Cory-Ann Wind
Lloyd 700 Building
700 NE Multnomah St #600
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Sent by email: OregonCleanFuels@deq.state.or.us

Long Term Illustrative Compliance Scenarios

Expanding the Clean Fuels Program – Meeting #1

Dear Ms. Wind,

Thank you for the opportunity to provide comments following DEQ's recent kick-off meeting for the expansion of Oregon's Clean Fuels Program as directed by Governor Brown's Executive Order 20-04. With an ambition to become a net zero company by 2050 or sooner, and to help the world get there, bp is actively engaged in advocating for policies that support net zero, including the Clean Fuels Program in Oregon. bp offers the following comments:

Additional Forms of Credit Generation

Similar programs to California LCFS

- Refinery Provisions (investments, crude innovative methods, renewable H2)

bp supports Oregon DEQ mirroring the CARB LCFS program and would encourage cross jurisdiction co-operation with other LCFS programs within PADD V to pro-rate the numerator volume and subsequent qualifying credits between programs. Such an approach could provide enough critical mass to incentivize projects that may otherwise have not be viable under a single jurisdiction's regulation.
- Carbon Capture and Sequestration

As with the above, bp supports Oregon DEQ mirroring the CARB LCFS program. However, there is strong industry interest for including access to off-shore storage in future LCFS regulation, and as such we would recommend this potential additional flexibility be reflected as a sensitivity within the illustrative compliance scenario.

Given the commercially sensitive nature of individual company project opportunities, we would recommend DEQ consider 3rd party intermediary outreach to solicit an aggregated industry response for estimates of potential project credit contribution.

- Renewable Jet / Sustainable Aviation Fuel (SAF)

As discussed during the meeting of 10/29, it was recognized that SAF should be incorporated into future compliance scenario planning to reflect volume that may arise after the previous rulemaking allowed it as an opt-in for the clean fuel component of the finished fuel.

New fuels, technologies and feedstocks

- Additional RNG or liquid fuel feedstocks (poultry manure, wood waste), Gasification, Hydrogen – cars, trucks, forklifts, etc.

bp fully supports DEQ's efforts to reflect emerging fuels, technologies and feedstocks within the Illustrative Scenario Planning.

For DEQ's consideration, not included within the ICF presentation

- Application Exempt Fuels

An underutilized sector for incentivizing decarbonization is the list of end uses that fall within the regulation for Application Exempt Fuels. Current regulation allows for opt-in, though the incentive only exists for net credit generators.

bp would recommend that DEQ consider treating Application Exempt Fuels in the same way as Renewable Jet, in that for opt-in fuel, credits would be generated for the clean fuel component but without obligation for the fossil fuel. Energy Information Agency (EIA) data ¹ would suggest that up to 20% of transportation diesel sold in Oregon could be within scope under Application Exempt Fuels and offers a not insignificant sector of the state's fuel demand that could benefit from such a decarbonization incentive. As such it would be useful to see how this approach would influence the outcomes in the illustrative compliance scenarios.

Identify the variables and fuels for the compliance scenarios

- Gasoline substitutes – electricity, high ethanol blends, hydrogen

With respect to how high(er) ethanol blends are treated within the illustrative compliance scenarios, bp would caution that there are a number of additional factors that will heavily influence greater than E10 adoption other than the vehicle fleet compatibility variable that was discussed during the meeting. Even if Oregon law were to change to allow E15 within the state,

¹ http://www.eia.gov/dnav/pet/pet_cons_821dst_dcu_sor_a.htm

there is still the matter of legacy E10 retail site infrastructure that may lack the ability to be compatible, listed and approved for higher ethanol blends without considerable site investment².

Given the above, a key variable for higher ethanol blend availability is whether there will be a critical mass of retail site infrastructure investment that takes place to meet the latent demand from E15 compatible gasoline vehicles. Factor on top of this the regional backdrop of numerous programs to accelerate ZEV vehicle adoption, it is not clear that there would be enough return on investment to support greater than E10 infrastructure investment within the program timeframe. This is another consideration that should be included as a sensitivity within the illustrative compliance scenarios.

bp looks forward to working with you and your staff as you move forward with potential rulemaking to bring the Clean Fuels Program in line with Governor Brown's Executive Order (EA-20-04). Feel free to reach out with any questions or for more information.

Sincerely,



Pam Brady
bp America

² https://www.energy.gov/sites/prod/files/2019/03/f60/USDRIIVE_FWG_PotentialImpactsIncreasedEthanolBlend-Level.pdf



November 16, 2020

Ms. Cory Ann Wind
Clean Fuels Program Manager

Re: First Meeting, Clean Fuels Program Transport Sector Regulations Review, Oct. 29, 2020

Via email: OregonCleanFuels@deg.state.or.us

The Renewable Fuels Association (RFA) is supportive of Oregon's efforts to reduce GHG pollution from the transportation sector. We appreciate the opportunity to provide comments regarding Oregon's efforts to meet new ambitious targets for the Clean Fuels Program (CFP) in the post-2025 timeframe.

RFA is the leading national trade association representing U.S. ethanol producers. Its mission is to advance the development, production, and use of low-carbon ethanol by strengthening America's ethanol industry and raising awareness about the benefits of renewable fuels. Founded in 1981, RFA serves as the premier forum for industry leaders and supporters to discuss ethanol policy, regulation, and technical issues. RFA's 300-plus members are working daily to help America become cleaner, safer, more energy secure, and economically vibrant.

RFA believes that renewable fuel, especially ethanol, can further decarbonize passenger cars and light-duty trucks today and in the near-term future. Promising research and development initiatives show ethanol could also help reduce emissions from medium duty and heavy-duty engines in the future as well.

Affordable low-carbon ethanol is available today for the transportation sector to help transition to the clean energy economy. Today's ethanol reduces greenhouse gas emissions by an average of 35-50% compared to petroleum fuels and is on a technological curve to be carbon neutral or even carbon negative. California's Low Carbon Fuel Standard (LCFS) program has encouraged lower carbon intensity (CI) fuels, and investment in new technologies has led to a reduction of more than 30% in ethanol's average CI score since LCFS enforcement began in 2011. In both California and Oregon, the LCFS and Clean Fuel Standard (CFS), respectively, have also driven significant growth of E85 (85% ethanol blends for Flex Fuel Vehicles), which boasts a 70-75% reduction in carbon intensity per mile over gasoline.

Several questions arose during the first stakeholder meeting; we offer comment on those questions below.

➤ **Are the heavy duty EV vehicles going to be available as projected?**

Heavy-duty, long-haul trucking and other off-road applications which are major contributors to GHG, PM and NOx emissions, can be converted to using cleaner energy at a faster pace if low-carbon liquid fuels are used. Very substantial gains are possible for both GHG and criteria emissions – with the speed of implementation being the largest driver of near-term carbon displacement. Not waiting for the required infrastructure associated with electrification and/or hydrogen-based alternative will speed the adoption and resulting mitigation effects.

Oregon has abundant liquid fueling infrastructure. This infrastructure is largely already compatible with higher-alcohol fuels. The U.S. already produces large quantities of low carbon ethanol. Alcohol fuels, using newly developed combustion technology, can now be used at 100% levels in both large displacement compression-ignition (diesel) engines¹ as well as more moderate displacement spark-ignited engines – thus eliminating petroleum fuel and its attendant emissions.

Compression-ignition engine technology is now commercially available at 50% efficiency. This rivals hydrogen fuel cell efficiency, and can enable range-extended, small-battery, electrified vehicles that are much more cost effective and less dependent on infrastructure buildouts. Using and focusing on liquid fuels reduces the cost, volume, and weight challenges of on-board pressure vessel storage, which must be used with gaseous fuels.

➤ **In terms of scenarios, will there be recognition around infrastructure and fleet limitations on biofuels blending (E10 vs E15) in terms of what the compatibility is that in terms of the scenarios?**

Low carbon ethanol fuels like E15 for light duty vehicles and E85 for flex fuel vehicles help meet carbon reduction goals today. EPA has approved the use of E15 for more than 9 out of 10 cars on the road today. Ethanol is the lowest cost, highest octane fuel additive available. Consumers will also benefit from more competition and greater savings as E15 and E85 use expands.

Given that gasoline-ethanol blends have a long history of being used successfully and that ethanol is a renewable fuel with low carbon intensity and still trending down, increased use of ethanol in blends with gasoline is one way in which Oregon can make progress towards achieving its goals regarding climate change.

¹ <https://www.clearflameengines.com/>

In addition, there are advantages to the use of gasoline-ethanol blends above E15 with attention being focused on mid-level blends containing up to 30 percent ethanol (E30). Interest in E30 is sparked by the fact that it can be blended to achieve much higher octane ratings than current fuels, which would facilitate the use of higher compression engines, leading to higher fuel economy and lower greenhouse gas emissions than can be achieved with current fuels.

Equipment for distribution, blending, storage and dispensing of fuel, compatible with up to E15 and up to E85 (and thus also with mid-level concentrations) is widely available for all commonly expected fuel-handling uses. However, all fuel-handling equipment will need to be checked, and updated if necessary, to ensure compatibility with any new fuels.

E15 – E85 blends must be stored, transferred and dispensed from equipment appropriate for these fuels. Listing by Underwriters Laboratories (UL), which tests for compatibility, is available for all the different kinds of fuel-handling infrastructure and a significant portion of the existing underground storage infrastructure, installed after 1989, readily meet current materials compatibility requirements for E15.

While not all materials are appropriate for all fuels, vehicle OEMs and manufacturers of fueling infrastructure components have been able to select appropriate materials for flex-fuel vehicles and the E85 fuel infrastructure that have successfully handled all ethanol blends between E10 and E85 for many years. A process for review and approval of such equipment can be developed to assure ethanol blended fuels are stored and distributed in a safe and compliant manner.

RFA looks forward to reviewing ICF International's technical analysis to assist in the development of the long-term illustrative compliance scenarios for GHG reductions. We believe ICF's compliance scenarios should include expanded use of higher ethanol blends as a primary means of delivering greater GHG reductions in the future.

Ethanol will continue to offer economically competitive GHG reduction in a world of increasing sustainability. Promoting the efficient use of ethanol fuels will provide emissions benefits as well as support for future pathways of circular energy production and complete decarbonization.

Sincerely,

Kelly Davis
Vice President of Regulatory Affairs

Southern Oregon Climate Action Now



Confronting Climate Change

<https://socan.eco>

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**Comments to DEQ on the Issue Brief and Teleconference Session Regarding:
Program Development to Reduce Greenhouse Gas Emissions: Illustrative Scenarios**

Colleagues:

I write on behalf of the 1500 Southern Oregonians who are Southern Oregon Climate Action Now in relation to the above-mentioned program. I appreciate the effort undertaken by DEQ staff to develop these scenarios and share them for discussion.

Before addressing the document and discussion, I would like to offer an overarching expression of concern that emerged during this discussion and was strengthened later in the day during a discussion within the OCAP Statewide coalition Transportation policy group. When I first looked at the scenarios, I was struck by the difference among them in terms of the Cap Trajectory. What struck me was the differences compared to the goal established in EO 20-04. As we know, the EO establishes a very clear goal for 2050 of GHG emissions 80% lower than 1990, with an interim target of 45% below 1990 level by 2035. From this charge, I assumed either that each agency would accept responsibility for achieving these targets for emissions within its purview, or that some coordinating entity, maybe the Governor's Carbon Policy Office, would assume a coordinating role that would ensure that where differences occur among agencies in their GHG reduction plans, the plan overall would achieve the interim target and final goal. From the discussion regarding the scenarios, my confidence that one or other of these mechanisms was in place has dwindled. Indeed, my sense from the discussion was that, as enthusiastic and energetic as DEQ has been in developing a plan, there is no expectation that the plan developed would achieve the EO interim target and final goal for GHG emissions within its purview. This is troubling since it became evident from later discussions, that neither is the Department of Transportation developing plans that would assure transportation emissions would be reduced according to the stated interim target and final goal. This is troubling because the inference I draw is that agencies are essentially developing plans that assign the 'heavy lifting' to achieve the EO goal to other agencies. This seems to be a roadmap for program failure.

Now, to the document and discussion session:

Introduction and General Comments:

While the Cap and Reduce (C&R) program is primarily directed at reducing greenhouse gas emissions, it should be remembered that IPCC 2018 and the EO both recognize the importance of reducing the atmospheric greenhouse gas concentration through carbon sequestration as well. It's clear that reducing emissions is not enough. Indeed, the current atmospheric concentration of GHGs in carbon dioxide equivalent ppm is over 500 and for a 1.5°C rise above pre-industrial level this needs to be well below 500. To be successful the OCAP must promote carbon sequestration. Absent requirements imposing sequestration - with penalties, this is unlikely to happen without incentives. In the probable covid-compromised budget of the next decade, it is unlikely that substantial state funds will be available to provide the necessary financial incentives to promote sequestration. Since the C&R program is the only place where alternative compliance options (ACOs) or instruments (ACIs - previously known as offsets) are possible, these should be required as options that allow investment by polluters in sequestration. ACOs should not just provide mechanisms for promoting emissions reductions, they should include C sequestration options.

There is no doubt that historically offsets have allowed polluters to continue polluting and emitting toxic co-pollutants. This compromised the air quality of communities living in the vicinity of the polluter. However, this problem was addressed in both the Oregon 2019 Bill (HB 2020) and the 2020 Bill (SB1530) by allowing DEQ to preclude offsets in such situations. It is perfectly reasonable to stiffen this barrier to ongoing social injustice by making such preclusion a requirement. In order to prevent polluting entities from taking advantage of ACOs rather than reducing their own emissions, regulations could also require that any industry seeking to use this mechanism must have a plan in place demonstrating how they are using or anticipate using best available technology to reduce emissions. It is not only inappropriate simply to reject ACOs because there have been problems historically when these problems can be addressed through rulemaking, but also we should recognize that rejecting ACOs also compromises our goal of reducing the atmospheric concentration of greenhouse gases and thus addressing the climate crisis. It should not be forgotten also that ACOs have the potential to provide economic input into rural and impacted communities addressing historic economic imbalances suffered by such communities. Rejecting ACOs means rejecting such economic benefits.

While carbon sequestration is not directly a Cap & Reduce function, it is critical for the overall plan that mechanisms be established within this segment of the overall plan to incentivize that aspect. Absent such accommodation, I fear that the carbon sequestration element will be lost from the EO.

If compliance flexibility allows investment in carbon sequestration through ACOs, a critical question is how these will be counted. Although the stated goal of the EO is to reduce emissions and promote Carbon sequestration, the obviously implicit goal is to reduce future atmospheric greenhouse gas concentrations in order to slow global warming. If we accept that our goal is to reduce the atmospheric concentration of greenhouse gases, a ton of carbon (or

CO₂e) emissions reduction is exactly equivalent to a ton of carbon (or CO₂e) removed. This suggests that a 1:1 equivalence should be designated. Establishing any other relationship implies that either emissions mitigation or C sequestration is better yet there is no scientific basis for arguing such a case.

I appreciate that the following triangle is not intended to suggest that any one element is more or less important than the others. However, there appears to be an implicit bias underlying the designation of the economic consideration as being only one of cost. This suggests that there is no possibility that economic gains can accrue to those reducing emissions (or sequestering carbon). As was mentioned during the session, to acknowledge the cost/benefit potential, this corner would better be labeled 'economics.'



It is also critical that any economic costs or benefits be accounted in terms of the economic costs/benefits of alternative actions or no action at all and the social cost of emissions. Failing to undertake fair economic accounting will likely continue to promote the false frame that addressing the climate crisis is too costly when there is abundant

evidence that economic benefit is a more likely outcome.

The Scenarios:

I will comment in relation to the headings rather than the scenarios

Initial Cap -

The notion that a low initial cap must be accompanied by a steep trajectory seems to lack imperative and have been arbitrarily imposed on the scenarios. While there is certainly a sound argument for imposing a low initial cap (much like the argument for a steep trajectory, below), this should be accompanied by recognition that some entities have undertaken steps to reduce emissions prior to the establishment of the program. A mechanism should be included to offer programmatic reward for such efforts.

Trajectory -

The evidence tells us that we need a steep trajectory for emissions reductions simply because, as the 2018 IPCC points out, we only have a decade to take a huge bite out of the problem. Failing to adopt such a trajectory could potentially compromise the success of the entire venture, as progress gets bogged down in resistance, evasion, and prevarication. In relation to the accompanying commitment in Scenario 1 we also find a high level of compliance flexibility suggesting a relatively unfettered array of ACOs. Given the historical abuse of ACOs, this would be a mistake. It is essential that ACOs should not be the first response of polluting industries. Rather, it should be available only to those who have either

incorporated the best available technology to reduce emissions, or can demonstrate plans depicting clearly how and when this technology will be installed.

Additionally, I reiterate the point made above: any program imposed by DEQ should demonstrate a clear intent to achieve the interim target and final goal established by the Executive Order of at least 45% below 1990 emissions by 2035 and at least 80% below the 1990 level by 2050. Given that the best science tells us that we need to achieve net zero emissions by 2050, the emphasis on 'at least...' should be a focus for the program developed by DEQ. This, surely, means a rapid emissions reduction should be imposed.

Distribution of Instruments -

The adjustment "based on other requirements, such as development of long-term emissions reduction plans...." is only included in scenario 1? It seems wise to offer incentives for planning emissions reduction whatever the scenario.

The basis for distribution of compliance instruments being the percent of emissions attributable to a given entity precludes the possibility of any new industry opening up in the state if it is likely to generate emissions. Surely a mechanism needs to be in place to allow start-ups.

Trading Instruments -

It seems reasonable to allow Trading of unused instruments regardless of other factors since this will allow entities finding emissions reductions difficult to adopt an option that allows them to avoid penalties while achieving emissions reductions through an entity selling unused compliance instruments. This also adds an incentive to entities reducing emissions on the trajectory to decrease emissions even more than easily possible. Trading unused allowances does not compromise the program targets, and should not compromise social justice goals so long as appropriate rules are developed to prevent such an outcome

Alternative Compliance Options -

Within scenario 1, there seems no reason why priority should not be given to ACOs that are within state. This would enhance the ability of the program to address social justice and equity issues.

I also reiterate the point made above about ACOs for carbon sequestration, the entire Climate Action Plan may well lack a mechanism for encouraging sequestration unless ACOs are available. Additionally, the elimination of ACOs from Scenario 3 arbitrarily precludes the economic benefits that such might offer to rural and impacted communities in terms of promoting renewable energy and incentivizing carbon sequestration in our natural and working lands.

Compliance Instrument Reserve -

The problem identified in Scenario 1 regarding costs to consumers is generated largely by the arbitrary elimination of a compliance instrument reserve to address such concerns; it is an artefact of the scenario design.

Final Note -

I am concerned about the option: "...an exemption or financial assistance program would be provided for natural gas emissions from low-income households." Given the fugitive emissions from the natural gas lifecycle, rather than being awarded any exemptions, natural gas should be phased out altogether.



Tiffany Roberts

Vice President, Regulatory Affairs

November 13, 2020

(Submitted OregonCleanFuels@deg.state.or.us)

Department of Environmental Quality
700 NE Multnomah Street, Suite 600
Portland, OR 97232-4100

Re: Comments on Oregon Illustrative Compliance Scenarios Kick Off-Meeting

Dear Department of Environmental Quality,

Under direction by Section 4A of Governor Kate Brown's Executive Order (EO) 20-04¹, Oregon's Department of Environmental Quality (DEQ) has contracted with ICF International to examine pathways to expand the provisions of the Clean Fuels Program (CFP) to achieve a 20% carbon intensity (CI) reduction from 2015 by 2030, and a 25% CI reduction from 2015 by 2035. On October 29, 2020, DEQ held a workshop to discuss the development of long-term illustrative compliance scenarios to meet the reduction targets as specified in EO 20-04. Western States Petroleum Association (WSPA) is a non-profit trade association that represents companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in Oregon and four other western states, and has been an active participant in air quality planning issues for over 30 years. WSPA appreciates the opportunity to comment on the DEQ/ICF presentation.²

1. DEQ should seek CFP pathways which are consistent with the Cap-and-Reduce Program

DEQ is currently in the process of developing a Cap-and-Reduce program and has also contracted with ICF International for specialized economic and greenhouse gas (GHG) and co-pollutant emissions modeling for that program.³ DEQ should seek consistency between the CFP CI reduction compliance scenario and the Cap-and Reduce study. Compliance with one program should be complementary with the other.

2. DEQ should ensure CFP compliance scenarios are both technically and economically feasible.

Slide 5 of the ICF presentation notes that their compliance scenarios will "inform DEQ **feasibility**, compliance fuel requirements, and alternative technology penetration necessary to comply with program."⁴ Nonetheless, DEQ staff has stated that the ICF compliance scenarios will provide **illustrative** scenarios and, as such, will not analyze the

¹ Executive Order 20-04. Available at: https://www.oregon.gov/gov/Documents/executive_orders/eo_20-04.pdf. Accessed November 2020.

² ICF Illustrative Compliance Scenarios Presentation. Available at: <https://www.oregon.gov/deg/ghgp/Documents/ICFm1Pres.pdf>. Accessed November 2020.

³ Oregon DEQ Cap-and-Reduce ICF Modeling Study Scope. Available at: <https://www.oregon.gov/deg/ghgp/Pages/modelingstudy.aspx>. Accessed November 2020.

feasibility nor the costs of the various scenarios modeled.⁴ DEQ staff noted that an economic analysis will be conducted “in house” during the formal rulemaking to expand the CFP program.⁴ This approach would be inconsistent with the scope of the Cap-and-Reduce modeling study, which will analyze the “economic effects on regulated entities, businesses, consumers, and Oregon's economy.”³

Through the expansion of the provisions of the CFP, it is imperative that DEQ put forth rules and regulations that are both cost effective and technologically feasible. As such, the CFP compliance scenarios, which will serve to inform the formal CFP rulemaking, should focus on reasonable and achievable pathways to achieve the program's CI reduction goals. As such formal and independent economic and feasibility analysis should be conducted.

Within such an analysis, DEQ should explore multi-technology pathways that consider fuel distribution constraints, such as tankage, fuel stations, electric vehicle (EV) chargers, hydrogen fueling stations, biofuel blending limitations, labeling requirements, etc. DEQ should also provide an estimate of the overall incremental costs for each scenario to achieve a 25% CI reduction.

Conclusion

Thank you for consideration of our comments. We would welcome the opportunity to discuss these ideas in more detail. If you have any immediate questions, please feel free to contact me. We look forward to working with you on these important issues.

Sincerely,



Tiffany K. Roberts,
Vice President, Regulatory Affairs
Western States Petroleum Association

⁴ Oregon DEQ Illustrative Compliance Scenarios October 29th Workshop Recording. Available at: <https://www.deq.state.or.us/psc/pdf/CFPaudioM1.m4a>. Accessed November 2020.