State of Oregon Department of Environmental Quality

Written Comments

Greenhouse Gas Emissions Program 2021 Rulemaking: Advisory Committee Meeting 1

This document is a compilation of written comments received related to the first meeting of the advisory committee for the Greenhouse Gas Emissions Program 2021 Rulemaking to develop a new Climate Protection Program. Comments received on or before Monday, Jan. 25, 2021 are included. Comments related to the first meeting received after the cutoff will be included with comments from the second advisory committee meeting.

Individual Comments

Group Comments

Thank you for allowing this public comment
Diane Hodiak, 350Deschutes, dhodiak@350Deschutes.org

Stationary Sources

Oregon Needs Rules for Alternative Sources of Energy

Trash burning and Forest Biomass Burning are Toxic, Climate Accelerants and should not be considered or subsidized as "energy sources"

I wish to express concern over the apparent support for forest biomass as a source of alternative "renewable" energy. This is wrong on many levels.

First, we must distinguish between "good biomass" like switchgrass or algae and "bad biomass" like forestry products and byproducts, logging residues.

Massachusetts Model for Alternative Fuels

Oregon may wish to develop rules that identify the requirements for "good biomass" or even good alternative fuels. The State of Massachusetts could be a model for sorting this out. They have developed new standards to ensure that the state's Renewable Portfolio Standard rewards only biomass energy that reduces carbon emissions. **These standards are the first in the world to set a performance requirement for biomass**

The issues

Several studies indicate that forest biomass as an energy source is as dirty as coal, and could lead Oregon down a path of greater rather than lesser emissions, should these "alternative fuel" projects be given subsidies. 200 Scientists signed a letter to Congress to ask that forest biomass NOT be considered carbon neutral. (its neutrality, if any, is not achieved until the 75 year mark, rendering it ineffective in todays urgent fight to reduce emissions.

https://news.mongabay.com/2020/05/scientists-warn-congress-against-declaring-biomass-burning-carbon-neutral/#:~:text=Scientists%20warn%20U.S.%20Congress%20against%20declaring%20biomas s%20burning%20carbon%20neutral,-by%20Justin%20Catanoso&text=Scientists%20warn%20that%20the%20failure,help%20destab ilize%20the%20global%20climate.

Biomass has serious environmental and health consequences**. A study by Partners for Policy Integrity** shows that biomass plants emit 50% more carbon dioxide than coal. Biomass also releases significant amounts of local pollutants, such as nitrogen oxides,particulate matter and polycyclic aromatic hydrocarbons (PAH). Biomass uses a great deal more water than wind and solar energy production.We know the perils of fossil fuel use. They must be reduced and replaced quickly. Fortunately, there are Better alternatives. Given the urgency of addressing climate change, we simply cannot afford to use and promote forest biomass as an energy source.

MEMORANDUM

To: Richard Whitman, Director, Oregon Department of Environmental Quality

From: Alliance of Western Energy Consumers

Edward Finklea, Natural Gas Director

Date: January 21, 2021

Re: Feedback on Oregon Climate Protection Rulemaking Advisory Committee Meeting 1

Thank you for the opportunity to provide written feedback to the questions posed by the Oregon Department of Environmental Quality ("DEQ") at the first meeting of the Oregon Climate Protection Program: Rulemaking Advisory Committee. The Alliance of Western Energy Consumers (AWEC) is a non-profit association of more than forty businesses that consume electricity and natural gas in the States of Oregon, Washington and Idaho. AWEC members include diverse energy intensive business interests, including food processing, pulp and paper, wood products, metals, chemicals, electronics and aerospace. AWEC provided comments to DEQ in 2020, raising concerns about how impacted natural gas consumers would comply with the proposed caps on emissions from combustion of natural gas under the program being developed in this proceeding. AWEC brings to this proceeding the concerns of natural gas consumers, especially Energy Intensive, Trade Exposed Entities (EITEs), for whom most have no alternative to using natural gas in their manufacturing processes and still make their products in competitive markets.

AWEC is focusing its comment at this time on one question posed by DEQ:

"Should emissions from natural gas combustion at stationary sources be regulated upstream at utilities?"

In the context of that question, DEQ set forth three scenarios for regulation of natural gas: one at the 25,000 Metric ton level and the other two assuming regulation of only entities emitting more than 300,000 metric tons of carbon dioxide annually, which AWEC assumes is intended to put regulation at the local distribution company (LDC) level.

AWEC 's threshold concern with the approach DEQ is taking to the proposed development of this rule is that the agency has failed thus far to set forth a compliance pathway that would allow natural gas consumers to meet their energy needs without being above caps imposed by the proposed regulations, and thus being out of compliance with the program. Is DEQ intending to model how natural gas consumers in the future would comply with the program and at what cost? If the point of regulation is 25,000 Metric tons or above, how would sources such as manufacturing facilities comply if the natural gas needed to produce their products is above the cap, and there is not an available compliance instrument to acquire by the end of the compliance period? Does the

agency intend to model the economic impact of reducing industrial output in Oregon in order to come below the natural gas emission caps within compliance periods? Potentially impacted businesses have not been able to ascertain from the material produced thus far by DEQ if the agency is offering an economic way to purchase a pathway to compliance, or if the intention is to literally cap the natural gas consumption in the State.

If the point of regulation is set at 300,000 Metric tons or above, AWEC assumes that it would be DEQ's intention to only regulate the three LDCs in Oregon: NW Natural, Cascade Natural and Avista. That approach does not avoid the compliance conundrum that exists if there is no economic way to purchase a pathway to compliance beyond trading with others to acquire a preset number compliance instruments. The agency has thus far failed to acknowledge in this process that carbon dioxide emissions from natural gas combustion are not able to be controlled with a carbon capture technology that can be acquired and deployed by sellers or consumers. Regulating carbon dioxide emissions is not the same as regulating toxic pollutants, as there is not any available technology AWEC is aware of to control the CO2 emissions while still burning the natural gas. Thus, emissions regulation is essentially natural gas consumption regulation.

AWEC is uncertain what DEQ is proposing in a scenario where the point of regulation is at the LDC, and in a future compliance period, demand for natural gas exceeds the established cap. Is the utility supplier expected to ration natural gas until demand goes below the supply that can be sold to a level below the cap during that compliance period? Is DEQ intending to model the economic cost of natural gas supplies in Oregon being held to capped levels that are below expected demand? If there is a compliance instrument the agency contemplates permitting regulated entities to acquire, what price should be assumed for the acquisition of that compliance instrument?

It is AWEC's strong conviction that unless DEQ can design a program that provides a compliance instrument that can be purchased at a reasonable price, the regulation of greenhouse gas emissions from natural gas consumption is tantamount to establishing consumption restrictions on natural gas under all three scenarios set forth at the first meeting. Without a compliance pathway, any of the three scenarios likely leads to rationing of natural gas in Oregon at some level by this agency or the regulated LDCs or the Oregon Public Utility Commission over the course of a compliance period. Barring technological breakthroughs that do not exist at this time, there appears to be a strong likelihood that natural gas would have to be rationed in Oregon if this program is implemented without giving utility suppliers and consumers a compliance instrument that can be purchased. DEQ's modeling under the three scenarios either should set forth a compliance pathway or model the economic impact of natural gas being in artificial short supply during compliance periods in the out years of the program. AWEC and other stakeholders cannot make an informed decision regarding the point of regulation until the agency explains the pathway to compliance and the instruments that will be available to meet compliance caps.

Thus far, DEQ has seemingly ignored the risk of leakage from this program if EITE's have no practical way to comply with the program other than moving natural-gas intensive operations out of the State. In no way is AWEC arguing that some natural gas conservation cannot be accomplished with existing technology. Energy efficiency is a hallmark among large volume

natural gas consumers in Oregon. In too many cases, however, DEQ will find that the caps that are projected in any given year are below what natural gas consumers can achieve to meet their energy needs without switching to other energy sources, such as electricity where feasible, or reducing production altogether.

Thank you for the opportunity to provide DEQ with feedback during the public process. AWEC looks forward to providing additional input into this important process.

Tom Wolf
Senior Government Affairs
Manager, US West Coast
Communications & Advocacy

BP America Inc.
4519 Grandview RD
Blaine, WA 98230

January 21, 2021

Department of Environmental Quality
VIA Email Transmission
GHGCR2021@deq.state.or.us

Dear Department of Environmental Quality Staff:

Oregon Climate Protection Program: Rulemaking Advisory Committee (RAC) Meeting #1

On behalf of bp America (bp), thank you for the opportunity to follow the Department of Environmental Quality's (DEQ) recent RAC meeting #1. bp is an integrated energy company with an ambition to be a net zero company by 2050 or sooner and to help the world get there, too. We support efforts to reduce greenhouse gas (GHG) emissions and offer feedback that is based on our experience with similar programs elsewhere, and as a natural gas marketer and fuels supplier in Oregon.

Attached you will find our pre-rulemaking comment letter to DEQ from August 26th, 2020 as these considerations remain our key points and continue to be relevant in your work to develop the Oregon Climate Protection Program.

bp would welcome the opportunity to participate in a dedicated breakout session with DEQ to help clarify some of the complexities associated with natural gas transactions and how these have successfully been addressed within California's existing regulatory language.

We appreciate the opportunity to share these comments and look forward to working with you in order to achieve meaningful reductions in GHG emissions. If you have any questions or would more information, please contact me at Thomas.Wolf@bp.com or 360-483-7438.

Sincerely,

Tom Wolf

bp

Pam Brady
Director
Government and Public Affairs

BP America Inc.
4519 Grandview RD
Blaine, WA 98230

August 26, 2020

Department of Environmental Quality
VIA Email Transmission
CapandReduce@deq.state.or.us

Dear Department of Environmental Quality Staff:

Technical Workshop 1 – Program Scope

On behalf of bp America (bp), thank you for the opportunity to participate in Department of Environmental Quality's (DEQ) recent Technical Workshop 1: Program Scope. bp is an integrated energy company with a goal of being net zero across our entire operations by 2050 or sooner. We support efforts to reduce greenhouse gas (GHG) emissions and offer the following comments based on our experience with similar programs elsewhere, and as a natural gas marketer and fuels supplier in Oregon.

Considerations for the Fuels Supplier Sector

With respect to fuels and thresholds, bp believes that the 5,000 million tons (MT) CO_2e threshold should be adopted as it equates reasonably closely to the minimum threshold expressed in gallons within the Oregon Clean Fuels Program. DEQ's issue brief rightly highlights that impacts on the competitive landscape should be a consideration. Applying a threshold higher than 5,000 MT CO_2e could not only distort competition, but also could lead to GHG leakage. While California applies a 25,000 MT CO2e threshold for fuels under its Cap and Trade program, its market for gasoline and diesel is almost ten times the size of Oregon's market.

When taking into account fuels and compliance, bp recommends that as many fuel uses as are practicable be included under the cap and that DEQ avoid applying end use exemptions in the manner adopted under the Clean Fuels Program. For such exemptions to work, there needs to be a clear line of sight from point of regulation to end use, and when this is not possible, the default should be for the fuel to be included under the cap.

Considerations for the Natural Gas Sector

bp supports designating the point of regulation for covered entities as close as is administratively feasible to the point of combustion, thus providing transparency to emitters and helping them make economic choices to reduce GHG emissions. For liquid fuels, it is feasible to designate the point of regulation at the fuel distribution rack. For natural gas customers, the only practical way for this

regulation to work is to have the point of regulation at the gas meter where either natural gas customers or their immediate agents (such as regulated gas utilities) hold the reporting and carbon obligations. In situations where a natural gas marketer sells natural gas directly to a large industrial customer, the bilateral contract between the marketer and the industrial customer should be the basis for determining the quality (or non-renewable carbon content) of the natural gas sold. The natural gas utility should be responsible for providing the meter reads. Buyers and sellers have used these bilateral contracts to verify the carbon content of energy consumed for many years in California, and the same system could be adopted in Oregon. For example, bp Energy Company provides the California Air Resources Board with redacted contracts to help verify the carbon obligations associated with power delivered into the California Independent System Operator.

Relying on upstream transactions would create data that would be inaccurate and burdensome for the state and market participants to administer. This problem arises because gas may change hands multiple times, be stored over a long period of time, or be exported from and not consumed in Oregon. Further, designating the point of regulation at the meter is the only feasible way for DEQ to account for cost rebates to vulnerable populations if the agency so chooses.

bp would welcome the opportunity to participate in a dedicated breakout session with DEQ to help clarify some of the complexities associated with natural gas transactions.

We appreciate the opportunity to share these comments and look forward to working with you in order to achieve meaningful reductions in GHG emissions. If you have any questions or would more information, please contact me at pamela.brady@bp.com or 360-920-1171.

Sincerely,

Pam Brady
bp America

Submitted electronically via email:
GHGCR2021@deq.state.or.us;

Nicole Singh, Senior Climate Policy Advisor
Singh.nicole@deq.state.or.us
Department of Environmental Quality
Office of Greenhouse Gas Programs
700 NE Multnomah St.
Portland, OR 97232

Dear Ms. Singh,

Thank you again for the opportunity to represent the perspective of Cascade Natural Gas and Avista (Small Gas Utilities) through my position on the Department of Environmental Quality's (DEQ) Regulatory Advisory Committee (RAC).

We appreciated the conversations that took place during the DEQ's January14 meeting, and believe it was a good starting point for deeper conversation about how to best deliver a well-designed cap and reduce program for the benefit of our communities.

As natural gas utilities serving the predominantly rural areas of Eastern and Southern Oregon, we value the distinct role our customers play in delivering agricultural, manufacturing, and other essential services to our communities. Our customers also face more severe winters and a higher energy burden than many in the State. This results in the need for creative solutions and region-specific approaches to meeting energy needs and ensuring reliability. To this end, we have broken our comments into several sections that address areas of support, concern and further development which can be found below:

Need for Break-Out Sessions with Deeper Dive into Model Assumptions

As others on the RAC mentioned during the discussion, we believe there is an opportunity to take a deeper dive into the analysis offered by ICF to maximize each member's ability to provide meaningful feedback and guidance during these proceedings. We therefore recommend that DEQ provide more time in advance of our next meeting to review slides and materials, as well as adequate time to submit comment following RAC meetings as a week may not be sufficient to process and respond to DEQ and ICF findings.

We also recommend that DEQ convene several break-out sessions to walk through the details of ICF's assumptions and calculations. The first of these sessions should be held prior to initial modeling so that analysis is properly informed by the feedback of the RAC. Even minor assumptions regarding carbon reduction technology, usage, and costs can have significant impacts on program outcomes and on consumers. It's therefore essential that all parties have access to the technical details informing this analysis. These sessions should cover all details pertaining to:

- The structure of ICF's modeling tools and inputs utilized for each model including (but not limited to)
    - The source data utilized to determine costs of emissions reductions, including the methodology used in the model to factor for cost increases for energy-intensive and trade exposed (EITE) industries that use natural gas;
    - GHG emissions calculations for all sectors, including an opportunity to review the spreadsheets proposed for each scenario;
- The process used for ICF's Marginal Abatement Cost (MAC) analysis and the pricing of compliance instruments;
- Leakage of emissions as a result of business relocation to states with less stringent compliance obligations;
- How jurisdiction mapping will be applied to determine program impacts on different natural gas customer end uses on the back end – as well as consistency of inputs from DEQ's sister state agencies on the front end –with analysis that includes:
    - A full map of all jurisdictional authorities; and
    - Process flow of a cap and reduce framework among state agencies; and
- How scenario modeling will be used to provide input on the cost of reductions that can be achieved sooner to inform stringency of the cap at the outset, factoring for future technology advancements.

To ensure clarity for the RAC, we also request that DEQ explain how the GHG reporting rule data provides sufficient detail to prevent double counting of emissions, taking into account natural gas usage by regulated large stationary sources. Under 40 CFR Subpart NN, natural gas suppliers are required to report natural gas delivered to customers, whether to core or transport customers, that could be regulated as a large stationary source. However, many natural gas transport customers are not required to file individual reports under Subpart NN, but are instead regulated through air permits or similar mechanisms. These differences in reporting should be factored for in the analysis. We'd also like to understand how ICF's model of GHG emissions categorizes the emissions from core and transport natural gas customers, and whether the model treats emissions from core and transport customers differently.

While Cascade and Avista were able to discern many of the inputs and calculations that informed the charts presented at the Jan. 14th RAC, we believe all parties would benefit from a detailed break-out of the assumptions that feed into any charts prior to future meetings. We further request that DEQ provide more granular details regarding the emissions proposed for regulation under the cap and reduce program, with links to applicable working documents for RAC review.

It will also be important that the RAC have the opportunity to be fully briefed on the capacity and limitations of the Energy Trust of Oregon (Energy Trust) to deliver energy efficiency and carbon reduction opportunities on behalf of the local distribution companies (LDCs) it serves. The need for this approach will be described in detail later in our comments.

Scenario modeling should be implemented in a manner that considers varying levels of carbon reductions while ensuring appropriate cost-containment parameters to prevent emissions leakage resulting from industry/job losses within OR as energy costs increase. Break-out meetings should include all interested RAC members in a discussion of how triple-bottom-line objectives (including equity and economics) will be met through this analysis.

In addition to understanding the inputs utilized by DEQ and ICF, it is equally important that the cap and reduce rulemaking be informed by essential primary source data provided by the gas utilities and other relevant parties. To this end, we welcome the opportunity to offer DEQ critical information regarding sector-based fossil fuel usage; a presentation on the state of the current natural gas system; and formal data regarding calculations of our fugitive emissions.

Valuable secondary source data on the energy sector can be found on the Oregon Department of Energy website with CO_2e emissions intensities for electricity delivered to OR electric utility customers. We recommend obtaining electric utility intensity average from ODOE reports for modeling.

Reference Case Policy Assumptions

Cascade and Avista appreciated the opportunity to review the Reference Case Policy Assumptions shared on slide 65 of DEQ's presentation to the RAC.

Based on our review, we have notes and questions for clarification:

1) Under "Energy Efficiency Policies" there is a reference to "Energy Trust and Electrification programs." Cascade conferred with Energy Trust staff following review of this slide for clarification on any electrification activities that have currently been assigned their organization. Staff confirmed that the Energy Trust does not currently offer electrification programs. Since the slide in question assumes polices are currently on the books as of December 2020, we encourage further review of this assumption before use in program modeling. We also seek further clarification on any electrification programs or activities that DEQ intended to reference on this slide.

   Cascade and Avista would be concerned if building electrification programs were treated as a predetermined pathway to meeting carbon reduction goals, particularly as many reports and studies, including the Oregon Department of Energy's Biennial Energy Report, identify a viable role for natural gas as part of the State's energy future when paired with carbon capture and renewable gas technologies. Studies in other jurisdictions have found there is a role for natural gas in a decarbonized economy, serving the transport sector and other end uses that are difficult to electrify.1 Any policy pathway that has not yet been implemented should not be modeled as a reference case at this time.

2) Under "Natural Gas Supply and Consumption Policies," DEQ lists the optional renewable natural gas (RNG) portfolio standard of "30% of utility natural gas supply to be RNG by 2050." This is likely inspired by OR Senate Bill 98 Section 5[2], which sets a voluntary RNG standard of 30 percent by 2050.

   Cascade and Avista appreciate the importance of adding as much RNG as possible into our gas systems in support of decarbonization and we are actively exploring opportunities for RNG development or procurement. However as Small Gas Utilities, we recommend care in developing a baseline from the voluntary target set for OR Large Gas Utilities. ODOE's 2018 Biogas and Renewable Natural Gas Inventory[3] stated that the Oregon's total gross potential for RNG production is 22.1% of Oregon's total yearly use of natural gas. Displacing 30% of the State's utility natural gas supply may require importing RNG from neighboring states.

   In order to maximize the accuracy of modeling based from reference case policy assumptions, we recommend that DEQ work with the Small Gas Utilities to more fully understand overall potential and timing for ramp-up of RNG before assumptions are made regarding total achievable GHG reductions resulting from this measure. We do however agree that there is a strong role for *all* natural gas utilities to play in a low-carbon future utilizing renewable gas.

Point of Regulation

Cascade and Avista appreciate DEQ's receptivity to exploring the appropriate point of regulation of large industrial emissions. This decision will have significant impacts on how emissions reductions are addressed and the associated costs of compliance.

However, we were discouraged to see all three modeling scenarios outlined on slide 71 of DEQ's presentation indicated regulation would take place at the fuel supplier level. We are confused as to how other approaches can be fairly considered if alternative points of regulation are not modeled. The Small Gas Utilities urge DEQ and ICF to consider modeling scenarios where point of regulation is at the point of fuel usage for transport customers. This is particularly important since some larger gas customers currently report their emissions directly to the EPA. Regulation of these emissions at the fuel supplier level would signal a change in ownership for a responsibility currently outside the scope of the utilities.

[1] See, for instance, Navigant's 2019 *Gas for Climate* study, *Gas Decarbonisation Pathways 2020-2050* study, which showed that a smart combination of renewable electricity and gas can fully decarbonize the European Union's energy system at the lowest societal costs. Available at: https://gasforclimate2050.eu/publications/
[2] Available at: https://olis.leg.state.or.us/liz/2019R1/Downloads/MeasureDocument/SB98/Enrolled
[3] Available at: https://www.oregon.gov/energy/Data-and-Reports/Documents/2018-RNG-Inventory-Report.pdf

Development of Caps and Thresholds

The development of a carefully sourced baseline is critical to supporting the success of regulated entities in meeting their emissions reductions. Such an approach is an essential first step to developing realistic targets.

Once a well-designed baseline and targets are formulated, DEQ should ensure that regulated entities are empowered to meet these targets through ample allowances and adequate time to address fluctuations in markets and weather, and to successfully ramp-up efforts as low-carbon solutions are developed.

The Small Gas Utilities therefore recommend using a 5-10 year historical average for natural gas with a 3-5 year compliance period. Without a realistic foundation from which reductions can be made, and the tools to achieve them, cost-effective compliance options will be limited. Significant increases to gas costs resulting from policies that stifle industry innovation would force businesses to relocate outside Oregon where energy prices were lower. This would result in emissions leakage.

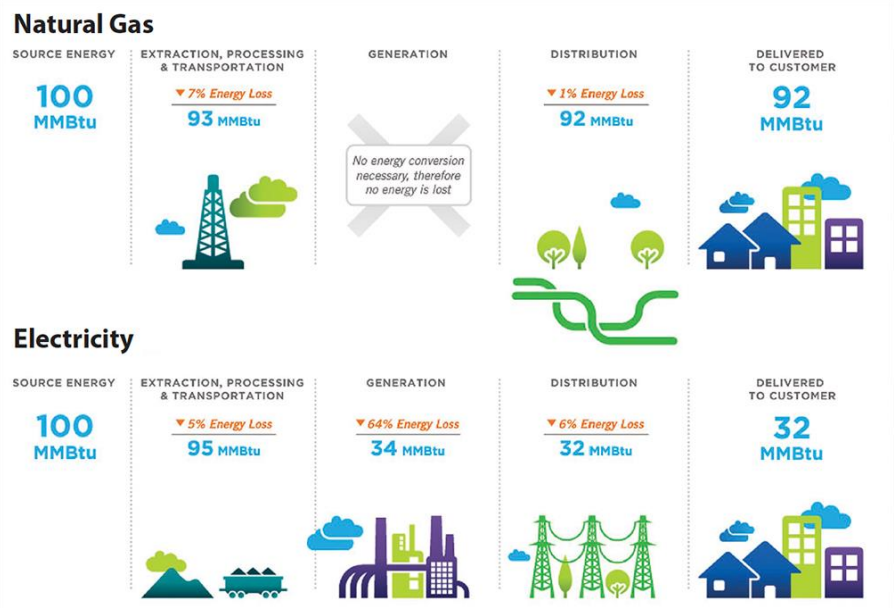
It will be essential to Oregon's economic recovery that DEQ provide adequate time for alternative compliance options before caps decline. This will allow ratepayers of all classes to meet financial challenges resulting from the pandemic, and helps ensure an equitable approach to GHG reductions. We also encourage consideration of multi-sector thresholds to ensure avoidance of a one-size-fits-all approach.

Site vs. Source Emissions

The Small Gas Utilities seek clarification of DEQ's assumptions regarding site efficiency of natural gas equipment. During the first RAC meeting on January 14, a comment was made that natural gas equipment has more CO_2 at end use for onsite use as opposed to its use as an electric generation fuel. However, this comment is misleading. Comparing the end-use efficiency of space and water heating equipment across fuel types is not apples-to-apples. While electric equipment typically has higher site efficiency, it is offset by lower source efficiencies.

According to the Northwest Gas Association, on average a house fueled by natural gas directly for space and water heat is responsible for about one third fewer GHG emissions than a comparable home that uses electricity to generate energy for the same end uses.[4] This is because the transmission and distribution of electricity (regardless of source fuel) results in significant line losses that lower total overall energy efficiency at the electric generation source per the graphic below.

[4] Northwest Gas Association, Dec 2020 https://www.nwga.org/blog/



We therefore recommend that emissions associated with building performance should also consider the net GHG associated with technologies from a source efficiency standpoint.

Areas of Agreement on DEQ Staff Leanings

Cascade and Avista appreciated the opportunity to gain further insights into the leanings of DEQ staff regarding program design and operation. We were pleased to see multiple areas of alignment regarding DEQ's proposed direction. We've detailed our support below:

- Use of Compliance Instruments to Demonstrate Compliance

We agree the direct distribution of compliance instruments to all regulated entities will be important for effectively meeting and tracking compliance under a cap and reduce regime. If DEQ is considering output-based distribution, flexibility should be applied based on industry capacity.

- Broad Banking Flexibility

The Small Gas Utilities support the banking of allowances in order to address fluctuations in weather and market from year-to-year. This approach helps provide greater stability, rewards early emissions reductions, and supports an economically sound approach to managing compliance costs.

- Broad Trading Flexibility for Buying and Selling of Compliance Instruments Among Regulated Entities

We believe compliance flexibility supports cost equity and continued energy affordability. The cross sector sharing of allowances will ensure greater success in meeting overall emissions reduction targets. This is particularly important for regulated entities that have an obligation to serve under OR law. Regulated gas utilities have an obligation to serve under law, and must provide reliable natural gas service to all ratepayers. Since we can only incentivize (but not mandate) carbon reductions from our customers, the purchase and sale of compliance instruments among regulated parties allows Small Gas Utilities to meet our obligations by partnering with entities that have greater capacity to reduce their usage while we ramp-up our ability to introduce low-carbon options (such as renewable natural gas) into our systems.

The use of a 3-5 year compliance period provides further support for utilities to meet their emissions reduction obligations. The approach recognizes that savings are not linear and can vary from year-to-year depending on weather, current economic conditions, and other external factors. Multi-year compliance also accommodates the need for investment planning, and coordination with partner organizations such as the Energy Trust to ensure delivery of necessary conservation programs and to synchronize as appropriates with utilities' two-year Integrated Resources Plan (IRP) cycle.

We also believe it will be important for DEQ to include a cost cap for compliance similar to the RPS for the electrics to maintain energy affordability.

- Alternative Compliance Options

We support a technology-neutral, all-of-the-above, approach to decarbonization. This includes the use of alternative compliance options, such as offsets from outside OR, to ensure best-cost resources are acquired. We agree with OBI that DEQ should increase the allowable use of alternative compliance instruments to at least 20% and this increase should be reflected in at least one modeling scenario. Modeling offset usage of 30%-50% will also help the RAC better understand impacts to equity and cost containment at a higher level of offset compliance usage. We believe this to be especially important for compliance flexibility prior to 2050.

Areas of Divergence from DEQ Staff Leanings

The Small Gas utilities have identified several areas where our recommendations diverge from the leanings of DEQ staff. We have outlined these positions as follows:

- Single, Mass-Based Limit or Cap

Cascade and Avista appreciate the simplicity of a single cap or limit approach. However, we believe that there is a risk of oversimplification that does not take the nuance of different sectors' unique needs and capacities to deliver GHG reductions into account. We believe additional discussion will be required to fully understand how such an approach could be made compatible with sector-specific distribution.

- Reduce Program Emissions 80% by 2050

Executive Order 20-04 established a new GHG emissions reduction goal for the state of OR of 80% below 1990 levels by 2050. However, as it is being designed, the Cap and Reduce program is only covering a portion of the State's emissions. There are multiple methodologies for considering the reduction target for a program that only covers a portion of the emissions under a state-wide target – one allocation methodology would require that all sectors reduce at the same rate, while another may consider that certain sectors reduce at different rates determined by the cost and ability to deliver on the target. We would request that the DEQ provide additional clarity on the scope of emissions that will be covered under the Cap and Reduce program, the ways in which the remainder of OR emissions will be regulated, and the methodology for allocating the statewide 80% reduction goal across these various buckets.

It's imperative that any approach be based from the precise baseline emissions and reduction capacities of the regulated entities, rather than from statewide usage that takes place outside the control of the regulated parties. Inter-sector leakage should also be considered. For example, if

the cost of natural gas increases as a result of program compliance, residential customers might migrate to propane and heating oil, which are both more carbon intensive fuel sources. This would result in a net *increase* to GHG emissions.

Design of Compliance Programs and Instruments

It is essential for Small Gas Utilities to have every opportunity made available to meet compliance obligations. It's important to empathize the dependence of local distribution companies on the actions of the customers we serve to reduce emissions. Much of our ability to meet caps, particularly in the early years of the program, will ultimately depend upon the use of allowances and offsets paired with the increased proliferation of robust and aggressive energy conservation programs.

As mentioned earlier, regulated utilities have an obligation to serve. With very few exceptions, our Companies cannot simply turn off a customer's gas at will. Nor do we control the amount of gas used in a home or building, or the equipment used to burn those molecules for space heating, water heating, and cooking. We can however use market mechanisms such as rebates, to encourage the use of high-performance natural gas equipment, weatherization, and building controls. And we can invest in low-carbon technologies such as renewable natural gas. While renewable natural gas is undoubtedly essential to meeting aggressive targets, there will be a learning curve for the gas utilities as we ramp our capacity and determine the full availability of this essential resource.

As we develop RNG targets and establish programs over the next few years, our main vehicle for compliance will be energy efficiency. Yet, these programs are not directly controlled or delivered by the utility. Unlike neighboring states, all energy efficiency programs in Oregon are delivered by the Energy Trust, an independent third party.

Therefore, as caps are set by DEQ, the success of meeting these caps in the early years of compliance will be contingent upon the independent actions of our customers as well as the ability of the Energy Trust to develop programs and incentives sufficient to drive customer investments in upgrades that result in carbon reductions. Energy Trust's effort, in turn, will be dependent on the overall demand side management capacity identified in their planning processes and potential assessments, paired with the performance measures5 and cost-effectiveness parameters established by the Oregon Public Utilities Commission (OPUC). These factors should be built into ICF's modeling.

It should also be recognized that Cascade and Avista's large customers on a "transport" rate schedule are not currently included in the Energy Trust's programs, nor do they currently contribute ratepayer dollars for this purpose. Without such programs in place, our Small Gas Utilities have no means of driving carbon reductions in these facilities. This is a main concern for our Utilities and where point of regulation resides. We understand that these larger customers use natural gas differently than residential and most commercial customers, having unique circumstances to consider when exploring and implementing energy efficiency enhancements and natural gas suppliers are not the experts in this process. We expect there will be significant complexity and challenges for emissions reductions compliance success for larger commercial and industrial sector use of natural gas. It is possible that these transport customers or other customers could already be acquiring RNG or offsets to mitigate GHG emissions and the Utilities would not be aware of these actions taken by customers. This should be taken into consideration as the DEQ and ICF model scenarios of point of regulation for utilities and large stationary emissions.

Because of the significant role the Energy Trust will play in the delivery of gas efficiency (and associated carbon reduction) efforts, we believe it is imperative that RAC planning and modeling be undertaken in close coordination with this organization. We therefore recommend that at least one session of the RAC be dedicated to a workshop with the Energy Trust and the Oregon Public Utilities Commission (OPUC) detailing their capacity to meet the reduction targets in concert with any regulatory obligations regarding program performance and cost management for which those agencies are responsible. The gas utilities' Integrated Resource Plans, which detail the DSM delivery capacity of the Energy Trust for each LDC is an excellent place to start for primary-source data on projected efficiency achievements and potential.

Ensuring that Energy Trust, the sole vehicle for delivering energy efficiency to standard-income core utility customers, is involved early in the process will ensure that they are provided the information and resources needed to deliver required services on behalf of Oregon's natural-gas LDCs. There are equity benefits to the inclusion of Energy Trust as well since targeted energy efficiency programs such as those offered through this organization result in key progressive effects (lower-income households financially benefiting more than other income groups, i.e. reducing inequity) to offset the expected regressive effects (increased inequity) of a Cap and Trade program.[6]

It is also essential that the Community Action Agencies (CAA's) delivering bill assistance and whole-home weatherization services to low income Oregonians likewise be given the opportunity to provide essential insights to the RAC on impacts of energy affordability to low income households. As part of these discussions, DEQ should consider excluding low income emissions from inclusion of a cap design in order to ensure rate stability and mitigation of energy costs for Oregon's most vulnerable ratepayers.

We believe that our capacity to meet compliance obligations directly through RNG, and through energy efficiency partners such as the Energy Trust will take time. California recognized the critical need for additional transition time in implementing its Cap and Trade framework; that state originally planned to phase in natural gas suppliers as covered entities a full three years after its electric utilities. We therefore recommend that DEQ allocate more allowances towards the beginning of the program to give all parties adequate time to adjust their business models to meet regulatory obligations. This gradual approach has been demonstrated to mitigate the initial dramatic impacts, particularly on natural gas utility customers, and should be modeled in one of the ICF scenarios.

Regardless of the methodology used by DEQ, it will be essential that any policy framework prioritizes cost management. The last year has resulted in unprecedent challenges at both the state and national levels. Energy affordability means ensuring our most economically vulnerable customers never have to make the choice between heating their homes and affording other life necessities. Protection for traditionally underserved and economically fragile populations must be taken into account. Likewise, it's important that the costs to economically impacted businesses and agricultural customers dependent upon natural gas as part of their operations are considered. To this end, the Small Gas Utilities encourage the inclusion of a price ceiling for compliance instruments and offsets. We also encourage the design of off-ramps for constraining costs to low income customers and trade exposed businesses.

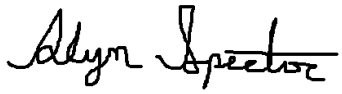
[5] See https://www.energytrust.org/document-type/performance-measures/ for a list of all annual performance measures by year.
[6] For further discussion, see Guidehouse's 2020 *E-Quality* study. Available at: https://www.eurelectric.org/e-quality/

Conclusion

Cascade Natural Gas and Avista appreciate the opportunity to participate as members of the RAC. We believe natural gas LDCs play, and should continue to play, an important role in supplying Oregonians with clean, reliable, and affordable energy. Today, our utilities operate extensive infrastructure to deliver gaseous fuels to end users; in the future this infrastructure should be leveraged to deliver a blend with low-carbon fuels such as renewable natural gas and hydrogen. Our infrastructure also serves an essential role in addressing reliability challenges associated with intermittent renewable resources and the resilience of the overall energy system, such as encountered through increasing extreme climatic events.

We thank you for the opportunity to participate in this process to ensure the best possible outcome for our environment, economy, and equity for all Oregonians.

Respectfully Submitted,



Alyn Spector
Energy Efficiency Policy Manager
Cascade Natural Gas
Representing Cascade and Avista as
Oregon's Small Natural Gas Utilities

From: Cheryl Conway <campaigns@good.do>
Sent: Wednesday, January 13, 2021 12:21 PM
To: Governor Kate Brown; Director Whitman
Cc: kristen.sheeran@oregon.gov; colin.mcconnaha@state.or.us; CapandReduce
Subject: NO exemptios for fossil gas power plants!

Dear Governor Brown,
(cc: Director Whitman)

Allow me to get to the point.

The steps we take forward cannot be small if we hope to mitigate the climate chaos that is already here. We have lost too much ground due to inaction and unreasonable delay. Please require Oregon to reduce its carbon footprint to 50% by 2030, and to zero by 2050.

Secondly, I want you to take an immovable stance regarding fossil gas powered power plants and other large polluters. They cannot be exempted from the carbon reduction limits necessary to hit our reduction targets. It is the only rational way forward. We can't take one step backward with every step forward.

You have the power to establish a legacy for future Oregonians. Use it.

Thank you for your efforts to date. I look forward to your full support of the Climate Protection Plan with hard targets and no exemptions.

Yours sincerely,
Cheryl Conway
Astoria, Oregon, 97103, United States

_____

From: Peter Brandom <Peter.Brandom@hillsboro-oregon.gov>
Sent: Thursday, January 14, 2021 4:52 PM
To: GHGCR2021
Subject: Comments Following GHG RAC Meeting #1

Thank you for a well facilitated meeting today. I have a few comments and questions to follow up.

Comments:

- I too am interested in the details of the modeling and would like to be a part of any sidebar discussions on the modeling, inputs/outputs etc
- Related to the modeling and some comments regarding transporation system modeling in particular, we know in Washington County (urbanized) that the transportation system modeling that is done relative to air quality, system volume etc provides a very blunt and often not terribly accurate measure of reality. We (City of Hillsboro) are contracted with Dr. Linda George at PSU and other air experts to proof a concept that measures a transportation system, related to air emissions, much more granularly and accurately through the use of a fleet of air quality monitors. I want to make you aware of this related to your modeling
- We hope that policy options will somehow take into account voluntary measures made by regulated entities to reduce or offset emissions. Perhaps this will come up, but if not we'd like to explore that a bit

Question:
I did not want to take time today, but would like to clear up some confusion I have related to 'stationary source process emissions.' I'm wondering whether I could connect with someone, briefly, to clarify.

Thank you,
Peter

Peter Brandom (he/him/his) |*Senior Project Manager*
City of Hillsboro, Oregon
phone 503-681-6191
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email peter.brandom@hillsboro-oregon.gov
web www.hillsboro-oregon.gov|Twitter @cityofhillsboro

January 21, 2021

Office of Greenhouse Gas Programs
Department of Environmental Quality
700 NE Multnomah St.
Suite 600
Portland, OR 97232

RE: Climate Protection Program - RAC Meeting #1

DEQ's Office of Greenhouse Gas Programs,

Thank you for the opportunity to provide comments after the first Climate Protection Program Rulemaking Advisory Committee meeting. Although we appreciate DEQ's efforts, **we are very concerned with what was presented**. Our specific comments are detailed further below and we urge DEQ to quickly course correct.

Last Thursday was the first meeting of the Rulemaking Advisory Committee, but this was not the first public meeting on the design of the program. In fact, as DEQ reported, there were over 100 attendees at each of seven technical workshops and over 100 attendees at each of three town halls last year. There were also almost 700 written comments prior to the Rulemaking Advisory Committee meeting. As DEQ noted in the summaries and background materials provided for the first RAC meeting, many of those comments were focused on the **ambition of the program**:

- Regarding the **workshops**:
  - "*Many environmental organizations supported creating a stringent and ambitious program that incentivizes investments and early reductions and covers all stationary sources of emissions possible without exemptions.*"[1]
- Regarding the **town halls**:
  - "*General support expressed developing an ambitious statewide program to cap and reduce emissions, cover all greenhouse gasses and sources, and incentivize early reductions.*"[2]

[1] Scoping Phase Public Engagement Report - Page 5: https://www.oregon.gov/deq/Regulations/rulemaking/RuleDocuments/ghgcr2021ScopingReport.pdf.
[2] Scoping Phase Public Engagement Report - Page 7: https://www.oregon.gov/deq/Regulations/rulemaking/RuleDocuments/ghgcr2021ScopingReport.pdf.

- Regarding the **overall scoping phase**:
    - "*The following are overall key themes of the public input received during the scoping phase:*
        - *Emissions: Design the program to cover more regulated entities and strive to achieve significant and early reductions, due to overall concern about threat of climate change, current impacts of climate change in Oregon on public health and the environment, and that Oregon is behind in taking action.*"[3] ...
- Background **brief for RAC meeting #1:**
    - "*DEQ has heard from many stakeholders who seek large, early emissions reductions.*"[4]

Yet, what DEQ presented last week to the RAC does not match the ambition the majority stakeholders asked for. Not only that, it is inconsistent with what is required by the Governor's Executive Order - and what is required by DEQ's mission.

Again, at the first RAC meeting, many stakeholders and RAC members underscored similar interests in ambition for the program. And, relatedly, concerns with what DEQ was presenting.

After all of this public input, the question that we're left with is: **will DEQ step up to the plate and when?**

Cap

DEQ continues to assert that the Climate Protection Program does not need to at least track the state goals in the Governor's Executive Order. This is unacceptable. The Governor's Executive Order is clear on what the state goals are and the fact that the program should at least track those goals. DEQ is flirting with a concerning precedent here by setting aside the direction in the Governor's Executive Order.

DEQ has appeared to take the half step of indicating that it would likely commit to a program that tracks the 2050 goal outlined in the Governor's Executive Order. But, DEQ continues to shun the interim target - posing a question instead to the RAC of whether it should be included. This should not be a question. The question that should be asked in this case is: Should DEQ be going above and beyond the goals outlined in the Executive Order? Both the 2050 target and the 2035 interim target have the words "at least" in front of them - meaning they are a minimum and contemplated to be built upon.

Furthermore, DEQ's mission is to protect Oregon's environment. The science says that we need to go further and faster than the goals in the Executive Order to avoid the worst impacts.

[3] Scoping Phase Public Engagement Report - Page 3: https://www.oregon.gov/deq/Regulations/rulemaking/RuleDocuments/ghgcr2021ScopingReport.pdf.
[4] Rulemaking Background Brief - Page 3: https://www.oregon.gov/deq/Regulations/rulemaking/RuleDocuments/ghgcr2021BackBrief.pdf.

Not only does the best available science say that an interim target is needed, it also says that an interim target should be cutting emissions in half by 2030.[5] As a result, DEQ should not only be embracing an interim target, but planning to achieve an interim target that is consistent with the best available science. And, particularly in light of the many stakeholders who have called for ambition and reminded DEQ of its responsibility.

Adding to the necessity, the Oregon Global Warming Commission (OGWC) has been calling for an ambitious, science-based interim target for years to help get us back on track. And, the latest OGWC Biennial Report released last week shows just how far our state has gone off track: The preliminary 2019 sector-based emissions data included in the report exceed the state's 2020 emissions reduction target (set over a decade ago) by 26 percent or 13 million metric tons of carbon dioxide equivalent.[6] This news further underscores that we need to get back on track and actually make the reductions necessary in the near term instead of continuing to kick the can down the road. An ambitious interim target is a cornerstone of this effort.

In light of all of the above, DEQ's unwillingness to embrace at least the interim target of 45% below 1990 levels by 2035 in the Executive Order is frankly irresponsible and needs to be reconciled immediately.

Electricity

DEQ also continues to assert that the program should not cover electricity, despite public input to the contrary, and without providing a full analysis of the basis of its decision. DEQ has not provided analysis to support it's assertion that there is a leakage risk by covering electricity generated in Oregon under the Climate Protection Program that outweighs the benefits of covering the largest stationary source of emissions in Oregon. Or that any leakage risk cannot be mitigated by program design. Instead, DEQ has unilaterally taken the discussion off the table by excluding electricity generation from all of the modeling policy scenarios it plans to run.

In-state electricity power generation accounts for approximately 1 in every 10 tons of our emissions. The use of fossil fuels (fossil gas) in electricity generation is also increasing. To address climate change, we have to address this significant portion of emissions - and the Climate Protection Program can do so.

As we've noted in prior comments, there are reasons why leakage - electric utilities importing more dirty power to avoid complying with the Climate Protection Program - may not be as much of a concern as DEQ is making it out to be.[7] Other commenters have raised similar points.[8] We

[5] Intergovernmental Panel on Climate Change (IPCC) Special Report on 1.5 degrees: https://www.ipcc.ch/sr15/.

[6] Oregon Global Warming Commission 2021 Biennial Report to the Legislature. https://www.keeporegoncool.org/climate-conversation-blog/2021/1/13/oregon-global-warming-commission-2020-biennial-report.

[7] Comments by Climate Solutions, Oregon Environmental Council (OEC), Natural Resources Defense Council (NRDC), and Environmental Defense Fund (EDF) on the Program Options to Cap and Reduce Greenhouse Gas Emissions, Preliminary Report ("Cap and Reduce Report") - June 15, 2020. See also OEC-CS Workshop 1 comments: https://www.oregon.gov/deq/ghgp/Documents/ghgcrWScomments.pdf

[8] See Green Energy Institute Workshop 1 comments: https://www.oregon.gov/deq/ghgp/Documents/ghgcrWScomments.pdf.

won't re-tread all the arguments here, but suffice to say that most, if not all market and policy trends are pointing away from fossil fuels and towards renewable energy. And, legislation on the books is actively closing opportunities to import dirty electricity. By 2030, coal-fired electricity will not be able to be imported to Oregon.[9] In addition, our neighbors to the North and South both have 100% clean mandates on the books meaning their power supply will be cleaner and cleaner moving forward. In fact, DEQ is modeling all of these as inputs into the reference case for the program.[10]

Furthermore, since the public process around the Climate Protection Program began, one of the two major investor-owned electric utilities in Oregon - Portland General Electric - announced an ambitious decarbonization goal:

> *"We know our customers and communities want to use clean energy, which is why we're setting a new, accelerated goal to reduce emissions associated with the power we supply to customers by at least 80% by 2030. Ending operations at coal plants, like the one we recently closed in Boardman, Oregon – adding more renewable generating facilities through wind and solar, as well as battery storage, like our new Wheatridge facility, will help us get there. We are also setting an aspirational goal of zero greenhouse gas emissions associated with the electricity we serve customers by 2040. Reaching that goal will require policy, regulatory and technology advancements to fully eliminate emissions from our power supply."*[11]

One could easily surmise from this goal that this announcement only buffers against the supposed risk of leakage from this company as they would not only be going back on their stated commitment, but also what their customers want. Furthermore, the majority of emissions from electricity generated in-state and delivered to Oregonians is actually from this company. Per Slide 24 from Workshop 1:

> *"Emissions from the in-state generators (natural-gas fired) serving Oregon load are >95% associated with Portland General Electric...regulation would mainly only impact PGE and their customers."*[12]

So, for all the talk from DEQ of leakage risk, the one company responsible for almost all of the emissions in question has already committed to reduce their emissions (and frankly more ambitiously than anything DEQ has floated requiring). Yet, DEQ continues to push to exempt the emissions from the Climate Protection Program.

Also, as we've noted in previous comments, if potential leakage is the concern, there are program design options that can help minimize the risk. DEQ has not provided any discussion of these. At one point during the workshops, Public Utility Commission (PUC) staff noted they were considering possibilities to address leakage:

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[9] See SB 1547 (2016): https://olis.leg.state.or.us/liz/2016R1/Measures/Overview/SB1547.

[10] Slide 65 of RAC Meeting #1 Presentation: https://www.oregon.gov/deq/Regulations/rulemaking/RuleDocuments/ghgcr2021rac1slides.pdf.

[11] Portland General Electric Climate Goals: https://portlandgeneral.com/about/energy-future/climate-goals; https://portlandgeneral.com/news/2020-11-18-portland-general-electric-aims-for-companywide-net-zero.

[12] Slide 24 of Technical Workshop 1: https://www.oregon.gov/deq/ghgp/Documents/ghgcrPres081920.pdf.

"A member of the PUC noted that possibilities to prevent leakage are being discussed internally."[13]

Neither DEQ nor the PUC have shared the substance of these discussions with the public. **If DEQ truly wants an open and transparent process, it should provide the RAC and the public with a full analysis of the leakage risks DEQ is relying on for the exemption, a discussion of the possibilities to prevent or mitigate leakage, and an analysis of why the leakage risks, if there are any, would outweigh covering the largest (and increasing) stationary source of emissions in Oregon.**

Furthermore, it is important to point out that the discussion above has largely centered around existing power plants that deliver electricity to PGE customers in Oregon.. Yet, there are other emissions from generating electricity in Oregon that could also be covered, particularly those that are exported, but are swept up in DEQ's blanket exemption. DEQ would be giving a free pass to emissions from power that is generated by gas plants in Oregon, but exported out to states like Utah and Wyoming. In addition to the greenhouse gas emissions associated with these power plants, the air pollution from these plants impact the Oregon communities surrounding them. Given that there are no regulations or limits in Oregon law to reign in that exported pollution, the amount of exported power from these gas plants can change and increase over time as well, potentially meaning more emissions from this portion of the electricity sector. There could also be future power plants built and DEQ is choosing to give those a free pass as well by not dealing with electricity in this program.

Modeling

Unfortunately, DEQ carries over the above missteps into the proposed modeling that will inform program design. DEQ is proposing modeling a policy scenario that doesn't even include an interim target[14] and not one scenario that includes electricity generation. Not only that, but multiple modeling scenarios include exemptions for even more entities - process emissions from stationary sources as well as oil and gas companies that emit up to 300,000 MTCO2e per year.[15] **Modeling exemptions and slow-walking emissions reductions is not what DEQ should be doing if it is serious about protecting the environment.**

At a minimum, all of the scenarios should model at least the interim target of 45% below 1990 levels and the 2050 target of at least 80% below 1990 levels by 2050. That is what the Executive Order requires and the bare minimum from a scientific standpoint. DEQ should also go further and model a scenario that includes a target that goes above and beyond the targets in the Executive Order. Both of the targets in the Executive Order say "at least" meaning they are a minimum and best available science demands that those targets should be even more ambitious. The IPCC has said that we need to reduce our emissions in half by 2030 to avoid the worst impacts. DEQ should be modeling that instead of modeling slow-walking emissions counter to the Executive Order and science. It should also be modeling other program design elements that can help achieve those reductions further and faster.

[13] Technical Workshop 1 Meeting Summary - Page 8: https://www.oregon.gov/deq/ghgp/Documents/ghgcrmeetsumTW1.pdf.

[14] See Scenario 3 in Slide 71 of DEQ's RAC Meeting #1 presentation which only includes a 2050 target: https://www.oregon.gov/deq/Regulations/rulemaking/RuleDocuments/ghgcr2021rac1slides.pdf.

[15] See Scenarios 2 and 3 in Slide 71 of DEQ's RAC Meeting #1 presentation: https://www.oregon.gov/deq/Regulations/rulemaking/RuleDocuments/ghgcr2021rac1slides.pdf.

In addition, DEQ should include electricity generation in the scenarios - or at least most of them. See electricity section above.

Furthermore, DEQ should not be modeling additional exemptions. While the data in the slides is challenging to parse, and we would welcome DEQ's precision, by our estimations, the exemptions being modeled account for approximately 14 million MTCO2e per year.[16] That's almost one-quarter of the entire state's emissions that could be covered under the program.[17] To the extent that DEQ continues to pursue these exemptions (which again, we oppose), DEQ should make clear what each of the proposed exemptions would amount to both in actual emissions as well as percentage of the total emissions the program could cover.

Instead of toggling between exemptions, DEQ should be focusing on modeling ways to drive earlier reductions. This could include modeling a requirement for the use of best available technology or the use of an emissions reduction plan as DEQ has floated. In addition, DEQ offered a scenario during the Illustrative Scenarios discussion that focused on a more direct regulation approach.[18] Why not model a scenario along those lines to better understand the tradeoffs?

Underlying all of the above was a troubling conversation at the RAC around whether or not DEQ was accounting for equity in the modeling. Multiple RAC members raised concerns and even provided examples of resources in other states that DEQ could use to inform and improve its modeling to incorporate equity. DEQ should provide an accounting to the RAC at the next meeting regarding how those concerns have been/are being addressed. The design of this program is intertwined with e uity and should provide the fullest understanding that the modeling can provide. And, it is important to note, that the voices of impacted communities need to be heard and prioriti ed, particularly where the modeling falls short.
here was also some concerning conversation from AC members re uesting individual meetings with IC the contractor regarding modeling assumptions and scenarios. hese conversations should not be done individually all AC members should be able to attend if meetings are granted, and preferably, done at AC meetings where the public can also listen in and comment. owards that end, some of the more technical uestions we would want to explore include

[16] Many of the RAC Meeting #1 slides specifically note electricity emissions are exempted, but the closest proxy for electricity emissions is Slide 38. Forty-nine percent of the natural gas emissions (16.9 million MTCO2e total) is shown to be used for electricity generation which would be 8.3 million MTCO2e. As part of modeling scenarios 2 and 3, DEQ is also modeling exempting 14% of fuel suppliers which is another 3.4 million MTCO2e (see Slide 35 - total fuel suppliers = 24.1 MTCo2e). Process emissions from stationary sources are also being modeled for exemption = 1.5 Million MTCO2e in 2019 according to Slide 41. DEQ is also planning to exempt landfill emissions, but those are expected to be covered under a rulemaking that is already under way and are not included in these numbers.

[17] DEQ GHG Reporting Program 2019 Preliminary data shows total state emissions at 65 million MTCO2e. Seven million of that is from agriculture which DEQ says it does not have the authority to regulate. That leaves 58 million (with some of that being from landfills to be regulated under another program and from imported electricity which DEQ also says it does not have the authority to regulate). But still sticking with that number for conservative purposes, almost a quarter of emissions would not be included based on the exemptions.

[18] See Scenario 3 in the Illustrative Scenarios Brief: https://www.oregon.gov/deq/ghgp/Documents/ghgcrIllustrativeScenarios.pdf.

- Why and how is SB 98 being included in the reference case as it is a voluntary program and there are questions around the true technical potential of RNG?
- Why and how are the WA and CA 100% clean bills being included in the reference case? Are there certain percentages of electricity being allocated from each state and with what mix and on what timeline?
- Why can't the effect of the Executive Order initiatives be modeled in a way that would provide a useful comparison? DEQ explained during the RAC that including it in the reference case would make it hard to disaggregate the impacts, but why can't a second reference case be run with the Executive Order initiatives included to provide another comparison point as the Climate Protection Program will need to do more or less depending on what other policies are in place? Previously submitted comments from Climate Solutions, along with ATNI, as co-leads of the Renew Oregon OCAP Coalition detail the interest behind this further.[19]

Other issues (noted during the meeting for future discussion)
DEQ broached a number of subjects throughout the RAC meeting that were for future or ongoing discussion. These included:

- Thresholds
- Point of regulation
- Compliance period
- Distribution of compliance instruments

While we do not yet have all of the information on these, for now, we will direct you to our previous comments during the scoping phase which cover many of these topics.[20] We look forward to continuing the conversation on these as well as the other items discussed above.

We appreciate DEQ's recognition that "there are significant economic and health costs associated with inaction on greenhouse gas emissions and climate change."[21] That's why DEQ must course correct now to maximize the potential for the Climate Protection Program to effectively steer Oregon off the path of climate disaster, and assure Oregonians that their health and wellbeing not polluters are the priority.

Sincerely,

Zachariah Baker
Oregon Policy Manager
Climate Solutions

Nora Apter
Climate Program Director
Oregon Environmental Council

[19] See Modeling Study Written Comment compilation: https://www.oregon.gov/deq/ghgp/Documents/ghgcrBAUcomm.pdf.
[20] See OEC-CS comments on Workshops 1-3: https://www.oregon.gov/deq/ghgp/Documents/ghgcrWScomments.pdf.
[21] See Rulemaking Background Brief - Page 4: https://www.oregon.gov/deq/Regulations/rulemaking/RuleDocuments/ghgcr2021BackBrief.pdf

From: Jennifer Leveque <jenileveque@gmail.com>
Sent: Wednesday, January 20, 2021 8:19 AM
To: GHGCR2021; dcglobalwarmingcoalition@gmail.com
Subject: Public Comment, Climate Protection Program

To: The Office of Greenhouse Gas Programs, Department of Environmental Quality

From: Stuart Liebowitz, Douglas County Global Warming Coalition

RE: Public Comment, Climate Protection Program

The Douglas County Global Warming Coalition representing 450 residents of rural Douglas County requests that the Department of Environmental Quality meet the legally required goals of the Governor's Executive Order on climate change. Specifically:

* Reduce greenhouse gas emissions 45% below 1990 levels by 2035 and
* An 80% reduction by 2050.

All models developed by the DEQ must achieve both these goals as mandated by the Executive Order. In order to do so, it is imperative that:

* DEQ regulates natural gas and all sources of electricity in Oregon.
* Establish a Climate Protection Program that is economy-wide with no exceptions.

To do otherwise risks failing to meet the goals of the Executive Order.

We also recognize that the best science should govern all decision making. It is probable that the goals set by the Executive Order are insufficient to address the climate crisis. We, therefore, urge the DEQ to view the benchmarks of the Executive Orders, a minimum threshold and be prepared to accelerate the reduction of greenhouse gas emissions as dictated by the best science.

We are deeply distressed at the suggestion by the DEQ that it is not bound by the Executive Order and the Lack of urgency it implies. It has borne the brunt of climate change impacts. Global Warming has intensified and increased the frequency of wildfires. This has resulted in lives and home lost and livelihoods devasted. Failure to follow the Executive Order is an abdication of DEQ's legal and moral obligation to provide a safe environment for Oregonians.

We request that DEQ follow the mandated parameters of the Executive Order and, if the best science dictates, exceed them for the sake of ourselves, our children, and the planet.
Sincerely,

Stuart Liebowitz, On behalf of the Douglas County Global Warming Coalition
143 SE Lane Avenue
Roseburg, OR 97470
Ph- 541-672-9819
Email: dcglobalwarmingcoalition@gmail.com

January 21, 2021

Oregon Department of Environmental Quality
Office of Greenhouse Gas Programs
700 NE Multnomah St. Suite 600
Portland, OR 97232

GHGCR2021@deq.state.or.us ***Submitted via email***

Cc: Kristen Sheeran, Nik Blosser, Richard Whitman

EDF appreciates the opportunity to comment on DEQ's presentation made to the first RAC meeting. Below, EDF comments on some of the "leanings" and questions that DEQ presented, organized in the order that they appear in the DEQ presentation. Where relevant, we reference previous comments submitted to DEQ during the public scoping phase.

Some of the themes of these comments include:

- The Climate Protection Program should serve as a backstop for achieving Oregon's legislative and executive climate targets.
- Broad coverage of major emitting sectors is the most effective way to place a firm limit on climate pollution in line with these reductions and incentivize cost-effective reductions.
- It is best to address concerns like leakage or process emissions through allocation strategy rather than by exempting pollution from the program.

EDF comments based on RAC presentation:

Program coverage of in-state electricity generation.
During the RAC meeting, DEQ staff stated their assessment that this program is not well-suited to regulating emissions from the electricity sector. EDF disagrees with this assessment for a range of reasons, including:

- We have previously shared our legal analysis demonstrating Oregon's existing authority to regulate imported power (see EDF's technical workshop comments, pgs. 6-8). However, as discussed in our joint comments with Climate Solutions, Oregon Environmental Council, and Natural Resources Defense Council on the cap and reduce preliminary report (pgs. 4-6), **even if Oregon does not regulate emissions from imported power, it should regulate emissions from in-state electricity generation under the cap.** The most effective tool to limit pollution from in-state power generation facilities is ensuring that they are subject to greenhouse gas emission limits under the Climate Protection Program.

- EO 20-04 explicitly directs EQC and DEQ to cap and reduce emissions from large stationary sources of GHG emissions, and also clearly directs DEQ to use the full authority it possesses under the law to achieve Oregon's greenhouse gas reduction targets. To leave electricity generation facilities out of the program entirely would contravene EO 20-04's clear directives.
- Additionally, the electricity sector provides some of the most cost-effective opportunities for emissions reductions. These cost-effective opportunities are critical for smoothing the transition to a clean economy for all sectors, particularly in the near-term.
- DEQ has repeatedly cited concerns about leakage in presenting program design options that omit in-state electricity generation from program coverage. In our written comments on the technical workshops (pgs. 2-6), we have provided evidence from the Regional Greenhouse Gas Initiative and additional context specific to Oregon to demonstrate that 1) leakage risks can be mitigated through allocation strategies, and 2) the benefits of covering in-state power significantly outweigh the possible disbenefits from leakage.

Threshold for program coverage.
EDF recommends a threshold of coverage at 25,000 MT CO_2e with a reporting requirement threshold set below the coverage threshold, at 10,000 MT CO_2e. We also do not believe that Oregon needs to focus its scarce modeling resources on evaluating this question. Oregon would be attempting to reinvent the wheel by doing so. Back in 2008 and 2010, Oregon signed on to design recommendations developed by the Western Climate Initiative (WCI) which recommended a 25,000 MT CO_2e threshold. While some of the WCI design recommendations may be beyond what Oregon believes it has existing authority to do, this is clearly within DEQs authority and DEQ should not redo the work of past Oregon pro-climate administrations. Oregon was part of an 18 month long process to carefully negotiate and design just the first set of 2008 recommendations and an additional process to adopt the 2010 recommendations. THis is also the threshold negotiated in legislative packages, developed over many years. Finally, while Oregon might not be actively considering linkages with other programs now, designing the program with linkage in mind wherever possible will provide more options down the road. California and Quebec both use a 25,000 MT CO_2e threshold for coverage.

In explaining why it chose a 25,000 MT CO_2e coverage threshold and 10,000 MT CO_2e reporting threshold, the California Air Resources Board stated:

> Reporting down to a threshold of 10,000 MTCO2e is needed to determine whether the threshold for inclusion in the cap-and-trade program is set at the appropriate level to capture the largest emissions sources. The lower reporting threshold is also required to monitor potential leakage to facilities or entities below the threshold of the cap-and-trade program.

EDF does not believe that DEQ should factor leakage risk into a decision about the threshold for program coverage. Addressing leakage concerns through allocation of free allowances will better promote the climate goals of the program rather than narrowing coverage of the program. Allocating allowances via output based allocation (OBA) will facilitate addressing leakage risk with allocation much more effectively than doing so based on historical emissions, since OBA will mitigate the incentive to reduce emissions by curbing production.

Similarly, EDF believes it would be more appropriate to allocate free allowances based on estimated process emissions rather than excluding process emissions from the program.

EDF supports DEQ's preferred approach of a single, mass-based cap for the program.
A single, mass-based cap across all sectors is strongly preferred. As discussed in our technical workshop comments (pg. 9), basing a cap on an absolute tonnage of emissions rather than an emissions intensity standard is closely aligned with EO 20-04, which requires an absolute reduction in greenhouse gas emissions. A mass-based cap will also increase the environmental integrity and certainty provided by the program by putting a true cap in place that ensures that overall emissions reduction goals are achieved.

EDF also sees a number of important reasons to prefer a single cap across sectors, as discussed in our technical workshop comments (pg. 8). These reasons include benefits for cost-effectiveness and creation of a level playing field. This approach is also the most robust to uncertainty, allowing for the most cost-effective reductions to be realized first without being dependent on our ability to predict future conditions within specific industries and sectors.

EDF supports excluding landfill (and regulating separately) and biogenic emissions. This is the approach that the legislature ultimately settled on during lengthy climate negotiations. A separate landfill regulation will allow DEQ to tailor the requirements to make them specific to landfills. Since most landfill pollution consists of methane which is a short-lived climate pollutant, acting quickly and aggressively to reduce pollution is critical. Many other states also regulate landfills through specific regulation, including California.

Annual caps or emissions limits must meet or exceed both the 2035 and 2050 targets.
EDF believes that, at a minimum, program allowance budgets should be set based on a linear reduction between BAU emissions at the start of the program and the 2035 and 2050 targets. Interim targets are critical for accountability, and the program should be designed to ensure that Oregon will meet or exceed EO 20-04's target of reducing GHG emissions by at least 45% below 1990 emissions levels by 2035. While the program caps should be aligned with the interim 2035 target, it is also important to maximize cumulative emissions reductions over the life of the program. We explain further and demonstrate the impact of different cap trajectories on cumulative GHG emissions reductions in our recent blog "Important climate rulemaking kicks off in Oregon: What we're watching."

DEQ should consider ways to collect product output data to inform distribution methodology.
EDF strongly encourages DEQ to, as part of the Climate Protection Program regulation, require that relevant covered facilities provide the data needed to facilitate output-based allocation. In our written comments on the technical workshops, we discussed the benefits of output-based allocation, including rewarding industries that have already invested in low-carbon technology, while continuing to provide a powerful incentive for early action (EDF technical workshop comments, pg. 10). Output-based allocation can also mitigate leakage risk and protect competitiveness, for both EITE entities and the power sector—evidence from the RGGI region illustrates the benefits of output-based allocation in the power sector (EDF technical workshop comments, pg. 3).

As discussed in our technical workshop comments (pg. 4), we acknowledge that it may be appropriate for DEQ to allocate allowances based on historical emissions as a transition step in the first year or early years of the program. However, after the first year or early years of the program, if regulated sources are receiving allowances directly that allocation should be output-based.

DEQ staff asked if the program should also base compliance instrument distribution on long-term plans to implement best-available technologies to reduce emissions.
We believe that this concept is worth exploring, and we would be interested to learn more about this and other opportunities to make free allocation contingent on the source having made some investment in direct, on-site emissions reductions through efficiency improvements or other technologies. However, it is important that DEQ explore additional strategies for capturing program value for all Oregonians, including allowance allocation strategies. We further discuss the importance of such strategies for achieving equity as a program goal in our illustrative scenario comments (pg. 2).

DEQ should pursue allowance allocation strategies that ensure that the value inherent in the program's compliance instruments is not captured solely by polluters.
EDF has previously suggested options for achieving this that do not require DEQ to raise revenue, including allocation to non-covered entities and overallocation to utilities. Such strategies would involve some level of project-based allocation, with requirements that 1) those allowances be made available for transaction via the online platform that DEQ is developing to administer the program; and 2) allowance value be used for investments that will reduce emissions and are consistent with statutory and executive order objectives. We provide more detail about both free allocation to non-regulated entities and free allocation to utilities in our technical workshop comments (pgs. 11 -14).

Baseline period for evaluating compliance instrument distribution.
As discussed on page 4 of our comments on the illustrative scenarios, we believe that when allocation is based on historical emissions, it is essential that companies do not have an opportunity to artificially inflate emissions to receive a larger distribution of allowances. Therefore, historical emissions for calculating a baseline should come from 2019 data or earlier. And DEQ should transition to output based allocation as quickly as possible to secure the benefits of that allocation method.

Banking.
EDF agrees that banking of allowances from under the cap should be broadly allowed as this can create important benefits including incentivizing earlier emissions reductions. However, we have broader reservations about alternative compliance instruments and want to note that this support does not necessarily extend to ACIs. While banking is overall helpful, it should be balanced with design elements intended to reduce unexpectedly large supplies of allowances. DEQ notes that banking can provide a buffer, but it only provides a buffer if allowances are unexpectedly scarce. An allowance price containment reserve is one tool to buffer against unexpected abundance of instruments. California also uses elements of its auction design to control supply which is one of the many reasons we continue to push DEQ to consider the benefit of a consignment auction that does not raise revenue for the government. However, DEQ could also consider novel mechanisms that don't rely on an auction. For example, DEQ could withhold a set percentage of allowances from distribution if market prices for allowances are at or below a floor price set by DEQ. We believe it is helpful to have these supply adjustments set in rules so they are predictable. RGGI has had success with cap adjustments to retire allowances but is moving to a rule based supply reduction system to enhance predictability.

EDF supports DEQs preferred approach of broad trading flexibility and agrees with the benefits DEQ has articulated.

EDF supports multi-year compliance periods and annual, partial compliance obligations in Oregon, as we did in California during their design phase.
The California Air Resources Board articulated the benefits of this approach well, stating that a multi-year compliance period will "provide increased compliance flexibility and address price volatility."[1] CARB also describes the benefits of pairing a multi-year compliance period with annual, partial compliance obligations, stating that this approach will both "address the need to ensure that covered entities are making progress toward their obligations,"and "reduce the potential for a covered entity to default on a three-year compliance obligation."[2]

[1] California Environmental Protection Agency Air Resources Board. "Proposed Regulation to Implement the California Cap-and-Trade Program: Initial Statement of Reasons." October 28, 2010. Part 1, Volume 1. Page II-22.
[2] Ibid.

Alternative Compliance.
EDF has provided feedback and recommendations on alternative compliance instruments in our previous comments on both the technical workshops (page 10 of our technical workshop comments) and the illustrative scenarios (page 5 of our illustrative scenario comments). We will likely have additional feedback following RAC meeting #2, which will include discussion of cost containment measures such as alternative compliance. However, we would like to emphasize the following:

- The objectives for including ACIs seem two fold: 1) to provide program flexibility and cost containment and 2) to provide a path for investments in GHG reductions like EV infrastructure. EDF does not believe that including ACIs from under the cap is the best option for either of these objectives.
    - First, high-quality offsets from outside the cap can provide helpful program flexibility under the right circumstances. However, since these reductions do increase the amount of allowable pollution, there should be a limit on their use. We have laid out our concerns about the double-counting risk inherent in including ACIs from under the cap in previous technical workshop comments (pg. 10).
    - Other forms of cost containment are available to DEQ besides a high limit on ACIs or creating ACIs from under the cap. An allowance price containment reserve populated with allowances from under the cap is one good option. Allowances could be released and distributed if a specific price "ceiling" is reached in the allowance market. DEQ could also allow an increased use of ACIs from outside the cap, if a specific price ceiling is reached in the allowance market. If DEQ has other restrictions on ACIs, like a requirement to provide environmental benefits in Oregon, these requirements could also be relaxed if prices are unexpectedly high.
    - Second, as described in our comments on the illustrative scenarios (pg. 2), instead of including investment protocols as a form of ACI, DEQ could award allowances on top of a regulated entity's initial free allocation based on investments in these approved investment protocols. These awarded allowances would come from under the cap, in other words would not increase the level of overall allowable emissions. DEQ would withhold a significant portion of the allowance budget from initial free allocation to provide this award of additional allowances based on approved investments.

Modeling analysis.
As stated in our previous comments on the modeling study (pg. 4), we recommend that model outputs include greenhouse gas emissions (cumulative reductions, as well as emissions in specific years), cost/ton of CO_2e reduced, description of sectoral changes, criteria pollution emissions reductions, and quantified benefits of both carbon and criteria pollutant reductions. It is important that the modeling study demonstrates the impact of different program scenarios on cumulative emissions reduction, given that cumulative emissions reductions are a critical metric for program success.

Further, the policy scenarios laid out during the RAC meeting do not closely reflect what we see as the highest priority questions that DEQ could explore through modeling:

- DEQ proposes modeling a 45% below 1990 by 2035 target and the 2050 target in scenarios 1 and two and only the 2050 target in scenario three. First it is not clear what would actually be varied. The 2035 target represents roughly a linear reduction between expected BAU emissions at the start of the program and the 2050 target. As we state above, we believe this is the minimum that DEQ should consider, consistent with the "at least" language in statute and the EO. It would be more meaningful for DEQ to evaluate what would be necessary and the costs and benefits of achieving deeper reductions by 2030, as we suggest in our recent blog.
- The other question DEQ appears to explore through their proposed scenarios is around the threshold for inclusion in the program. As described above, using scarce modeling resources on this question would be wasteful.
- While DEQ seems resolved in its decision not to regulate even in-state electricity generation, comments demonstrate that this is a seriously contentious issue. EDF joins other advocates in strongly opposing this choice. An area of this importance and level of controversy is a good candidate for modeling. DEQ should include a scenario where at least in-state generation is covered, as described in our previous comments on the modeling study (pg. 4). Including such a scenario will help both DEQ and stakeholders understand the impact of leaving in-state electric generation uncovered by the program.
- We agree with comments made by some RAC members that the 8% and 12% limits on ACIs proposed are too high. We generally have concerns about including ACIs from reductions made under the cap, as described in our previous comments on the illustrative scenarios (pg. 5).
- Thus, we would recommend that DEQ consider only accepting ACIs from adopted protocols. All of these restrictions likely mean that DEQ cannot assume, as they propose to do, that ACIs would even be available up to the 12% level. It may not be possible to model this lack of supply but DEQ could indirectly do so by including a lower offset threshold. For example, DEQ could provide a good proxy for program flexibility more generally by including 1) a no offsets scenario, 2) a medium offsets limit (6%) scenario, and 3) a 12% offsets limit scenario.

We appreciate the opportunity to provide responses to the leanings and questions that DEQ presented during the RAC meeting. We look forward to continued engagement on the Climate Protection Program.

Respectfully submitted,

Erica Morehouse
Senior Attorney, Environmental Defense Fund

Kjellen Belcher
Senior Analyst, Environmental Defense Fund

Moore Noise, LLC

January 21,2021

Oregon Department of Environmental Quality
Cap and Reduce Program
700 NE Multnomah Street, Suite 600
Portland, OR 97232-4100

Submitted via email to GHGCR2021@deq.state.or.us

Re: Rules Advisory Committee Meeting #1 – Comments

This comment letter is submitted on behalf of EVRAZ Portland. Thank you for the opportunity to participate in the Rules Advisory Committee Workshop 1 to support development of Cap and Reduce regulations. First, we would like to acknowledge the complex and difficult task ahead of DEQ and state that we are committed to meaningful participation in this effort to reduce greenhouse gas emissions.

Reference Case (Business as Usual) Modeling Scenario and Leakage

Leakage of emissions to outside of Oregon is a real and substantive issue for the proposed program. Based on DEQ's data, leakage of greenhouse gas emissions to outside of Oregon from activities inside of Oregon is already a substantive issue. Both the Consumption-based (https://www.oregon.gov/deq/mm/Pages/Consumption-based-GHG.aspx) and the Sector-based (https://www.oregon.gov/deq/aq/programs/Pages/GHG-Inventory.aspx) emissions inventories show significant emissions export from Oregon. The Consumption-based emissions inventory shows that 66 percent of the greenhouse gas emissions caused by the consumption habits of Oregonians are exported to other states and countries. Vehicles and parts are by far the largest emissions category.

In the Sector-based emissions inventory, because Oregon imports 76 percent of electricity, at least 76 percent of greenhouse gas emissions from electricity used in the state are exported from Oregon to other states per analysis by DEQ staff. This export may be exacerbated by the Cap and Reduce Program (Renewable Portfolio Standards may also cause emissions export). Both the Reference Case modeling, and modeling of the proposed program should include an analysis of leakage from Oregon. While leakage can benefit Oregon when it reduces emissions of locally concentrated pollutants. Leakage will reduce or eliminate the effectiveness of actual overall greenhouse gas reduction from a U.S. or Global scale because those local reductions "leak" to other states or countries, but continue to be emitted.

One method to analyze the probability of leakage for electric system emissions would be to compare the system emissions based on Integrated Resource Plans (IRP) for utilities supplying electricity to Oregon in comparison to the emissions Oregon is claiming after implementation of state control programs. If IRP based emissions are higher than Oregon's calculated emissions based on the control programs, Oregon is effectively leaking (exporting) emissions of greenhouse gases. This allows Oregon to take credit for the

benefits of using electricity while externalizing some of the costs of doing so to other states. Careful consideration needs to be given to the timeline of forcing emissions from natural gas to electricity so that emissions of greenhouse gases are not increased in the short term. From DEQ's data (https://www.oregon.gov/deq/aq/programs/Pages/GHG-Emissions.aspx, 2010-2019 - Greenhouse Gas Emissions From Electricity Use Excel Workbook), it appears that future in-state electric supply may come from suppliers with emissions well above the emission rate of natural gas. Greenhouse gas emissions are a global issue. Forcing Oregon's emissions to other locations will not solve the issue. Leakage must be considered carefully and program provisions tailored to reduce or eliminate leakage of emissions. The Reference Case needs to be set up so that leaked emissions can be properly accounted. This would include accounting for the health effects of exported emissions.

Local Government Planning regulations do not appear to be included in the Reference Case Policy Assumptions on slide 65 of the *Oregon Climate Protection Program: Rulemaking Advisory Committee Meeting 1*. These programs have likely played a significant role in Oregon's already low greenhouse gas emissions per capita achievements. "Reality checks" on the results of the modeling should be implemented. One reality check would be the trajectory of per capita emissions in comparison to past per capita emissions which have continued to decrease as the state has added population.

Proposed Modeling Scenarios

Generally, it is useful to hold some parameters steady while evaluating the effects of other parameters as DEQ is proposing. We support this approach, while acknowledging DEQ's statements that these are not leanings, or decisions on program structure. We suggest the following as useful issues for DEQ to evaluate either within the models, or in separate analysis that could feed into model inputs:

1) Leakage risks to outside of Oregon are substantial. Leakage has real costs associated with it. Modeling must be set up to account for this issue. If this is not an issue to be explored in the initial sensitivity analyses, the models should at least be set up to account for it with reasonable accuracy in the program scenarios.
2) DEQ should explore a single (combined process and natural gas emissions) 25,000 MTCO2e emission threshold for stationary sources. It is quite possible that this threshold would not change program stringency depending on how natural gas is regulated. And it would potentially reduce regulatory burden to stationary sources. This could benefit small businesses, although additional analysis is required to determine this since emissions are not correlated to business size.
3) Natural gas point of regulation should not be decided at this point in the program as there are potential benefits to regulation at either the end user or supplier. There are multiple ways that flexibility in regulation could be incorporated into the program regarding natural gas point of regulation. Any assumption at this point in the process should be considered a place holder.
4) While 8% and 12% for allowable use of Alternative Compliance Instruments may be useful for sensitivity analysis, this range may not be sufficient to achieve program goals. Alternative Compliance Instruments could be an effective tool to reduce emissions leakage. The quantity allowed under the program should consider the results of leakage analysis.
5) Program costs need to be translated into average costs on a household basis to become understandable to most Oregonians. We understand that this is not included in the sensitivity analysis, but it needs to be a component of the program impacts analysis and public disclosure.

Program Design Discussion

We will state again that parsing the regulatory issues down to bits and pieces makes giving useful feedback on program elements virtually impossible because of the complexity of the program and the inter-relations between program elements. With that statement, we offer the following comments on the Program Design elements discussed at the first RAC meeting.

1) There must be reasonable methods to address variability in production, weather, and markets for stationary sources. There seems to be recognition that variability is an issue in the fuels market. This same variability is present in the manufacturing and industrial sectors. There are several tools that could be used to accomplish this including:
    a. Statistical analysis of emissions over time to establish baseline. This would require a longer baseline period in the range of 10 years.
    b. Use of output-based methods to account for production variability, or statistical analysis of production variability in establishing caps. This could be offered as an option with analysis provisions.

    In addition to methods needed to address variability in production, markets, and weather-related effects, there will be trade-offs needed under the cap to accommodate Emissions-Intensive, Trade-Exposed (EITE) Industrial sectors.

2) Multi-year compliance periods should be allowed for Stationary Sources based on implementation plans. Emissions reductions for large emitting units require substantial analysis, planning, and design, as well as allocation of capital, before they are constructed.

Thank you for the opportunity to weigh in on these issues.

Sincerely,
Moore Noise, LLC

Martha Moore, PE
Principal Engineer/Member

cc: Debbie Deetz Silva/EVRAZ

January 25, 2021

Via Email: GHGCR2021@deq.state.or.us

Colin McConnaha
Manager, Office of Greenhouse Gas Program
Oregon Department of Environmental Quality
700 NE Multnomah Street, Suite 600
Portland, OR 97232

RE: Cap & Reduce Rule Advisory Committee Meeting, January 14, 2021

Dear Mr. McConnaha,

Food Northwest appreciates the opportunity to provide the following comments on the materials and discussion at the January 14 meeting of the RAC.

Clarify the Impact of Exclusion of Fossil Fuel-Fired Electric Generation

Since fossil fuel-fired electric generators are the largest stationary sources of greenhouse gas emissions, it would be helpful to our discussion in the RAC for DEQ to explain how programs outside of the Climate Protection Program ("Program") will address electric industry emissions inside Oregon. Several members of the RAC have proposed that other sources and sectors covered by the Program should "make up the slack" for sectors that are not part of the Program. Food Northwest opposes such proposals as an inequitable and possibly illegal apportionment of responsibility.

Maximize Program Flexibility

DEQ presented staff leanings to include certain design elements regarding compliance instruments that would provide flexibility in achieving obligations under the Program: broad banking flexibility, broad trading flexibility, alternative compliance instruments, and distribution of compliance instruments based on a technology standard. Food Northwest urges DEQ to maximize flexibility by including all of these elements.

Program flexibility will meet all three Program Goals: Emissions reductions, Equity, and Cost containment. Some RAC members have proposed that Program flexibility be limited. The fact is that no entity's obligation to reduce greenhouse gas **Emissions** under the Program will be reduced through use of any of these flexibility elements. Equity could be achieved through use of alternative compliance instruments. **Equity** projects could be structured to similarly meet the rigorous requirements of other offsets

and could be used as alternative compliance instruments in the Program. Flexibility design elements can contribute to **Costs** containment by allowing regulated entities to choose least-cost pathways to meet their Program obligations.

Set Multi-year Compliance Periods

Food Northwest urges DEQ to set multi-year compliance periods. Through our food processing industry-wide energy intensity reduction goals (25% in 10 years and a total of 50% in 20 years) we have considerable experience in implementing energy reduction strategies and equipment. This includes auditing, planning, budgeting, approval, procurement, installation, and verification, which takes a significant amount of time, often several years. Generally, projects that will have the most impact on emissions reductions will be of this type. Most of the easily-implemented "low-hanging fruit" projects have already been completed by food processors.

Compliance periods should be no less than three years and preferably longer. Washington state's current cap and trade bill sets four-year compliance periods.

Investigate Product-Output Based Distribution of Compliance Instruments

Food Northwest recommends that DEQ investigate product-output-based distribution of compliance instruments. California developed a methodology and adopted this approach. The state chose this approach because it rewards efficient production and helps level the playing field with out-of-state manufacturers incentivizing continued in-state production. *CARB, Proposed Regulation to Implement the California Cap-and Trade-Program, October 28, 2010.*

Design the Program to Avoid Leakage

The potential for leakage must be considered and Program elements designed to avoid leakage. Cost impacts of the policy scenarios on regulated sectors need to be provided by the modeling analysis.

The study conducted by Vivid Economics for the Governor's Carbon Policy Office recommended that Oregon "Recognize that all potentially covered Oregon manufacturing and mining sectors face risk of carbon leakage and should be considered EITE . . ." (Vivid Economics, Oregon Sectoral Competitiveness under Carbon Pricing, December 2018, p. 82). The study evaluated food processing and determined that this sector is an EITE. (Vivid Economics, p.114). While the study focused on entities with emissions above 25,000 MTCO2e, the conclusion holds true for all food processors with emissions below 25,000 as well.

The Program could increase the cost of making food in Oregon by an industry that is already operating on some of the thinnest margins of any business sector. Oregon food companies face significant competition from imported food products as well as domestic food products from areas of the U.S. that lack strict environmental regulations like those in Oregon. Compliance with the new federal Food Safety Modernization Act has cost Oregon food processors millions of dollars, which they have not been able to pass on to consumers. As a result, food processor profits have eroded.

Food is very price sensitive. In fact, a contract can be lost by a mere 1/2-cent per pound increase in price. If we can't prepare food at a competitive price with other states or countries, then grocers, restaurants and other customers will obtain food from somewhere else that is cheaper.

If we can't compete, we will have to make cuts in production and jobs or may cease production in Oregon altogether. Leakage of production to Idaho is a real risk for our potato companies as they have facilities in Idaho. Idaho also grows great potatoes and there is little chance of carbon pricing.

Oregon's rural communities will be particularly impacted by the loss of food companies or loss of production at food companies. Agriculture is a critical industry in rural areas and food processing is an essential partner. Food companies are major employers and support related businesses and community infrastructure in these rural locales.

Include additional cost containment elements

Cost containment mechanisms such as compliance instrument reserves, price ceilings for compliance instruments, and off-ramps should be included. Additionally, measures should be included to provide rate relief for residential, commercial and industrial customers of natural gas utilities. Industrial customers will be particularly impacted by natural gas price increases due to natural gas utility Program compliance. Affordable natural gas prices are critical for food processors to remain competitive in national and global markets. This Program, if not designed properly, could have a major impact on the price of natural gas that will serve to drive production, jobs, and emissions to other jurisdictions.

Food Northwest appreciates the opportunity to provide comments on RAC Meeting #1. We look forward to continuing to work with DEQ and the RAC to shape a Program that meets the three goals and is good for Oregon's economy, environment and its citizens. Please contact me if you have any questions.

Sincerely,

Pamela T. Barrow

Pamela Barrow
Vice President

From: **Janet Lorenzen** <jlorenze@willamette.edu>
Sent: Thursday, January 21, 2021 4:51 PM
To: GHGCR2021
Subject: Comment on DEQ Climate Protection RAC

Oregon Environmental Quality Commission
January 20, 2021
GHGCR2021@deq.state.or.us
RE: Oregon Department of Environmental Quality, Climate Protection Program and Equity

In this letter, I comment on equity in relation to the DEQ development of the Oregon Greenhouse Gas Emissions: Climate Protection Program.

Thus far the DEQ has demonstrated slow progress toward using an equity lens for their climate protection program. First, the DEQ invited 9 people to participate in the climate protection RAC who represent: Indigenous people (3), environmental and racial justice (4), union workers (1), or low-income energy consumers (1). This represents 26% of RAC participants or 9 of 34 people. Unfortunately, academic studies show that a minimum of 35% of the people on a committee need to be people of color in order for their voices not to be drowned out. For example, at 1 hour and 40 minutes into the first RAC meeting an equity representative said "I'm not hearing equity in this conversation," they went onto say that banking allowances, trading allowances, long multiyear compliance periods, and leaving out natural gas and electricity sectors are all problems. In other words, none of the scenarios designed by DEQ used a comprehensive equity lens. At 3 hours and 40 minutes into the meeting another equity representative said "industry is talking more than environmental justice or tribes, the imbalance is already showing," were we "just brought in to check an equity box?" Two representatives from business and natural gas, apparently white men, agreed that they had not heard enough about equity. The goal of procedural equity is not achieved if representation is tokenizing, people of color are not invited into the conversation, or when they do speak, they are not allowed to shape the program. Thus, DEQ needs to do more to achieve procedural equity during RAC meetings and not just in additional small group meetings. This could involve including an equity discussion on the agenda of every subsequent climate protection RAC meeting and an equity component within every agenda topic.

The second way that DEQ is characterizing equity is distributive, in terms of the distribution of existing harms from pollution and program benefits, although it overlooks potential program harms. In response to the above critique of "not hearing equity in this conversation," DEQ staff said that they haven't used that word (equity), but that alternative compliance instruments may be designed to incentivized the reduction of emissions in affected communities (in an earlier meeting this included home heat fuel switching or cleaner bus fleets) which would have co-benefits (like for health outcomes). Another DEQ staff member pointed out that they will be using COBRA (Co-Benefits Risk Assessment) which is an EPA tool that estimates the impact greenhouse gas emissions have on air pollution and particulate matter, including health impacts and the cost of health impacts. Thus, the climate protection program may benefit impacted communities directly in terms of offset investments and indirectly in terms of the co-benefits to health of reducing pollution, but the DEQ seems to be ignoring that sector exemptions (natural gas, electricity) and alternative compliance instruments are likely to create pollution hotspots in impacted communities. This is what happens when an equity lens is partially applied in a piecemeal way.

Unfortunately, DEQ's focus on figuring out a mechanism for the distribution of benefits to impacted communities, which is a laudable goal, has eclipsed analysis on the distribution of harms – both existing harms (beyond COBRA) and potential harms caused by the climate protection program. DEQ staff said that banking and trading allowances need to be retained in program design so that there is greater ambition elsewhere in the program. Reconsidering those parts of the program seem to be off the table. However, **at least one scenario that DEQ is working with needs to guarantee that harms to impacted communities will not increase due to the climate protection program and that direct benefits and co-benefits will focus on impacted communities without putting them at risk of increased harms.**

Additionally, to have co-benefits, emissions must be immediately and significantly reduced, ideally based on best available science for both emission reductions and health benefits. Yet, during the first RAC meeting DEQ staff said that they have "flexibility" and do not have to meet the 45% below 1990 levels by 2035 goal. Yet, meeting this goal is both an environmental and equity obligation that the DEQ should prioritize.

Please take these comments into consideration for the next RAC meeting in order to approach the process and program in a more equitable manner. Thank you.

Sincerely,

Prof. Janet Lorenzen
Willamette University
Department of Sociology, American Ethnic Studies, Women's & Gender Studies
900 State Street
Salem, OR 97301
jlorenze@willamette.edu
Comments were also presented verbally at the EQC 1/21/2021 meeting

January 19, 2021

To: Department of Environmental Quality
Colin McConnaha, Manager, Greenhouse Gas Program
GHGCR2021@deq.state.or.us

Re: **Climate Protection Program RAC Meeting 1**

Because the **League of Women Voters of Oregon** believes that climate change is a serious threat facing our nation and planet, LWVOR supports climate goals and policies that are consistent with the best available climate science and that will ensure a stable climate system for future generations.

We are presenting here our major concerns about the Climate Protection Program; we are not yet ready to take positions on the specific components of the Program.

Among our major concerns is that the EO is not being taken seriously. It not only has the 2035 and 2050 goals relative to 1990, specified as at least 45% and 80%, respectively, but applies them individually in Sections 4. C. (1), (2), and (3) to each of the sectors: large stationary sources, transportation fuels, and all other liquid and gaseous fuels including natural gas, respectively. We do agree that landfills should be treated separately, since they are explicitly mentioned in Sections 4. D.

We are concerned about the amount of new information included in the presentation that was not in the pre-meeting materials. The inclusion of the "Potentially Covered Entities" list in the Charter was especially confusing. One example is that the list in the Charter allows regulation of imported electricity while DEQ claims it does not have authorization to do so. We discovered this list actually contains the Potentially Covered Entities from SB 1530 (2020), so regulation of imported electricity would have been authorized by passage of the bill.

In addition, the Modeling Policy Scenario proposals were not included in the briefing material. Because of the importance of the model for program development, it would have been useful for the RAC members to have had the information earlier.

Electricity

We object to the elimination of electricity just because of the legislative limitation on regulating imported electricity. We acknowledge that PGE is the only entity covered and thus might change its source to another state. But it should also be considered that if Oregon-generated electricity is unregulated, states with restrictions might change to using our electricity.

In the DEQ Sector-based GHG Emissions, which are consistent with the 1990 total emissions in the graphs being used to show the effect of the EO, electricity emissions are assigned to the user of electricity, not in a separate category. So even if electricity is excluded from the Climate Protection Program, both Oregon-generated and imported electricity would be included in the measurement determining if we are meeting the goals.

Natural Gas and Stationary Sources

It was difficult to determine from the briefing materials and the presentation whether DEQ has a "leaning" toward the regulation of natural gas combusted by stationary sources. In the Charter list, combustion of natural gas is allocated to the stationary source. Slide 43 implies that the decision as to whether it is regulated at the supplier or the stationary source is not decided. However, in all of the scenarios it is allocated to the supplier and two of the scenarios exclude stationary sources entirely.

We believe that large stationary sources should be regulated for both their on-site combustion of natural gas and their emissions generated by their industrial processes. We compared the facilities in the Charter list with the facilities potentially being called in by the Cleaner Air Oregon program, which has indices for both harm and demographics. The listing in the Charter separately lists the emissions from burning natural gas and those generated by the industrial processes. We discovered that the ones with all their emissions from burning natural gas were usually as harmful as those with significant industrial processes.

Equity

This ties into one of our other major concerns. Although Equity is given a vertex in the Emissions/Cost/Equity pyramid, it has not really been incorporated in the program. We agree that Alternative Compliance Options could provide one way to incorporate Equity. We suggest that limitations be put on the use of flexibility options by stationary sources causing the most harm in vulnerable areas.

Thank you for the opportunity to discuss this Program.

Rebecca Gladstone
LWVOR President

Claudia Keith, Kathy Moyd, Julie Chapman
LWVOR Climate Emergency Portfolio

From: Linda Craig <campaigns@good.do>
Sent: Wednesday, January 13, 2021 10:13 AM
To: Governor Kate Brown; Director Whitman
Cc: kristen.sheeran@oregon.gov; colin.mcconnaha@state.or.us; CapandReduce
Subject: Cap and Reduce Must Be Strong

Dear Governor Brown,
(cc: Director Whitman)

I very much appreciate your EO 20-04. You are standing up for what needs to happen in this critical time to address life-threatening climate change.

I understand that DEQ has done some good work to implement their part of 20-04, but now they want to give a pass to gas-fired utility power plants? It will be hard to keep everyone on the same page if some of the biggest sources don't have to comply. Please tell DEQ to include gas-fired power plants.

We also need interim targets for the cap. OR Global Warming Commissions new report shows us how very far we are from meeting the targets. We must do better.

Please continue to fight for what is right.

Cordially, Linda Craig, constituent

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January 21, 2021

For: Oregon Department of Environmental Quality:

Climate Protection Program/Rulemaking Advisory Committee Mtg #1

From Angus Duncan

Subject: Recommended Regulatory Directions for DEQ CPP

The comments below are specific to issues raised in DEQ's first Advisory Committee Meeting (January 14, 2021). In addition to these, we are attaching also comments submitted on behalf of NRDC October 6, 2020, which addressed many of the same issues, and ask that these be incorporated by reference. Where those comments went into some level of detail, we seek to avoid restating the same principles and advice in the additional comments offered below.

1) <u>Cap and Scope</u>

a) **<u>Overall and interim goals</u>**: DEQ has suggested, worryingly, that while it would respect the 2050 emissions reduction goal set by Oregon's legislature, it might not adhere to the interim 2035 goal declared in Governor Brown's Executive Order 20-04. A comparable 2035 goal was unanimously recommended by the Oregon Global Warming Commission in its adopted 2015 Biennial Report to the Legislature. The Commission recognized that the state was not on course to meet its 2020 legislative goal and felt strongly that having recourse only to the remaining 2050 goal – then 25 years in the future – would serve as license to continue deferring emissions reductions to the end of that period, in favor of shorter-term gratifications by businesses, households and drivers.

In fact DEQ is positioned, with the CPP, to (a) target the 2035 goal, (b) set still shorter interim goals by creating compliance periods not exceed three years, and (c) create incentives for meaningful early compliance by regulated entities; and it should commit to doing all three. It should do so in simply acknowledgement of the seriousness of the onrushing climate crisis and of too-often deferred reductions resulting in more destructive climate change effects; and it should take cognizance of commitments made by the Biden Administration toward substantial emissions reductions targeted to not later than 2035. It makes no sense for the Oregon DEQ to be indifferent to these multiple state and federal articulations of the seriousness and imminency of the changing climate and their focus on rapid ramping up of early emissions reductions, especially those that can be achieved between now and 2035.

b) **<u>Incentives for Early Action</u>**: Consistent with the above, DEQ should be seeking compliance designs that will encourage early compliance action, with rewards split between the entity offering up these actions and earlier overall emissions reduction count toward program goals. Our comment #9 in the October comments addresses this recommendation.

c) **Inclusion of Non-Utility Electricity Generation**: DEQ's data sets and "leanings" (slide 48) suggest that it would not include in the CPP "electricity sector, landfills or biogenic emissions." We appreciate the available option of regulating methane emissions at landfills with existing authorities, and the legal difficulties with biogenic sources (note: DEQ should seek authority to address this gap). We hear DEQ's concerns with regulating electric utilities that could frustrate regulation by redispatch from alternate generation, although we believe the concern to be overstated[1].

However, DEQ's blanket exclusion of electricity generation creates a huge opportunity for unregulated, non-utility gas generation to find a home inside Oregon's boundaries. The presence of two crossing gas pipelines in northeastern Oregon invite such merchant power plants to develop here, adding to Oregon's emissions while marketing their power products across the western grid. There have been several such proposed facilities in recent years, and certainly more will be arriving if this DEQ welcome mat – No Electricity Greenhouse Gases Regulated Here! – is spread out. The facilities may be selling outside the state, but that is no more reason to exclude them from GHG regulation here than for Oregon to exclude a cement or paper manufacturer from such regulation because it exports to customers out of state.

2) **Point of Regulation**: DEQ suggests regulating different emitters at different points of regulation. While this can make functional sense, it should be guided by the principle articulated earlier that "emitters should be regulated as close to the burner tip as practical in order to influence response to the cap as directly as possible" (see Comment #3, October 2020).

3) **Compliance Flexibility**: Meaningful compliance flexibility tools for emitters should be provided for subject to the principle that such flexibility be subject to rigorous enforcement of the emissions reduction trajectory, including incentives for early action. More detailed recommendations are provided in Comment #8, October 2020; but we would like to reprise here the case for limited and declining use of offsets. The point to this program is to induce emitters to seek and adopt lower emissions practices, and devise and adopt lower emissions technologies, that still enable their businesses to proceed. Flexibility tools are to enable these outcomes, not indefinitely defer them.

In this regard, DEQ should be supporting and encouraging emitters to seek out Best Available Technologies (BAT), rewarding them when they adopt such BAT to achieve early reductions and requiring such adoptions for slower emitters by reducing allowances to reflect these improving market choices.

[1] We also anticipate we can shape alternative emissions reductions obligations for regulated and consumer-owned electric utilities through other legislative means.

4) **Compliance Periods:** DEQ has suggested three-year compliance periods, a term that seems on its face reasonable and consistent with what other jurisdictions are proposing. We would suggest two qualifications to this base period:
   a) regulated parties should be expected to demonstrate partial annual compliance – ≥ 50% of period-required reductions would be a good place to start;
   b) DEQ should be prepared to allow, on a case-by-case basis, exception compliance periods up to five years for emissions sources where extensive capital replacement may be required or advisable of a nature that cannot be accomplished within a three year window, and where emissions compliance slippage can be made up at an accelerated rate – perhaps 150% of annual compliance requirements through the next three year window. Oregon should be open to exceptional circumstances that can also deliver comparably exceptional emissions reduction returns.

5) **Inclusion of EITE's**: DEQ should be very conservative in granting exemptions or other compliance deference to companies claiming EITE status and creating leakage concerns by threatening relocation to geographies outside the scope of Oregon's program. We noted in our October comments the disincentives to such relocation (Comment 5a), and will not repeat these here. We will emphasize that relocation options have shifted dramatically with the incoming Biden Administration. The payoff to relocating firms avoiding state-level GHG regulation, one that has to offset the cost penalties associated with such relocation, will be much diminished by a new federal perspective on carbon emissions reduction that will have national reach and scope. Oregon should be less concerned with EITE considerations in consequence.

6) **Natural Gas Space and Water Heating**: In this regard also, DEQ should consider that lower-emissions (BAT) technological options for space- and water-heating in commercial and residential applications are already available and, in many applications, cost-effective. The technology we reference is called the electricity-driven heat pump. DEQ should be requiring electrical and gas utilities both to offer, finance, install and maintain this BAT for their customers. The emissions reductions are not inconsequential: some 4.4 million tons CO2e, up from 2.4 million tons CO2e in 1990, an increase of ± 90% when overall Oregon emissions were supposed to be decreasing by 10%.

7) **Calculating CO2e Value of Methane**: DEQ staff indicated during the first Advisory Committee meeting that it was calculating the CO2e value of methane using a 100-year atmospheric impact. While we understand that standard is used elsewhere, we argue that it is a flawed reference value generally, and specifically with respect to compliance with Oregon GHG emissions reduction goals. In fact methane will have a disproportionately stronger impact on atmospheric warming short-term (± 80 X CO2, vs. a 100-year value of ± 25 X CO2). From the perspective of destructive and persistent climate impacts, all emissions reductions achievable in next 25 years are far more impactful than reductions occurring thereafter. Finally, Oregon has a 2050 emissions reduction goal – 30 years from now – and not a 2121 emissions reduction goal. DEQ's valuation methodology should be consistent with both climate science and Oregon's legislatively-adopted goal.

October 6, 2020

For: Oregon Department of Environmental Quality:

Carbon Cap & Reduce Workshops

From Angus Duncan, Consultant for Natural Resources Defense Council

Subject: Recommended outcomes for DEQ Cap & Reduce Workshops

Scope and Structure

1. Greenhouse gases (GHGs) and sources regulated: All GHGs referenced in state legislation, and all sources of emissions within the state with annual emissions ≥ 5000 tons CO2e. This should include in-state electric generation sources, which should be expected to operate consistent with the utility's acknowledged Integrated Resource Plan. Significant departures from that plan that could reflect leakage to out of state power plants should be monitored by the Oregon PUC and reported to DEQ.

2. Base Period and Cap Trajectory: DEQ should use a multi-year average emissions period relatively free from significant distorting factors (recession; pandemic) to set a point of departure for emissions, while the 2050 goal is set by the Governor's Executive Order.

3. Point of Regulation: As a default, emitters should be regulated as close to the burner tip as practical in order to influence response to the cap as directly as possible. This default would necessarily be modified by the practical requirements of regulation; thus large emitters may be regulated directly while more diffuse (non-point source) emitters such as motor vehicles are more practically regulated upstream from individual vehicles to importer/wholesale suppliers of vehicle fuels.

a. <u>NOTE:</u> *DEQ and its legal counsel assert that it has no authority to regulate in-state parties for emissions associated with their goods and services if those emissions occurred outside the state's boundaries. We note that, in contrast, the state's GHG emissions goals explicitly include such out of state emissions with respect to electricity generation. While NRDC disagrees with the narrow legal interpretation of DEQ's authority, we also would support a legislative remedy that would make an implicit authority explicit. Such a remedy should allow DEQ to include and impute to the responsible in-state entity at least the upstream emissions associated with production and transportation of electricity, oil and gas ultimately consumed in Oregon.*

4. <u>Distribution</u>: Overall allocation by sector, after DEQ reserves a quantity of allowances from within the cap for cost containment/flexibility purposes, should be on a mass basis to assure cap integrity and DEQ accountability. DEQ may elect to distribute within sectors on an intensity basis so long as sector outcomes overall are consistent with the mass-based cap. But DEQ must not freely allocate allowances to entities or sectors, notably transportation fuel suppliers, that can profitably pass through the cost of surrendering allowance value to consumers, thereby generating windfall gains[2]. Windfall profits can be avoided most directly by requiring covered entities with cost pass-through ability to purchase allowances. While DEQ may judge that it lacks authority to sell allowances, that does not compel it to freely allocate allowances to all sectors. For instance, allocating fuel sector allowances to regulated utilities with appropriate conditions (e.g. to be consigned to an auction with the proceeds used exclusively for the benefit of ratepayers) would ensure that allowance value is subject to regulatory oversight and could be leveraged to advance the goals of the EO (e.g. through beneficial electrification; bill relief for customers). Fuel suppliers and other regulated entities need *access* to allowances (which they would have via the consignment auction), but do not have any right to the (substantial) underlying monetary value.

5. <u>Leakage</u> is a theoretical risk that will vary with the emitter:
    a. Some <u>industrial emitters</u> may have the option of shifting production out of state, but few are likely to leave existing, valuable production assets stranded by exiting facilities in Oregon. The economic penalties for doing so – abandoned capital equipment, land leases, skilled labor losses – are substantial, while the potential advantages are mitigated by the existence or future probability of carbon regulation in any destination location.
    b. <u>Electric utilities</u> could shift generation to fossil units out of Oregon, but should be inhibited from doing so by customer preferences and by existing legislation, specifically SB 1547 requiring no coal-by-wire supplies after 2030, and reaching 50% *new* renewable generation, in steps, by 2040 (in addition to existing renewables as of 2016, including hydro). Until and unless there is credible evidence of leakage from this sector and not just the theoretical potential for such leakage, DEQ should be regulating all in-state emissions sources including electricity generating units (EGUs). If significant leakage were to occur, the Oregon

[2] See CARB Appendix J: B2a – Allowance Allocation/Background Concepts/Avoidance of Windfall Gains (https://ww3.arb.ca.gov/regact/2010/capandtrade10/capv4appj.pdf).

legislature will need to clarify and affirm DEQ's authority to calculate upstream (out of Oregon) emissions and impute these to the utilities and any other parties who are, or thereby would be, subject to the DEQ rule limitations.

c. There is risk that additional existing large customers of regulated utilities could exercise existing rights under allowed Direct Service (DS) law to shift from utility electrical service to third party suppliers. If the latter were supplying power from out of state, they could be delivering lower cost power with higher carbon content, e.g., from coal and gas generation. Current megawatt limits on DS customers, combined with exit charges sufficient to make other customers whole, will limit this leakage source initially, but if the delta between regulated electricity service and out-of-state, bargain-basement gas generation grows, pressures to leave and commensurate emissions growth may result. Additional legislative constraints may be required.

Stringency

6. Cap Design and Integrity: DEQ must set and maintain the integrity of the economy-wide declining carbon cap to be consistent with or exceed the state's greenhouse gas reduction goals and schedule for reductions.
    a. Set base year or initial emissions level to accurately reflect real, measured emissions for the state overall, and for individual sectors if the cap design intends to allocate by sector.
    b. Set declining cap on a mass-basis. If sector or individual emitter allocations are to be set on an intensity basis, the methodology for converting in both directions must be tested and transparent to ensure integrity of the overall cap.
    c. Different trajectories for sector emissions reductions will also require a methodology for reconciliation with overall mass-based emissions reduction trajectory.
    d. "Intensity based allocations" can add greatly to complexity of cap administration, as different emissions/factor (product; dollar value; etc.) will advantage or disadvantage each emitter. On the other hand, an intensity-based allocation will advantage the most efficient producers and incentivize the less efficient to upgrade their processes. DEQ can manage the complexity by making use of the extensive data and analysis that serves as the basis for similar such regulation by the California Air Resources Board.
    e. Accelerated Reductions: DEQ should seek options for incenting regulated parties to accelerate reductions (see Cost Containment, below).

7. Rate of Cap Decline: Given the years-long delay in Oregon adopting a declining carbon cap (first proposed in 2004), and the rapid realization of extreme climate change impacts afflicting Oregon, a compelling case can be made for steeper early emissions reductions to make up for lost time. In any event, the overall rate of reduction allowable can be no less stringent than a trajectory extending linearly from 2005 emissions levels to the 2050 goal. Moreover, compliance flexibility measures such as reserves must be secured from this allowable level of emissions under the cap, thus lowering effective early-year allowable emissions levels.

Cost Containment

8. Cost Containment Through Flexibility Provisions: Regulated entities facing emissions reduction cost issues – accelerated replacement of capital equipment; introduction of new technology; fuel-switching from fossil sources – should have first recourse to compliance flexibility provisions built into the compliance structure. These can include:
    a. Multi-year compliance periods – California has successfully implemented a three-year compliance period for all subject emitters, with an interim annual reduction requirement of at least 30% of the prior year's emissions. This is an instance where DEQ can leverage California's experience in setting its own comparable compliance schedule.
    b. Alternative Compliance Options – DEQ's primary focus must be on securing in situ emissions reductions from sources subject to the adopted rule. Limited and temporary use of offsets in lieu of in situ reductions are a reasonable front-end option to afford flexibility and enable compliance in the initial stages of regulation. Compliance actions, especially those involving modification of existing activities or capital equipment replacement, can be "lumpy" and require planning lead time. On the other hand, the advent of GHG reduction requirements in Oregon should not come as a surprise to any emitter, having been telegraphed for a decade and longer. Alternative compliance options should be limited as to extent (compliance burden share) and to early compliance years, while emitters should plan to rely upon process and technology carbon efficiencies after a limited phase-in period for the rule.
        i. Extent of Offset Use: The flexibility afforded by offsets will be most useful to emitters who may need it in early compliance years to plan and implement equipment replacement and operational changes. Thereafter emitters should be expected to plan in advance the systematic introduction of more carbon-efficient technologies as they become available and are needed for compliance. We recommend that offsets should be available for up to 8% of an emitter's compliance obligation for the first five years of the program; then 4% for the next five years; and 0% thereafter.
        ii. Offset Requirements: Without exception offsets should meet "real, permanent, quantifiable, verifiable, enforceable and additional" guidelines. Acceptable alternative compliance options should only be derived from sectors not otherwise subject to emissions constraints, and only from sources whose emissions are below the DEQ-set threshold for cap & reduce regulation.
        iii. Offset Sources: Large emitters such as industrial forest products and large agricultural facilities whose activities result in annual emissions greater than the DEQ-set threshold for regulation would have been subject to state regulation if DEQ

had authority to regulate biogenic sources. If they are for now excluded from DEQ's proposed cap, they should not thereby be rewarded by selling, as offsets, emissions reductions that a fairer and more comprehensive cap would have encompassed. DEQ should also take care to screen offset sources and uses for potential adverse impacts to low-income and other vulnerable households; and conversely, for potential equity benefits that could accrue to such households from alternative offset strategies.

c. Allowance Trading – So long as DEQ avoids the potential for windfalls in its method for distributing allowances, regulated entities should be allowed to trade unused allowances among themselves to add compliance flexibility. DEQ should have a reliable and timely allowance tracking tool to ensure against potential market manipulation; and it may require additional regulatory tools to redress unforeseen such perverse outcomes.
    i. Third Party Allowance Ownership: A question not posed by DEQ in these workshops goes to the relative merits of allowing third party (e.g., unregulated entities) acquisition and ownership of allowances. Such parties could add helpful liquidity to allowance markets, a useful asset in a market as narrow as an Oregon-specific one would be. On the other hand, the opportunities and temptations of market manipulation rise with a purely economic (vs. compliance flexibility) motivation driving such third parties. DEQ would need a heightened sensitivity to, and means to arrest, such perverse outcomes and should consider (a) a limit on percentage of outstanding allowances to be held by such third parties, and (b) a time limit on viability of at least some allowances (see paragraph 9, below).
d. Banking – Regulated entities should be allowed to reserve allowances, whether received directly or acquired by trading, to meet future compliance requirements. Allowance viability may be subject to expiration (see Recommendation #9 below)
e. Reserves – DEQ should proceed, as its Issue Brief 5 proposes, to reserve a quantity of allowances from distribution, depositing them in a Cost Containment Reserve for distribution to mitigate higher-than-anticipated compliance costs (reflected in trading market costs of allowances). Such higher costs may be due to slower technology advances, economic cycle effects (e.g., recessions; interest rate spikes) or other causes. To the extent possible, DEQ should stipulate in advance the terms (e.g., market costs) under which the Reserve would be tapped and thereafter replenished. *Above all, such a Reserve cannot be created by breaching the overall cap, a possibility regrettably raised in DEQ's Issue Brief[3].*

9. Accelerated Retirement of Allowances – DEQ should be thinking creatively about options to accelerate emissions reductions forward into the next ten years, when climate science informs us that emissions reductions are most critical. One option might be to issue two classes of allowances,

[3] On page 4 of Issue Brief #5, DEQ states: "These reserve instruments could be in addition to the amount of compliance instruments equal to the cap of allowable emissions, but this would mean the use of the reserve instruments would allow for an overall increase of emissions over the cap." ***DEQ should not even be hypothesizing a basis for breaking the cap***.

one for the full amount of allowances warranted by the base period calculation but with a time limit (five years?) for use; and another for perhaps 75% of warranted allowances but without an expiration date. A regulated entity could opt for either class of allowance (the non-expiring allowances would obviously have more value in a trading market).

Impacted Communities

10. Representation and Decision-making - We take "impacted communities" to generally include any community or group likely to be disproportionately impacted by either the effects of climate change or the costs and disruptions from remedies, and for reasons of low income or other structural disadvantages be less able to cope with these than most communities and groups. These groups tend to be, but are not limited to, communities of color, indigenous and immigrant communities. We agree with DEQ's apparent resolution to ensure full and adequate representation of these communities in its decision-making process, and generally defer to a dialogue between the agency and representatives of those communities to shape that representation.

11. Transition Assistance—As important as process involvement is, more important still is enabling members of these communities to transition from an existing, fossil-fueled normal to a new one that substitutes technology and efficiency for combustion. This transition will often involve higher front-loaded capital costs, although these are nearly always a pathway to lower operating costs. Thus weatherizing homes and businesses involves front-loaded investments in insulation, windows, efficient lighting and HVAC equipment. Lower GHG emissions from transportation will involve higher community costs for more efficient transit, while access to electric vehicles may involve higher purchase prices but lower operating (fuel; maintenance) costs. While DEQ will not have the financial resources to fund this transition, the agency and participants in the process need to document the scale and distribution of these costs – and benefits – for legislative attention. It will be important to include larger access, mobility, public health and other communal benefits as well as those that accrue to individuals and households directly.

January 26, 2021

Nicole Singh, Senior Climate Policy Advisor
Department of Environmental Quality
700 NE Multnomah Street, Suite 600
Portland, OR 97232

Re: DEQ Cap and Reduce Rule Advisory Committee Meeting, January 14, 2021

DELIVERED VIA EMAIL: GHGCR2021@deq.state.or.us

Dear Ms. Singh,

Thank you for the opportunity to comment on the Department of Environmental Quality's (DEQ) first Cap & Reduce Rules Advisory Committee (RAC) meeting held January 14, 2021. I offer the following comments on behalf of the Northwest Gas Association (NWGA), which represents the three natural gas utilities and two transmission pipelines that provide warmth and comfort to over 2 million Oregon residents (772,000 households), and productive energy for more than 85,000 Oregon businesses and industries.

NWGA members support and are actively engaged in reducing regional greenhouse gas (GHG) emissions. We maintain that there is and will continue to be a meaningful role played by smartly utilizing 30,000 miles of existing safe and reliable energy delivery infrastructure that comprise the natural gas transmission and distribution systems in Oregon.

As I mentioned at the outset of the first Cap & Reduce RAC meeting, I am concerned about the process. The primary discussion material for the first RAC meeting was not made available until mid-afternoon before the 9 a.m. meeting the following morning. This is simply not enough time to fully consider a 70-plus page presentation and prepare constructive contributions to the discussion (as requested and expected of RAC members). In addition, the 5 days provided for additional remarks are not enough time to prepare substantive comments on such complex proposals.

To state the obvious, this rulemaking will have a significant impact on natural gas consumers. As the regulated entities that deliver natural gas to those consumers, it is imperative we have enough time to fully analyze the rulemaking proposals and prepare comments that are productive to the process. Further, my member companies are obliged to submit accurate information and credible analysis. We simply can't make things up. It takes time for subject-matter experts and others to analyze and vet the information we submit in our comments.

In that regard, I respectfully request that staff distribute meeting materials a minimum of three business days in advance of a RAC meeting and give stakeholders a minimum of 10 business days after a RAC meeting to provide more substantive written comments.

In addition, this rulemaking is going to have real-world negative impacts on vulnerable communities – especially senior citizens, the unemployed and others on fixed incomes – because the rules being discussed will inevitably increase the cost of energy in Oregon. That being the case, this process must be deliberate, not rushed.

NWGA member companies will play a crucial role in any decarbonization plan, and we hope to be viewed as a partner in achieving the governor's goals. We also think it is eminently important to keep our eye on the prize, which is decarbonization, NOT electrification.

With that in mind, we are concerned that an initial staff leaning is to exempt electricity consumption and its attendant GHG emissions. This elephant in the room can't be ignored. We know how much electricity is consumed in Oregon and we know the generation mix, so we can make assumptions about GHG emissions without having to calculate out-of-state electricity or point to specific electricity consumers. This is both fair and absolutely essential to maximize GHG emissions reductions.

For any cap-and-reduce program to work in practice there must be flexibility for compliance, with access to out-of-state offsets and other alternative compliance options and access to out-of-state offsets. Those instruments should also be distributed in a manner that allows NWGA members to demonstrate compliance.

The ability to buy and sell compliance instruments is the most logical way to reduce overall emissions. It incentivizes GHG reductions from customers who have the capacity to achieve them, regardless of where the reductions are located. Furthermore, it will not unduly penalize entities with limited access to effective and affordable technological solutions.

Also concerning process, DEQ staff suggested that the agency is aiming to reach a conclusion on modeling questions and scenarios by the end of this month (January 2021). I have deep concerns about this aggressive timeline, and further question why there isn't another meeting of the RAC in advance of these important program decisions. This overly tight timeline makes it nearly impossible to interact with DEQ staff and its third-party modeling consultant, ICF. My members have real concerns and many questions about the ICF modeling and would like to meet with the consultant to ask our questions directly. We are willing to work with our members to coordinate such a meeting.

Each of the three policy scenarios laid out by DEQ will lead to substantial rate increases for Oregon families and businesses – rate increases at least DOUBLE from what was projected for past cap-and-trade legislative proposals. It is essential that DEQ include a cost cap for compliance similar to what is in the renewable portfolio standard for electric utilities. The rule must also include other cost-containment measures such as a price ceiling for compliance instruments, offsets, and off-ramps, should the cost of the compliance instruments begin to increase substantially. In particular and at a minimum, there need to be off-ramps that contain costs for low-income customers and trade-exposed businesses. Additionally, limiting offsets to 12% of the cap must be increased to adequately protect consumers.

My members and their customers will require time to plan for and implement GHG-reduction technologies, which will then need to be approved and incorporated into air permits. If the cap-and-reduce program forces mid-cycle permit modifications, it will further burden DEQ's already backlogged air-permitting programs. This scenario can be avoided by employing simple rulemaking common sense.

For instance, the baseline should be a 10-year historical average to account for weather variability. The rule should also include a 5-year compliance period. Such a compliance period is necessary to accommodate weather variability and economic fluctuations. Furthermore,

such a compliance period will coincide with long-established 5-year permitting cycles, such as the Title V or Air Contaminant Discharge Permit programs, which would simplify reporting and compliance for both regulated entities and DEQ.

Energy efficiency is a key mechanism for compliance and one our members embrace. Unlike neighboring states, however, all of Oregon's energy efficiency programs are managed by an independent third-party, not the utilities. Consequently, compliance with caps in the beginning will be mostly determined by the independent decisions of utility customers, who will rely on the Energy Trust of Oregon to provide appropriate programs and incentives necessary to support customer investments in upgrades for carbon reductions.

In that regard, ICF's modeling needs to account for Energy Trust's programs, which rely on demand side management capacity identified in their planning processes and potential assessments, within the confines of the performance measures and cost-effectiveness established by the Oregon Public Utilities Commission (OPUC).

We note that the large customers of our small utilities on a "transport" rate schedule are not included in the Energy Trust's programs, and they do not contribute ratepayer dollars for this purpose. Without such programs in place, our members don't have a mechanism for incenting carbon reductions in these facilities. New regulations need to understand that these larger customers use natural gas differently than residential and most commercial customers, and these differences need to be accounted for in the ICF models and in the rule itself.

As DEQ continues this rulemaking process, we have identified several questions that need to be answered and issues that need further explanation:

- How the rule will be applied to different customer classes is vital to understanding program impacts. This should include a full map of all jurisdictional authorities and process flow among state agencies and other jurisdictions.
- How will the data from the GHG reporting rule provide sufficient detail to prevent double counting of emissions?
- Regarding the modeling used by ODEQ's consultants, we ask that at least one of the modeling scenarios should show usage for large stationary sources as the point-of-regulation.
- We ask that our member companies be given a chance to collectively meet with the ICF consultants in order to discuss – and better understand – their modeling. We are willing to coordinate such a meeting with our member companies to simplify the logistics for DEQ's and ICF's benefit.
- NWGA member company IRPs provide greater data granularity and accuracy than does federal average use data for GHG reporting purposes.
- NWGA member company IRPs can provide credible detail for customer projections.
- There was no mention of inter-sector leakage. As an example, natural gas leakage is accounted for, while propane and heating oil are not. This could push customers to use fuels that are more carbon intensive than natural gas.

- DEQ makes no mention of how to treat low-income customers; it needs to. We suggest that their emissions (and therefore their compliance costs) be excluded rather than placing their costs on top of other ratepayers.
- DEQ needs to calculate and document how much of the economy is covered by the proposed cap. Without accounting for electricity consumption and with all other contemplated carve outs, it won't even approach the 80% reduction by 2050 mandated by the Governor's Executive Order.

NWGA continues its desire to work collaboratively with DEQ during this rulemaking process. Our industry has been pro-actively adopting new technologies to reduce the emissions impacts of the gas sector and believes this work compliments the state's overall climate policy goals.

Natural gas, particularly direct-use appliances, are highly efficient and offer lower lifecycle GHG impacts than other products. Natural gas is a reliable and cost-effective fuel that is often the fuel of choice for important economic sectors in Oregon, including food processors, nurseries, the wood products industry, manufacturers and others – and natural gas can make a positive contribution to the governor's decarbonization goals.

The natural gas system in Oregon represents billions of dollars in safe, efficient, reliable and well-maintained infrastructure that keeps Oregonians warm and is essential to many Oregon employers. This system can and should be a part of any future energy landscape.

Thank you for your time and consideration.

Sincerely,

DAN S. KIRSCHNER
Executive Director

January 21, 2021

VIA ELECTRONIC FILING

Department of Environmental Quality
Office of Greenhouse Gas Programs
700 NE Multnomah Street, Suite 600
Portland, Oregon 97232

RE: NW Natural Comments – DEQ Cap and Reduce Rulemaking Session #1

NW Natural ("NW Natural" or "we") appreciates the opportunity to provide replies to the questions posed by the Department of Environmental Quality (DEQ) staff during the January 14, 2021 Rules Advisory Committee (RAC) meeting to implement Governor Brown's Executive Order 20-04 or "Cap and Reduce." To reiterate our previous comments, NW Natural strongly supports the development of effective programs to address the existential crisis of climate change. This guided our support of proposed Cap and Invest legislation, HB 2020 and SB 1530. We are working vigorously to decarbonize our pipeline by 2050. It is critical that DEQ design a Cap and Reduce program in a way that complements and accelerates the work already underway. We also agree that it is critical that impacted communities are meaningfully engaged in program design and commend DEQ for designing an inclusive, transparent process. That being said, we have significant concerns around the scenarios put forth, the modeling, and staff leanings.

In an effort to be concise, our comments are organized by topic and address the important issues we see relative to questions posed by DEQ and the role the analytical modeling will play in informing Cap and Reduce design:

General Process- DEQ has emphasized time and again the importance of having a fair process and providing adequate opportunities for dialogue and interaction. However, the very thorough meeting materials were released around 2:30 p.m. the day before the RAC meeting was to begin. Though we appreciate the opportunity to have an additional week to react in written comments to the meeting materials, the written word format does not allow for dialogue or the exchange of ideas in a timely manner. Therefore, it is difficult to ascertain whether comments are read, or if staff or other stakeholders have questions about the comments, an opportunity to provide answers.

Moreover, determining modeling and basic scenarios are the foundations on which the rest of the RAC meetings and the resultant program will be built upon. In the meeting DEQ staff suggested the agency is aiming to reach a conclusion on modeling questions and scenarios by

the end of this month January, 2021. We question why such an aggressive timeline is needed and note that there is not another meeting of the RAC in advance of these important program decisions. The tight timeline makes it extremely difficult to interact with the DEQ third-party modeling consultant, ICF, or ask questions of DEQ staff. NW Natural would ask that such substantive meeting materials be available at least a week in advance of the RAC meeting and that topical subcommittees be established in order to ensure adequate discussion. Given the clear consensus among the RAC that members have an opportunity to review detailed assumptions and data sources with ICF before the modeling begins and program scenario evaluations are defined, we posit it is important that DEQ hold this meeting before the 3 scenarios are defined and the consultant begins analytical work.

Low Income Customers- While we appreciate the work that was done to put forth scenarios that would reduce carbon emissions there was no mention of how to hold low income customers harmless from the Cap. There are two ways to hold low income customers harmless – one is to hold them harmless from rate-based costs associated with compliance with the cap. The other is to exclude their emissions from the overall cap, and hold them harmless for other compliance costs. Given that natural gas rates will certainly rise as a result of a carbon cap, and could rise substantially if any of the three scenarios presented in the RAC meeting are adopted, decisions around how low income customers will be treated under the program is a key consideration. It is too much of a burden to put the compliance costs for the nearly one-third of our customers, the amount of customers estimated to be low income, on the backs of the other two-thirds of our customers. Therefore, to reiterate our comments to DEQ from November 2, 2020, the cleanest, and most equitable solution is to exempt low-income customer emissions from the overall cap.

The Brief Discussions Around Equity Were Vague and Inadequate- DEQ has stated their objectives are threefold – to reduce GHG emissions and to do so while applying an equity lens and containing the compliance costs. However, there was very little mention of equity in the presentation, and even less conversation about what an equity lens might look like. NW Natural asks DEQ to design definitions and metrics for the equity work so it can be accurately implemented and maintained.

The Brief Discussions Around Compliance Cost Were Inadequate- See *supra*, DEQ has stated their objectives to be threefold – to reduce GHG emissions and to do so while applying an equity lens and containing the compliance costs. However, there was very little to no discussion around cost containment. Nor did any of the three scenarios do an adequate job addressing compliance costs. NW Natural appreciates the inclusion of the ability to bank compliance mechanisms across year, but because so few allowances are allowed, banking in of itself will do very little to contain costs. Moreover, though NW Natural appreciates the ability to trade across sectors, if the program only covers the three natural gas utilities and six fuel suppliers, the market will be very shallow and trading is unlikely to make any material impact on compliance costs.

Also, unlike the Renewable Portfolio Standard (RPS) (SB 1547) in the electricity sector and the voluntary natural gas utility RNG portfolio option (SB 98(, there are not cost containment mechanisms listed in the modeling scenarios to ensure there aren't rate spikes. The RPS provides for a 4% cap on incremental compliance costs and the natural gas voluntary RNG program includes a cap on incremental compliance costs of 5%. Moreover, every other statewide carbon reduction program in the country includes some version of a cost cap to prevent rate shock. DEQ should include a cap on the cost of compliance as a release valve to ensure the program does not lead to large spikes in customer utility bills, even if DEQ does not anticipate that will happen. These cost caps are even more important in implementing Cap and Reduce given that DEQ has limited statutory authority to set up an alternative compliance market.

Moreover, without additional cost containment measures, low income customers are the customers least equipped to handle the cost increases to their natural gas bill associated with complying with the cap.

All Three Scenarios Would Lead to Very Drastic Increases in Utility Rates- By only covering a very limited number of parties in all three potential modeling scenarios and only natural gas utilities and fuel suppliers in two of the three, and doing so while imposing an aggressive cap decline with minimal alternative compliance limits, compliance costs are likely to be much higher than state sanctioned emission reduction programs seen in other jurisdictions. These significant compliance costs will lead to dramatically higher utility rates for every customer class. The impact of the program on natural gas utility customers under each of the three scenarios presented by DEQ staff would be substantially more than the compliance costs associated with HB 2020 or SB 1530.

The Process for Soliciting Questions/Assumptions to be Modeled is Inverse- DEQ has asked for comments regarding factors and assumptions stakeholders believe should be included in the modeling that ICF will undertake. However, DEQ seems to already be providing those answers in both the "Staff Leanings" and in the three scenarios DEQ presented. By using their own answers to the questions presented, DEQ minimizes the impact stakeholder feedback will have on the modeling questions and assumptions. DEQ should have asked the questions first in this meeting, then presented staff leanings and scenarios at the second meeting.

Moreover, the staff leanings around modeling d not incorporate enough information to get a full and adequate picture of where to set the cap, what the baseline ought to be, nor the role that the alternative compliance market can play in cost containment. To that end, quoted below are our comments from our November 3, 2020 letter to DEQ RE: NW Natural Comments – DEQ Cap and Reduce Upcoming Modeling, as none of our suggestions were included:

> "**Cost is a Key Concern of the Program**
>
> Reiterating our support for the emissions reduction goals of the program and Oregon's commitment to address climate change, the ultimate success of a Cap and Reduce

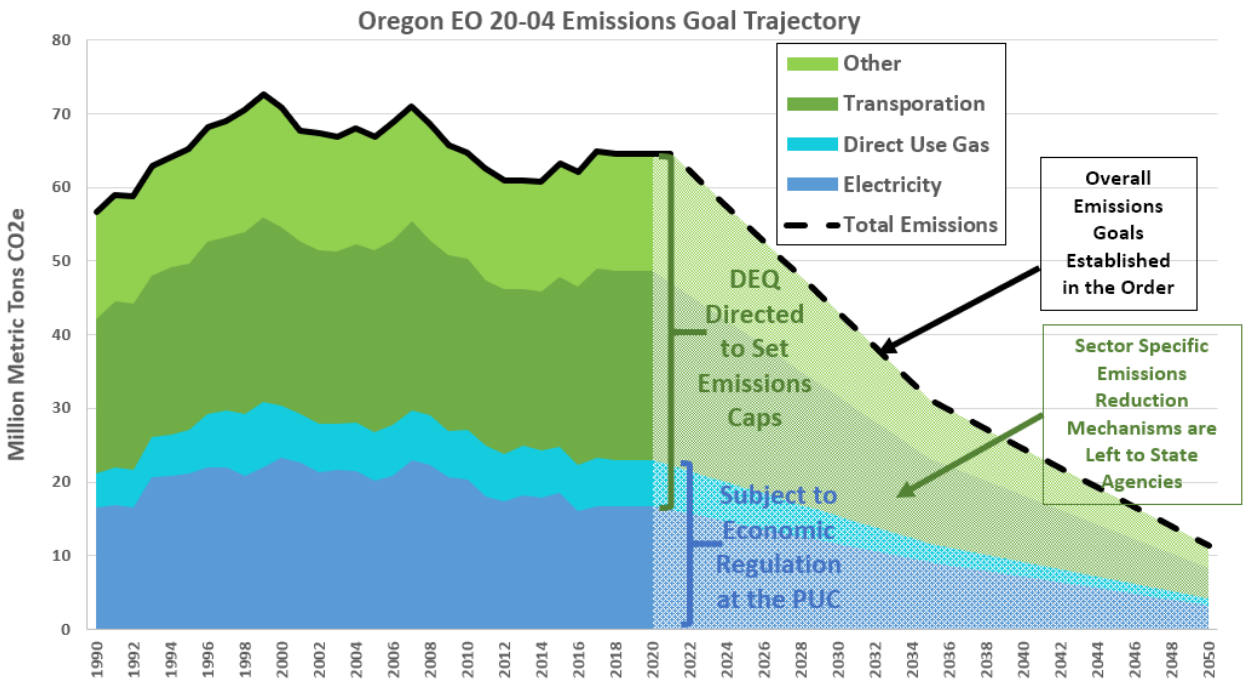
program depends upon keeping the costs of the program as low as possible. This is particularly true for the most vulnerable Oregonians and rate payers, and in the near term as our state deals with economic and other challenges caused by the COVID-19 pandemic. The following comments contain suggestions on requisite program design mechanisms and flexibility to ensure the costs of the program are manageable for the 3 million Oregonians and tens of thousands of businesses that rely upon gas utility service every single day for basic and critical needs. Program elements should be balanced with expected emissions reductions. A threshold design criterion for the gas utility sector should be that the cost of the Cap and Reduce program should not exceed the expected cost to Oregon gas utility customers of Cap and Invest proposals considered in the 2019 and 2020 legislative sessions.

Oregon's GHG Goals in Context

Executive Order 20-04 calls for more aggressive emissions reductions in the initial years of the program than other North American states and provinces with aggressive 2050 decarbonization targets. Assuming compliance begins in 2022[1], our understanding is a straight-line trajectory following the EO's statewide emissions reduction goal would require an approximate 37% reduction in covered emissions in the first ten years and a reduction of more than 50% to reach the 2035 goal.[2]

[1] Given that most emissions reduction opportunities available to natural gas utilities have relatively long lead times there are potential timing issues with completing a rulemaking in the second half of 2021 and having compliance obligations begin in 2022.

[2] Assuming Oregon's emissions remain at the level in the most recent year of DEQ's GHG inventory to year 2022.



In comparison, the "caps" in Quebec and Ontario will have declined by 23% and 30%, respectively in the first decade that fossil fuel distributors were included in their respective programs. Emissions in California's program will have fallen 32% after ten years, and Washington's Clean Air Rule would have required a 16% decline in the reduction "pathway" assigned to fossil fuel distributors. Furthermore, these jurisdictions rely heavily on the electric sector, which is largely left uncovered by EO 20-04, to provide emissions reductions in the near term even though these jurisdictions have a less emissions-intensive electricity sector than Oregon.

It is critical to note that comparable programs outside Oregon include important features to ensure viability and cost-effectiveness of the programs and to mitigate the economic burden of their ambitious emissions goals. California and Quebec's emissions markets are notably linked, providing trading liquidity and compliance cost stability for covered sectors. Ontario's program would have linked with both before its termination in 2018, and Washington's Clean Air Rule provided partial linkage with out-of-state emissions programs. Linkage between jurisdictions is central to the design of the successful Regional Greenhouse Gas Initiative (RGGI) and European Cap and Invest system (EU-ETS), which have served as models to other areas as they develop their own emissions reduction programs. All of these programs also allow (or would have allowed) some form of emissions offsets as a compliance option for covered parties, adding cost-effective alternatives to conventional credit trading and flexibility to parties meeting increasing compliance obligations.

Given this landscape, without careful consideration in program design, EO 20-04 would require a more drastic challenge for covered sectors than most (if not all) comparable programs. This would likely result in higher costs to achieve emissions reductions for Oregonians than for residents in other jurisdictions with similar 2050 goals.

Difference Between Cap and Reduce and Cap and Invest

As noted throughout the technical workshops, the Cap and Reduce program that DEQ is developing is fundamentally different than proposed Cap and Invest legislation. Under the Cap and Invest construct, state-sanctioned allowance auctions within a much larger market linked with other states and provinces would have provided the key source of flexibility and cost savings, with alternative compliance mechanisms and cost containment measures filling in the gaps for additional flexibility.

In contrast, under Cap and Reduce, DEQ has clarified that while prior legislative consideration of GHG regulation has included linkage with our jurisdictions and an auction of compliance instruments, DEQ does not believe the Environmental Quality Commission (EQC) has the authority to auction or otherwise sell rights to emit GHGs, which likely precludes linkage with broader GHG markets and the cost savings that would come with it. Further, DEQ has stated that the EQC may not develop a program designed to generate revenues or proceeds for investment in programs that would reduce emissions. Finally, DEQ has stated the EQC also lacks authority to distribute compliance instruments to a third-party for sale through an auction process, with proceeds funding GHG emissions reductions programs.

Given this, it is important that the cost saving advantages that would likely have been available under Cap and Invest due to linkage and a broader trading market not be assumed under Cap and Reduce, and it be recognized that the primary source of flexibility for compliance under Cap

and Reduce will need to be alternative compliance mechanisms and cost containment measures.

Additionally, existing statutory authority does not permit DEQ to design the program in a way that generates revenue, and the agency is constrained to design a program of cost recovery. Unfortunately, the lack of revenue-generating ability greatly reduces the amount of program money available for investments in carbon-reducing measures or other investments focused on front line communities.

Gaseous Fuels Support Low Cost Decarbonization

Roughly two out of three Oregonians use natural gas directly in their homes for home heating, water heating or cooking, yet the direct use natural gas sector represents only

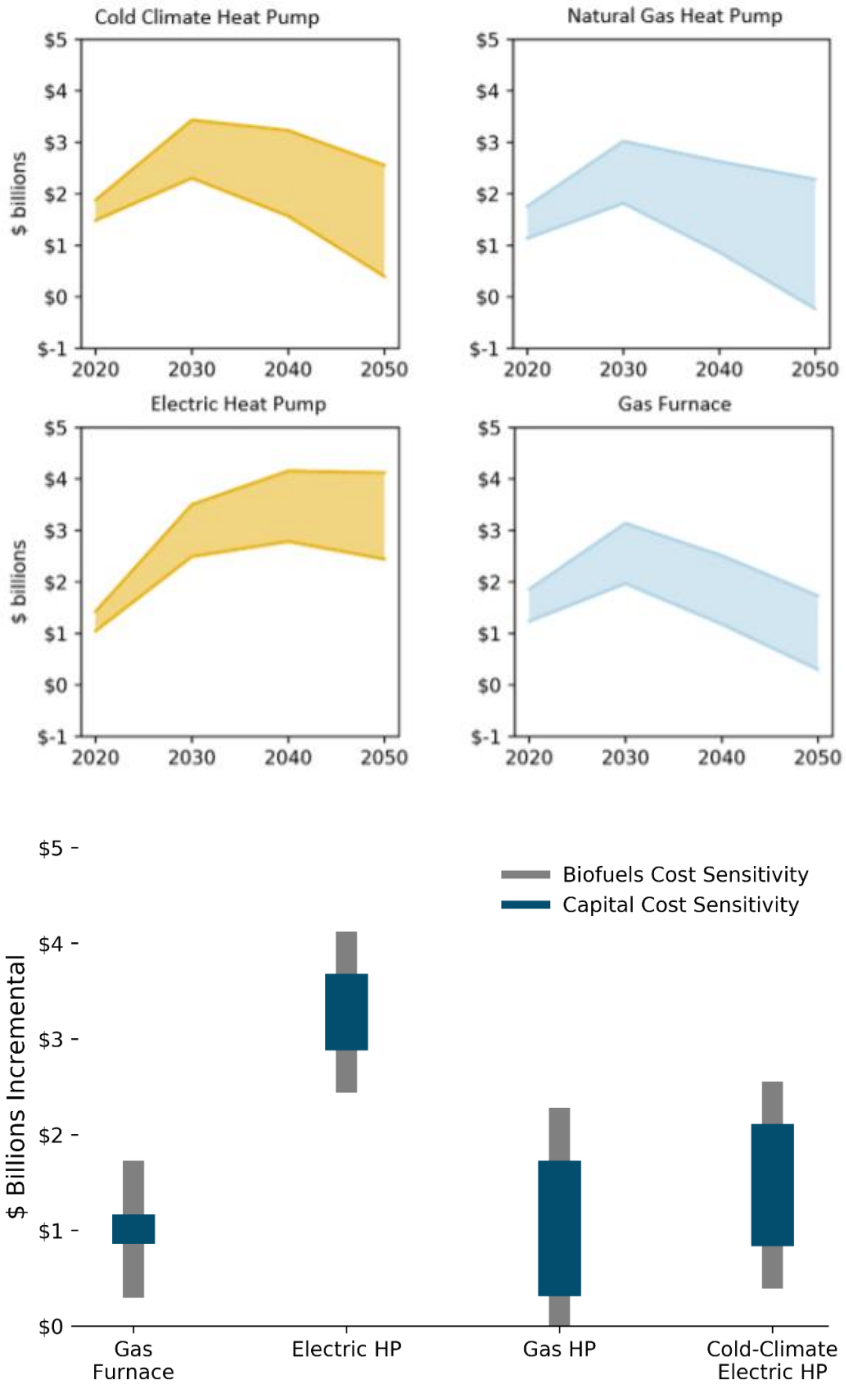
13% of the state's emissions, a distant third to the transportation and electricity sectors[3]. All non-industrial natural gas used directly in Oregon is responsible for roughly 7% of the state's emissions, where natural gas heating in the state represents less than 5%, and natural gas water heating less than 2%, of the Oregon's emissions. Furthermore, 8 out of 9 Oregon gas utility customers are also served by the state's largest electric utilities, which are relatively emissions intensive; if fewer Oregonians were using gas directly in their homes and businesses Oregon's total emissions would likely be higher now than they are.

With this context, different sectors have different mitigation options available to them and the marginal costs of achieving GHG reductions vary considerably across activities. Some sectors have low-cost reduction options immediately available to them. However, other sectors—particularly the gas utility sector— will take time for the costs of some mitigation technologies to decrease to lower cost levels. That said, the cost of utilizing the direct use gas sector to meet Oregon's greenhouse gas reduction goals is likely lower than replacing the state's vast needs for heating homes and businesses with an alternative source of energy, and certainly provides a more robust energy system that is more reliable and resilient.

A study by Energy and Environmental Economics (E3) compares the expected cost to the Oregon economy of four different economy-wide pathways (scenarios) to achieve an 80% reduction in GHGs by 2050, where the scenarios are based upon the primary equipment used to heat the homes and businesses in the state in each scenario. The results of this work are shown in the following graphs, where the economy-wide costs under the two scenarios which rely on building electrification (the "heat pump" and "cold climate heat pump" scenarios) generally result in higher cost emissions reduction than the scenarios which rely more heavily on decarbonizing the direct use gas sector serving those buildings (the "furnace" and "gas heat pump" scenarios) in both the near term and the long term. The first graph shows the range of costs to Oregon economy that could be expected in the years leading up to 2050, and the second graph provides more detail on the range of costs in 2050 in the four scenarios. Key drivers of differences in costs across the scenarios are the needs to balance seasonal demands and reliably serve peak needs during cold events (noting that building electrification would result in a heavily winter-peaking state in the electric sector):

Total Scenario Costs to Oregon Economy to Achieve 80% Reduction in GHGs in 2050

[3] Roughly 40% of natural gas use associated with Oregon energy consumption is not delivered by gas utilities and used directly, but is used to generate electricity used by Oregonians, and these emissions are accounted for in the emissions of the electricity sector.



Source: ***Pacific Northwest Pathways to 2050: Achieving an economy-wide 80% reduction in greenhouse gases by 2050,*** Energy & Environmental Economics (E3), 2018

Considerations for Low Income Customers

Low-income customers are most vulnerable to rate increases resulting from the implementation of Executive Order 20-04. NW Natural customer demographics are

consistent with those of the state of Oregon with roughly one third of our customers considered low income to near low income. Insulating these customers from cost increases is imperative, especially considering the economic impacts of the COVID-19 pandemic on financially vulnerable households.

Today, we partner with Community Action Partnership (CAP) agencies to deliver both bill assistance and weatherization to low-income customers through NW Natural's public purpose charge authorized by ORS 757.315. These programs, while effective in reducing energy burden to participants, are not sufficient on their own to ensure that the implementation of the carbon cap does not disproportionately impact low income customers. As such, NW Natural requests that the DEQ not impose compliance obligations on the roughly 15% of gas utility sales emissions associated with low income or near low income natural gas customers. We note that implementing this to ensure that low-income customers are held harmless will likely require significant changes in our internal processes because we do not currently have a way to identify or track the income levels of our customers that require low-income assistance. This process has historically been facilitated by the CAP agencies. Collectively, we should be exploring ways to support structural changes to low-income assistance, including working with the PUC, Oregon Housing and Community Services (OHCS) and CAP agencies to utilize categorial eligibility to streamline access to deliver responsive programming.

The Impact from Cap and Reduce on Gas Utility Customers is a Package

The impact of the program to our customers depends upon the entire package of issues discussed at the workshops, making it difficult to consider any of these topics in isolation. The trajectory of Oregon's emissions reduction targets, the covered parties, and the flexibility available to covered parties in their work are intricately linked. Previous efforts to develop comprehensive climate legislation in Oregon have included extensive deliberation on all three of these elements and the interactions between them. The tenability and success of the goals of the Cap and Reduce program similarly depend on such consideration. Without knowing the entire package of (1) point of regulation, (2) emissions cap trajectory (for the overall program, each sector, and each entity), and (3) the alternative compliance mechanisms that will be allowed and to what degree, it is challenging estimate what impact the program will have on our customers.

The following comments on separate issues discussed at the workshops should take into consideration this interplay and that many of these issues cannot be evaluated in isolation.

Minimizing Leakage Risks

Any Cap and Reduce program must be designed carefully to minimize the risk of "leakage." Leakage occurs when a cap program merely drives emitting operations to entities outside the jurisdiction of the program—whether in-state or out-of-state. Leakage defeats the mitigation purposes of a cap program by shifting emissions rather than reducing them.

In order to minimize leakage risks, it is important to identify the potential sources of such risks and to design the Cap and Reduce program accordingly. As DEQ acknowledges, one potential source of risk is in the power sector. Because (i) electricity grids span state lines, and (ii) emissions from the broader electricity sector are not included in the Cap and Reduce program, there is a particular risk that a program could shift other fuels to electricity or that generation could be shifted to non-regulated resources outside of Oregon without reducing emissions and potentially result in an increase in societal emissions. This risk could be realized if the Cap and Reduce program applies such stringent caps on the natural gas sector that it induces a precipitous, large-scale gas-to-electric switching, which, given the carbon intensity of the electricity delivered to direct use natural gas customers, would not lead to meaningful emissions reductions (and may not lead to a reduction in economy wide natural gas use as the marginal generation unit on the electrical system in the Northwest is usually a natural gas generating facility). To minimize this risk, DEQ should be careful to ensure that natural gas utilities can comply with any near-term caps through a wide range of mitigation options, including energy efficiency measures, increased sales of renewable gas, and alternative compliance mechanisms.

Point of Regulation

Natural gas utilities have two types of customers: "sales" customers and "transport" customers. For customers on "sales" rate schedules a natural gas utility delivers *and sells* the natural gas used directly in homes and businesses (a customer pays the utility for both delivery service and for the natural gas commodity). For "transport" customers, the utility only delivers natural gas *sold to the customer by another entity* (the customer pays the utility for delivery service but pays the third-party gas marketer for the natural gas commodity).

As became clear during the consideration of Cap and Invest legislation over the past several years, this distinction between "sales" and "transport" customers is important in the design of climate policies affecting the natural gas sector. DEQ is contemplating regulating suppliers of fossil fuels—including natural gas utilities—as "air contamination sources" on the theory that such suppliers are the "generative stimulus, force, or cause" of their customers' direct emissions. We have questions about this interpretation

generally. It is difficult to see how a natural gas utility "forces" or "causes" a customer to purchase gas from the utility. In any event, this interpretation is particularly problematic in the context of "transport" customers because the utility does not sell the gas. As explained above, the third-party marketer procures and sells the gas to a "transport" consumer. The utility charges a fee for the use of the pipeline infrastructure. Because the natural gas utility is only providing a physical conduit for the marketer to deliver the gas to the marketer's customer, it is difficult to see any legal basis to determine that the utility is the "generative force, stimulus, or cause" of the transport customer's emissions from combusting the gas. The natural gas utility is not the "fuel supplier" for "transport" customers.

Legal issues aside, there are policy design problems with assigning emission of 'transport' gas users to the utility. Because the gas utility does not provide the gas commodity for these customers they are not eligible for utility or Energy Trust of Oregon run energy efficiency programs. For sales customers, by contrast, gas utilities procure energy efficiency (in partnership with the Energy Trust) when these demand-side resources cost less than the supply side portfolio. Similarly, NW Natural will begin to procure renewable natural gas under legislation recently passed in Oregon (SB 98), but the gas utility does not have the ability to purchase RNG for its "transport" customers because they buy their gas from a third party.

Alternative Compliance Mechanisms

Had Oregon enacted Cap and Invest and joined the Western Climate Initiative trading system, the primary source of flexibility and low-cost compliance would have been trading allowances in a fully linked multi-jurisdictional market that is much larger than Oregon. Since Cap and Reduce cannot provide this flexibility and source of low-cost compliance, our collective experience debating types of – and limits on – alternative compliance mechanisms to be allowed within Cap and Invest is of limited value in understanding their required role in Cap and Reduce. As alternative compliance mechanisms will be the primary source of flexibility and cost-containment in Cap and Reduce, the provisions of the program related to them will be a key driver of the cost of the program to Oregonians. For the expected costs of the program to be similar to those expected under Cap and Invest, substantially more alternative compliance mechanisms will be needed in any Cap and Reduce program.

A broad set of alternative compliance instruments, including verifiable offsets, renewable electricity certificates, and emissions allowances from other jurisdictions should be permitted under the Cap and Reduce program.

In addition to providing cost containment benefits, offsets provide opportunities for a broader range of entities to contribute to meeting the state's GHG reduction goals. In particular, a robust offsets component of the Cap and Reduce program would offer opportunities for Oregonians to contribute to and benefit from the program, including through sequestration and other land management activities on the state's working lands. Governor Brown's EO 20-04 sets out a multi-state agenda and state goals for "carbon sequestration and storage by Oregon's natural and working landscapes, including forests, wetlands, and agricultural lands…" The offset provisions of DEQ's program can provide a meaningful avenue for helping to support this goal.

Trading Amongst Covered Parties

While important to acknowledge that the trading price within Oregon's Cap and Reduce program would likely be substantially higher than the current prices of allowances in existing Cap and Invest systems, trading of emissions amongst entities with compliance obligations within the Cap and Reduce program should be allowed. If some entities are able to reduce emissions below their own cap at a cost cheaper than another covered entity can reduce their emissions to meet their own cap, the former should be able to sell emissions reductions to the latter so that the same emissions reductions can be achieved at a lower cost. Again, while such a market should not be seen as a panacea able to keep program costs at a desired level without a detailed assessment of the likely supply and demand, trading amongst covered entities could reduce the cost of emissions reduction and should be allowed.

Voluntary Utility Emissions Reduction Programs

NW Natural supports prudent measures to control cost impacts to all customers. To achieve this, it is important that all emission saving measures facilitated by the company on behalf of customers be recognized toward meeting its compliance obligation.

Smart Energy is a voluntary offset program that allows customers to offset the emissions associated with their natural gas use. Smart Energy is subscribed to by more than 7% of sales customers. The emissions savings associated with the high-quality offsets funded by this program and secured in partnership with The Climate Trust have resulted in verified emission reductions and should be considered in determining the utility's emissions.

Additionally, we are actively developing a voluntary renewable natural gas (RNG) product or "Green Tariff" for customers wishing to accelerate RNG purchases. This voluntary initiative is responsive to customer demand and will be additional to the portion of RNG provided to all customers under the guidance of SB 98.

The provision of additional RNG to customers with greater appetite or ability to accelerate the decarbonization of their own load can likely be facilitated more cost effectively by leveraging both SB 98 and the voluntary program to increase buying power and investment potential.

Supply constraints, especially in the near term, will be a limiting factor if the voluntary efforts to secure RNG for customers cannot be additive to the RNG secured via SB 98 when determining the utility's emission footprint and reduction obligation. Therefore, it is important to prevent constructs, including unnecessary competition, that could create barriers to purchasing RNG and encouraging its development holistically.

Any discounting of voluntary emission reductions either via offset or accelerated RNG purchasing places proactive and environmentally progressive customers in competition with the utility's compliance obligation. Ensuring voluntary emission reductions are decremented from the utility's reported emissions in the Cap and Reduce program would allow voluntary program customers to claim the emissions reduction they are investing in as well as helping their community reduce emissions, without creating a double counting issue.

Potential Costs of the Cap and Reduce Program to Gas Utility Customers

As noted above, EO 20-04 calls for statewide emissions reductions from where they are today by more than 50% in 13 years (by 2035). If a reduction proportional to the state's overall reduction goal was required from each covered party under the Cap and Reduce program and alternative compliance mechanisms were not allowed, as has been suggested by a number of participants in the series of workshops held by DEQ, the expected cost of the program to gas utility customers of all types would be severe. The table below projects the incremental annual cost increase natural gas utility customers would be required to pay due to the Cap and Reduce program under this setup, and compares that to the expected costs that would have been imposed by the Cap and Invest program requiring similar statewide emissions reductions[4]:

Expected Incremental Impact to Annual NW Natural Customer Bills:
Cap and Invest vs Cap and Reduce Proportional to Statewide Goals in EO 20-04

[4] Above and beyond the expectation from renewable natural gas acquisition in support of SB 98 and other changes in costs due to expected changes in the price of natural gas, needed investments to maintain safe and reliable service, and changes in operational costs.

	Residential		Commercial		Industrial	
	Cap & Reduce- EO 20-04 statewide trajectory applied to all entities	Cap & Invest- Gas utility treatment under SB 1530	Cap & Reduce- EO 20-04 statewide trajectory applied to all entities	Cap & Invest- Gas utility treatment under SB 1530	Cap & Reduce- EO 20-04 statewide trajectory applied to all entities	Cap & Invest- Gas utility treatment under SB 1530
2025	13%	10%	15%	9%	36%	19%
2030	34%	14%	41%	12%	86%	26%
2035	62%	16%	74%	19%	144%	37%

These projections are based upon the expected cost of the significant amount of incremental renewable gas and energy efficiency resources needed to meet such an aggressive near-term cap. This projection includes the greatest amount of energy efficiency Energy Trust analysis shows is possible to achieve on behalf of NW Natural customers as well as well as a future where half of the gas sold by NW Natural is RNG or hydrogen. These cost increases are so acute for three primary reasons: 1) the emissions reduction requirement would be more aggressive than the requirements for gas utilities in programs in other jurisdictions, and, 2) the program cannot benefit from the flexibility of a state sanctioned emissions trading system linked with other larger jurisdictions, and 3) offsets and other alternative compliance mechanisms wouldn't be utilized to the degree that can overcome (1) and (2).

NW Natural Proposal for Cap and Reduce Design

With that context, and as was requested from multiple parties during the technical workshops, NW Natural proposes two options for consideration during program design. These proposals follow the directives in Governor Brown's Executive Order to balance aggressive emissions reduction with keeping costs as low as possible, particularly for those least able to afford them. The proposals are focused on providing options that would result in costs to Oregon gas utility customers similar to those that would have been imposed under Cap and Invest. As noted earlier, the proposals should be considered as packages, as changing even one element of the program design could have significant impacts on the expected costs for Oregonians.

Proposed Cap and Reduce Program Design Elements for Large Gas Utilities - Option 1:

- For all direct use natural gas, the party who sells the gas to an end user in Oregon is the party responsible for compliance of the use of that gas

- To hold them harmless from cost impacts from the program, emissions associated with low-income residential customers are not included in the compliance obligation of the party that sells their natural gas
- The incremental cost impact of the Cap and Reduce program should not exceed 20% of a customer's annual total gas bill out to 2035
- Natural gas utility emissions caps decline at a straight line from weather normalized 2022 emissions to a **40%** reduction from 2022 weather normalized emissions by 2035 with the following considerations[5]:
  - Allowed trading amongst all covered parties in the Cap and Reduce program
  - Multiyear compliance periods with banking allowed across years to account for the differences in weather in any given year
  - Gas utility renewable gas expectations align with the first 13 years of Oregon's electric RPS, where by year 13 of the program expected renewable penetration is at 20% (i.e. 2035 in this case)
  - Offsets can be used for compliance up to an amount equal to 25% of 2022 weather normalized emissions, but cannot represent more than 50% of reported emissions reduction in a given year after 2025
  - While the emissions reduction will be attributed to the customers (and they have the right to claim them), emissions reductions from voluntary utility emissions reduction programs (e.g. NW Natural's Smart Energy program and other future programs) can be used to reduce reported emissions of the utility as a cost-containment mechanism for all customers

An alternative proposal that allows for less alternative compliance mechanisms but would also be likely to result in cost impacts for gas utility customers similar to what would have been expected under Cap and Invest is provided below, noting the tradeoff in the emissions reduction trajectory.

*Proposed Cap and Reduce Program Design Elements for Large Gas Utilities - Option 2***:**

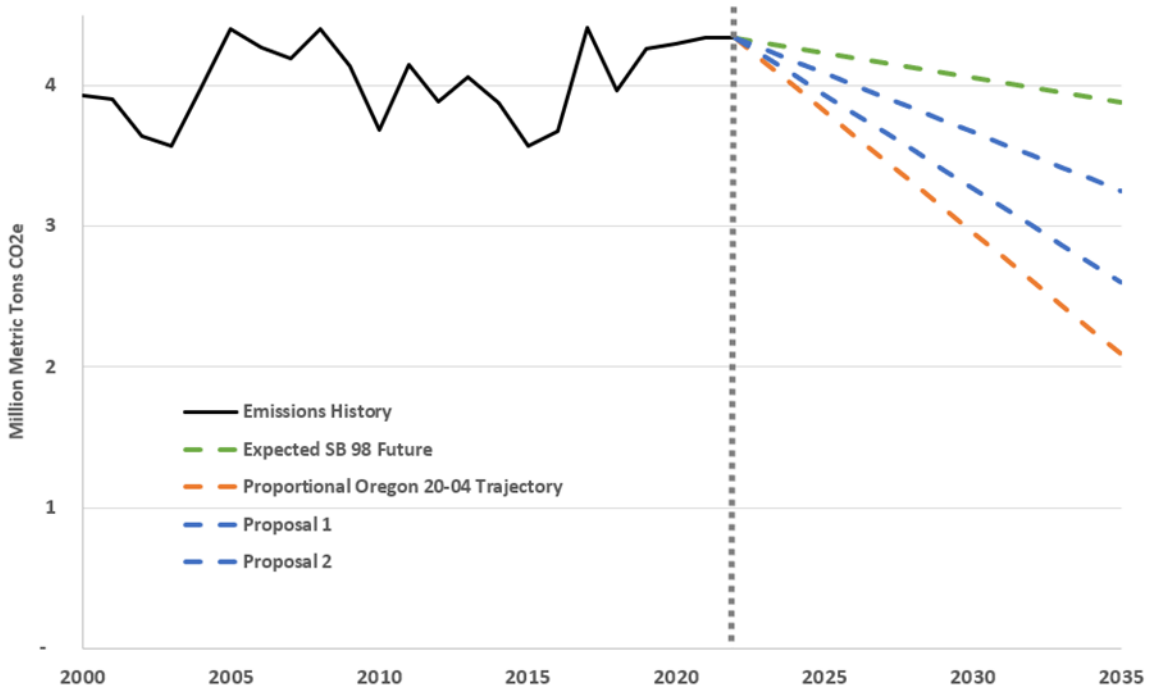
- For all direct use natural gas, the party who is responsible for selling the gas to an end user in Oregon is the party responsible for compliance of the use of that gas
- To hold them harmless from cost impacts from the program, emissions associated with low-income residential customers are not included in the compliance obligation of the utility that delivers their natural gas
- The incremental cost impact of the Cap and Reduce program should not exceed 20% of a customer's annual total gas bill out to 2035

[5] For context, the Renewable Portfolio Standard (RPS) has a cost cap of 4% per year. Any actions taken in compliance of the RPS obligations that lead to a rate increase of more than 4% per year triggers the cap, thus placing RPS obligations on pause until compliance can be achieved for a cost of under a 4% rate increase per year.

- Natural gas utility emissions caps decline at a straight line from weather normalized 2022 emissions to a **25%** reduction from 2022 emissions by 2035 with the following expectations:
  - Allowed trading amongst all covered parties in the Cap and Reduce program
  - Multiyear compliance periods with banking allowed across years to account for the differences in weather in any given year
  - Natural gas renewable gas expectations align with the first 13 years of Oregon electric RPS, resulting in an expectation that 25% of gas sold by the natural gas utility be renewable in 2035
  - Offsets can be used for compliance up to an amount equal to 10% of 2022 weather normalized emissions, but cannot represent more than 50% of reported emissions reduction in a given year after 2025
  - While the emissions reduction will be attributed to the customers (and they have the right to claim them), emissions reductions from voluntary utility emissions reduction programs (e.g. NW Natural's Smart Energy program and other future programs) can be used to reduce reported emissions of the utility as a cost-containment mechanism for all customers

The figure below compares the emissions trajectories of NW Natural's two proposals (blue lines) with its SB 98 inclusive expectations prior to the issuance of EO 20-04 (green line) and a trajectory proportional to the statewide emissions goals in the Order (orange line).

NW Natural Sales Emissions History and Projections Relative to an Unmitigated Future



The Presentation Did Not Adequately Address Leakage Concerns- The DEQ presentation did not address concerns of interstate or intrastate leakage. If our understanding of the three proposed modeling scenarios is correct, the program will only cover roughly half of the state's emissions. Given it is highly plausible that the program could reduce emissions from the covered parties, but increase the emissions of the state overall as the role of non-covered parties in the state increases. For example, all of the large fuel suppliers could be replaced with smaller suppliers whose emissions do not go above the program threshold and provide the same – or even more emissions intensive – fuels and avoid compliance costs. Similarly, it would be quite easy for smaller propane and heat oil distributors to avoid program coverage that would result in it being cheaper for natural gas utility customers to to switch to electric resistance heating, heating oil or propone though this would actually increase Oregon's emissions while making it more expensive for Oregonians to heat their homes and businesses.

Enhancing GHG Inventory Reporting- In order to adequately design and administer the Cap and Reduce program DEQ needs to enhance its GHG inventory reporting program. All three of the scenarios presented by DEQ staff regulated natural gas emission as the utility level. DEQ needs to have adequate information if the agency is going to only have the three natural gas utilities as the only covered natural gas users. We urge DEQ to use information available in IRPs to help inform their GHG inventory reporting.

Slide 38 – Measuring Oregon's Usage of Natural Gas- NW Natural would submit that neither pie chart on Slide 38 provide much value, as neither is tied to GHG inventory.

The Cap is Not Economy Wide- Section 4(C)(3) directs to DEQ to "Cap and reduce GHG emissions from all other liquid and gaseous fuels…" Yet, none of the three scenarios put forth by DEQ do that. Instead, they seek to only cap and reduce emissions from natural gas utilities and fuel suppliers. We believe greater GHG reduction could be achieved, and could be achieved at a lesser cost were additional GHG emitters included under the cap.

Thank you for the opportunity to provide these comments; we are open to further discussing providing any data that will help DEQ and ICF analyze the impact of different Cap and Reduce program designs on the majority of Oregonians who are natural gas utility customers. Additionally, we look forward to providing additional input as DEQ provides more information about the proposed analysis.

Sincerely,

/s/ Nels Johnson

Nels Johnson
NW Natural

cc: Colin McConnaha, DEQ
Nicole Singh, DEQ
Kristen Sheeran, Office of Governor Kate Brown

Northwest Pulp & Paper
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Submitted to: GHGCR2021@deq.state.or.us

January 21, 2021

TO: Oregon Department of Environmental Quality

FROM: Northwest Pulp & Paper Association

RE: Rulemaking Advisory Committee Meeting 1, Oregon Climate Protection Program

Thank you for the opportunity for the Northwest Pulp & Paper Association (NWPPA) to provide comment on Oregon Department of Environmental Quality's (DEQ) Oregon Climate Protection Program Rulemaking Advisory Committee (RAC) Meeting 1, held January 14, 2021. As a member of the RAC, Kathryn VanNatta Director of Regulatory Affairs for NWPPA, submits the following written comments.

Background

NWPPA is a 65-year-old regional trade association representing 10-member companies and 14 pulp and paper mills and various forest product manufacturing facilities in Oregon, Washington and Idaho. Our members hold various permits issued by DEQ including permits for Title V Air Operating Program and the Air Contaminant Discharge Program, and also report Greenhouse Gas (GHG) emissions under DEQ's GHG Reporting and Third Party Verification Program.

NWPPA members are at the forefront of Oregon air quality improvement efforts. Our members have embraced technically advanced and scientifically sound controls on air emissions over the past 20 plus years. We are proud of our dedication to efficient and environmentally sound processes and reduction of GHG emissions over time. We are committed to the hard work, expense and discipline it takes to be contribute to our communities.

NWPPA staff are long-standing-stakeholder participants in numerous DEQ advisory committees including groups on: establishing regulatory programs, administrative rules (RACs), agency program improvement efforts and agency fee increases.

Overarching comments

Oregon's pulp and paper sector has been recognized as an essential business by state and federal governments. Without fail, our Oregon mills' essential workers have been making vital paper products we all use every day to help fight against COVID-19. Our essential paper

products are used by Oregon consumers as well as being distributed within the Western US and abroad.

NWPPA's comments on the RAC meeting held January 14 should be construed as preliminary in nature, given the enormous complexity of the proposal and many assumptions with very limited details, and the short comment turn-around time. NWPPA will provide additional comments on this rulemaking as we continue our analysis over the coming months.

While many details are unclear, pulp and paper manufacturing could face increased costs from Scope 1 (on-site combustion and process emissions), Scope 2 (cost of energy) and Scope 3 (transportation fuels required to get our vital products to consumers). We ask the Department to keep this triple-threat cost profile in mind as you design Oregon's program.

Shared goals

NWPPA member mills have been longtime leaders in minimizing GHG emissions by maximizing the use of carbon-neutral biomass as the sector's primary (57%) fuel source and the use of highly efficient combined heat and power (CHP) systems for onsite energy generation of steam and electricity. Since 2010 Oregon pulp and paper sector has reduced emissions from anthropogenic sources by 62,000 mt CO_2e. That's the same as removing over 13,400 passenger vehicles from the road for one year.

Oregon's pulp and paper mills make their products with predominantly zero-carbon emitting hydropower and other renewables for purchased electricity, carbon neutral biomass, and natural gas—resulting in one of the most environmentally responsible manufacturing methods in the world. As a result, in 2019 Oregon's pulp and paper sector emitted only about 1% of the state's anthropogenic GHG emissions.

Biogenic recognition and incentives

NWPPA appreciates the fact that emissions from the combustion of biomass and process by-products are not proposed for regulation. Biogenic emissions clearly should not be included. NWPPA believes that the pulp and paper sector should be recognized for our leadership in reducing anthropogenic fuel use in manufacturing by using residual materials generated in our manufacturing processes for energy production and for our manufacture of recycled paper products.

With Oregon's abundant forest resources and our Oregon forest products supply chain from timber harvest-to-papermaking-to-consumers, Oregon's pulp and paper sector should be incentivized for the use of biomass, CHP and recycled materials. Incentives could assist in our use of biomass for onsite CHP, as CHP allows us to efficiently self-generate much of our steam

and energy needs onsite and also incentives to continue and increase our use of recycled materials.

Pulp and paper sector is energy Intensive and trade exposed (EITE)

Pulp and paper manufacturing is one of the most energy intensive and trade exposed sectors in the country. The Governor's 2018 study, titled *Oregon Sectoral Competitiveness under Carbon Pricing, Final Report December 2018*, prepared for the Oregon Carbon Policy Office study by Vivid Economics,[1] categorizes Oregon's pulp and paper sector as an EITE sector. Therefore, a primary DEQ consideration for elements of the future program must be the fact that Oregon's pulp and paper sector is vulnerable to regulatory programs that increase production costs relative to producers in other jurisdictions because these costs typically cannot be passed on to consumers. Carbon regulation increases the cost of energy (a major cost component of pulp and paper production) and therefore has the potential to cause production to "leak" to other jurisdictions. As discussed in more detail below, such leakage to locations that likely have higher GHG emissions intensities would in fact increase the greenhouse gas emissions for an equivalent amount of pulp and paper or wood products produced, which works against the clear intent of Executive Order 20-04 to reduce carbon emissions.

Leakage

DEQ's Greenhouse Gas Emissions Program 2021 Rulemaking: Background Brief [2] states there could also be costs for consumers and businesses. We believe there will be significant cost increases for consumers and businesses and that the program should be designed to ensure Oregon business may thrive. Regarding leakage, the Brief also states at page 4,

> DEQ also seeks to minimize leakage, which is the shifting of greenhouse gas emissions outside of Oregon or outside the scope of the program's regulation. This may result in emissions in areas or sectors where there are no emissions regulations or there are less strict emissions regulations.

Leakage of a small percentage of Oregon's pulp and paper sector's emissions to nearly any other part of the world has the potential to increase the GHG emissions, both in areas with and without GHG emission regulations. Another key factor to consider is that Oregon has one of the lowest state-based GHG emission factors associated with purchased electricity of any major pulp and paper producing state in the US. Production shifts outside of the state would increase purchased electricity GHG emissions. Production shifts outside Oregon would also

[1] https://www.vivideconomics.com/wp-content/uploads/2019/08/Oregon-Industrial-Sector-Competitiveness-Under-Carbon-Pricing-1.pdf (downloaded Jan. 19, 2021).

[2] Climate Protection Program, Greenhouse Gas Emissions Program 2021 Rulemaking: Background Brief, dated Dec. 18, 2020.

bring the devastating effects of the loss of family-wage essential worker jobs in rural areas within the state.

Necessity of Alternative Compliance Mechanisms

NWPPA believes that mitigating the risk of leakage for Oregon's EITE pulp and paper sector should be a major program design consideration. NWPPA's preferred way to protect our essential paper manufacturing base and our highly-trained essential workers is to exclude Oregon mills from the program. However, if the rule moves forward including the pulp and paper mills and our forest products supply chain in the program, there must be multiple compliance pathways *thoughtfully and carefully built into the core of the program*. In general, alternative compliance mechanisms could include energy audits, a recycling credit, technology analyses, use of offsets, and multiyear compliance periods to name a few.

Until additional details about the parameters of the rulemaking are understood, NWPPA is unable to comment on specific alternative compliance mechanisms.

Thank you for the opportunity to provide written comment on DEQ's Oregon Climate Protection Program Rulemaking Advisory Committee (RAC) Meeting 1, held January 14, 2021.

January 21, 2021

VIA EMAIL

Colin McConnaha
Manager, Office of Greenhouse Gas Programs
Oregon Department of Environmental Quality
700 NE Multnomah Street, Suite 600
Portland, OR 97232

Re: Comments on Cap and Reduce Rule Advisory Committee Meeting 1, Jan. 14, 2021

Dear Mr. McConnaha:

Thank you for the opportunity to comment on the Department of Environmental Quality's (DEQ) first Cap & Reduce Rules Advisory Committee (RAC) meeting. I am writing on behalf of Oregon Business & Industry (OBI), Oregon's most comprehensive statewide business association, representing more 1,600 businesses that employ more than 300,000 people across our state.

OBI offers the following comments on the materials presented and discussion at the Jan. 14 meeting.

Oregon is about to embark on a historic program to regulate greenhouse gas (GHG) emissions. Although other states/regions of the U.S. regulate GHG emissions, these programs lack some basic commonalities with Oregon's framework and there is little to draw from in terms of policy experience to help shape Oregon's program. There is no question that costs will increase for the sources regulated under Cap & Reduce and other programs associated with Executive Order 20-04. For these reasons, it will be critical for Oregon to focus on policy options that balance reducing emissions and cost containment to maintain the competitiveness of Oregon's businesses and protect against unreasonable costs to consumers.

DEQ presented several key policy design options indicating its tentative position on these decision points and requesting information in follow up questions. In general, OBI believes broad flexibility in the program design is critical for both achieving compliance and managing costs.

OBI Supports Several of DEQ's Leanings Relative to Compliance Instruments

- Use of Compliance Instruments: The distribution of free compliance instruments is the most viable method for regulated entities to demonstrate compliance.

- Trading of Compliance Instruments: The option to buy and sell compliance instruments among regulated entities is an effective way to reduce overall emissions by incentivizing GHG reductions from entities that have greater capacity to carry out reductions without penalizing those that may be more constrained by available and affordable technology, market forces or the broader economy.

- Banking: All of the sectors regulated under Cap & Reduce are subject to dynamic forces

that result in significant fluctuations in manufacturing production as well as the use of natural gas and transportation fuel. Markets for specific products, the weather, the economy and other factors create variability in annual GHG emissions. Banking incentivizes early reductions without penalizing uncontrollable factors.

- Alternative Compliance Instruments: Multiple options will be required to demonstrate compliance and manage costs. Use of alternative compliance instruments is another essential option for regulated entities to achieve both and should be utilized to the maximum extent possible. The alternative compliance option limits proposed for modeling on page 71 of the slide deck are low. Greater flexibility in the use of allowable compliance instruments should be provided. We urge DEQ to increase the allowable use of alternative compliance instruments to 20-25% and this increase should also be reflected in one or more modeling scenarios. To provide an adequate supply of compliance instruments, the rule should allow broad geographic sourcing of the instruments from sources and projects both inside and outside Oregon.

- Exclusion of Process Emissions: Process emissions are unique, difficult to control, and are basically limited to just a handful of sources. One RAC member stated that if process emissions were excluded then other sources should operate under a more stringent cap to make up for their exclusion. We are opposed to any attempt to hold other businesses accountable for addressing process emissions.

Multi-Year Compliance Periods Are Essential

DEQ has sought input on the use of multi-year compliance periods. As discussed above, many uncontrollable variables come into play in any given year. Regulated entities rely on strong markets to weather the inevitable and corresponding downturns to remain economically viable over the long term. DEQ's program should provide for these dynamic factors affecting GHG emissions that are unknowns from year to year by implementing multi-year compliance periods.

Additionally, installation or implementation of GHG reduction technologies does not happen on a dime. These technologies take time to identify, plan for and permit. Without providing the flexibility of a multi-year compliance period, regulated entities' only option may be to curtail production or limit the amount of transportation fuel and natural gas sold to Oregon customers. These would not be favorable outcomes to Oregon's economy, workforce, or residents.

Finally, we believe that compliance periods that coincide with long-established five-year permitting cycles, such as the Title V or Air Contaminant Discharge Permit programs, would be most effective for both regulated entities and DEQ. Facilities will require time to plan for and implement GHG reduction technologies that will also need to be approved and incorporated into air permits. Mid-cycle permit modifications would also place greater burden on DEQ's already strained and backlogged air permitting programs. Increases in budget and staff would be required to address the additional workload needed to process off-cycle modifications. These outcomes would certainly result in acute challenges and an overall detrimental effect on permit holders and DEQ.

For these reasons, OBI urges DEQ to implement a five-year compliance period for the Cap & Reduce program.

Additional Cost Containment Measures Should Be Included

DEQ's Cap & Reduce policy framework must prioritize keeping costs reasonable. This regulatory program will make basic needs more expensive at a time when Oregonians and Oregon businesses are least able to cope with cost increases as result of COVID-19. DEQ must consider the increased heating and transportation fuel costs that will disproportionately impact low-income Oregonians. Unemployment is at historic highs, state and local governments are facing budgetary shortfalls at a time when Oregonians need access to government services and programs, and additional new taxes on vulnerable businesses are being contemplated in the Legislature and elsewhere. Full economic recovery from this historic global event is expected to take years.

In addition to having sufficient compliance instruments on day one of the program, OBI urges the inclusion of additional cost containment measures that include a price ceiling for compliance instruments, offsets and the design of off-ramps that would provide a framework for containing societal and business costs should the compliance instruments begin to increase substantially. The Renewable Portfolio Standards and Clean Fuels programs have cost containment mechanisms that have been critically important to those programs and the sectors they regulate. DEQ should consider using similar cost containment mechanisms in the current rulemaking.

Program Flexibility, Efficacy and Enforceability Are Not at Odds

During the meeting the Jan. 14 meeting, some RAC members posited that providing for flexibility in the program would hinder achieving its goals. That conclusion is not supported and should be fully examined by ICF in a broader range of policy assumptions within the modeling exercise.

DEQ Should Engage in a Robust Discussion of Leakage, EITEs and Management Transportation Fuels

The first Cap & Reduce RAC meeting did not include any discussion of leakage. We fear that, without a robust discussion of leakage and the very real potential for adverse environmental and economic impacts from leakage, RAC members will have limited ability to engage in informed policy dialogue. Leakage, which occurs when emissions sources shift production outside Oregon, relocate, or shut down in response to stringent regulatory schemes, has been the subject of much discussion in reports like the Vivid Economics Study commissioned by Gov. Brown.

Any policy construct to reduce Oregon's GHG emissions must achieve net global emissions rather than shifting emissions sources elsewhere. Oregon businesses compete in a global economy and must be competitive to stay in business and remain profitable. A regulatory program that incents businesses to leave Oregon and operate under less stringent regulations is harmful across the board--to Oregon's economy, jobs, tax base and global GHG emissions.

In no other sector is leakage a greater concern than for Energy Intensive Trade Exposed (EITE) businesses. Given the attention, study and negotiations devoted to EITEs previously, we encourage DEQ to present the governor's study and engage RAC members in a discussion of the economic realities of a stringent program that has great potential to displace environmental impacts and risks permanent loss of Oregon businesses.

Further, as presented by DEQ, transportation fuels would be, by far, the largest obligated sector in the program. There should be a detailed discussion on the program's impact on the sector including realistic compliance pathways.

Production-Based Distribution of Compliance Instruments

Given DEQ's leanings toward a mass-based cap, we are uncertain how production-based distribution of compliance instruments might be incorporated into a mass-based cap. OBI believes production-based distribution of compliance instruments is worthy of consideration and particularly if a sector-specific distribution method could be determined. We would be interested in discussing how this might be achieved in a way that does not result in the inequitable distribution of allowances between sectors. Not all sectors have the same ability to reduce emissions and this must be factored into a policy framework so that it does not result in an uneven playing field.

Point of Regulation

OBI sees advantages and disadvantages to the point of regulation being placed at the fuel supplier or at the emissions source. Irrespective of the point of regulation, a program will only work if adequate compliance instruments are distributed to the regulated entities to prevent leakage and unreasonable economic impacts.

Interim Targets

OBI opposes an interim target for the program to provide flexibility in achieving the program's long-term goals while balancing existing needs using current technologies. Mid- program adjustments can be made to the program if the need arises without the stringency of an interim program target.

Additional Meetings Will Be Needed to Explore Sector- or Issue-Specific Policy Questions

OBI requests that DEQ conduct additional meetings with a smaller group of stakeholders in order to have a more focused dialogue on particular sectors and issues. Summaries of those meetings should subsequently be provided to the full RAC. We understand the time constraints DEQ is under for completing the rule, but exploring policy options more thoroughly now is essential to a reasonable, workable, and effective program.

Modeling Approaches and Assumptions

OBI has dozens of questions around the proposed modeling exercise. We note a mere sampling of concerns and pose a few questions below, however, we believe a meeting with ICF is the only way to understand the decision points in the proposed modeling and offer input to that critical process. For the modeling to be of value, it is important that it be thoughtful, deliberate and not rushed. To that end, OBI requests a meeting with ICF to ask questions and gain a better understanding of the proposed modeling approaches. Cap & Reduce is likely to have a multi-billion dollar impact over the course of the program and it is critical that the modeling be as reflective as possible of the baseline scenario and what a broader range of policy scenarios would look like.

For example, we would like to understand:

- The selection of a static model like IMPLAN over a dynamic model like REMI given the substantial limitations of IMPLAN.
- Whether DEQ will include existing programs like Cleaner Air Oregon into the reference case.
- Why there was not greater variation in the policy scenarios proposed for modeling in contrast to the minor variations in policy choices that have been selected.
- How modeling will account for the mandate to double the requirements of the Clean Fuels program.
- How the Vivid analysis and EITEs will be factored into the modeling.
- How the modeling will account for climate and energy policy changes under the Biden Administration generally, such as a national clean energy standard.

We believe these important questions in the modeling must be addressed before proceeding further and we welcome a meeting between ICF and the regulated sectors prior to the next RAC meeting.

OBI appreciates the opportunity to offer comments on the Cap & Reduce Meeting 1 and we look forward to engaging in this rulemaking as it moves ahead. As always, please contact me should you have any questions.

Sincerely,

Sharla Moffett
Director
Energy, Environment, Natural Resources & Infrastructure

January 13, 2021

Nicole Singh
Senior Climate Policy Advisor
Oregon Department of Environmental Quality (DEQ)
Electronic Submission: GHGCR2021@deq.state.or.us

RE: Department of Environmental Quality Greenhouse Gas Emissions Program 2021 Rulemaking

Ms. Singh and Climate Protection Program Advisory Committee,

The Department of Land Conservation and Development (DLCD) is encouraged to see DEQ undertaking rulemaking to create standards for reducing greenhouse gas emissions. As Oregon continues to be directly impacted by the impacts of climate change, creating standards to reduce greenhouse gas emissions will be a critical step in mitigating further exacerbation of impacts. DLCD highly recommends the Climate Protection Program Advisory Committee include policy language that meets the enforceable policy criteria under the federal regulations of the Coastal Zone Management Act of 1972 (CZMA) (15 CFR §923.84). Incorporation of policies that meet these criteria will allow Oregon to apply state standards to federal activities that impact coastal uses or resources during federal consistency reviews. Applicable federal activities reviewed under this authority include federal permits and licenses as well as direct federal actions.

DLCD acts as the lead agency of the Oregon Coastal Management Program, which is Oregon's federally approved coastal zone management program under the provisions of the CZMA. A major incentive for state participation in the Coastal Zone Management Act is the federal consistency authority. This authority, along with OCMP's uniquely networked structure, means that the diverse natural resource policies of the state can be applied when reviewing federal activities, so long as they meet the enforceable policy criteria outlined in 15 CFR §923.84. Federal activities taking place within Oregon's coastal zone must be consistent with the enforceable policies of the OCMP. OCMP's networked partners include multiple local jurisdictions and state natural resource agencies, including DEQ.

DLCD-OCMP staff are available to assist in policy development to assure alignment with federal regulations and the enforceable policy criteria. Please contact Deanna Caracciolo at Deanna.Caracciolo@state,or,us or 503-956-8163 for assistance. Additional information on Oregon's federal consistency authority is available at - https://www.oregon.gov/lcd/OCMP/Pages/Federal-Consistency.aspx

Sincerely.

Deanna Caracciolo
State-Federal Relations Coordinator
Oregon Coastal Management Program

Electronic CC:

Patty Snow (Manager, DLCD-OCMP)
Heather Wade (Coastal Policy Specialist, DLCD-OCMP)

January 21, 2021

Colin McConnaha
Nicole Singh
Office of Greenhouse Gas Programs
Oregon Department of Environmental Quality
Sent Via Email: GHGCR2021@deq.state.or.us; Colin.McConnaha@state.or.us; Nicole.Singh@state.or.us

RE: Oregon Fuels Association RAC #1 Comment Letter

Dear Colin and Nicole:

Thank you for an opportunity to provide comment following the first Cap-and-Reduce / Climate Protection Program rules advisory committee meeting.

The Oregon Fuels Association (OFA) is the voice of Oregon's locally-owned fuel stations, fuel distributors and heating oil providers. OFA members are at the forefront of environmental stewardship within the industry and continue to make investments toward a cleaner, greener economy. In fact, Oregon's locally owned fuel providers are leaders in the use of fuel blending and promoting the use of low carbon fuels and biofuels. We are dedicated to helping Oregon reduce emissions from fuels by at least 10 percent by 2025. These investments by our members have helped eliminate millions of tons of greenhouse gas emissions since the Clean Fuels Program was implemented in 2015.

As a leader in reducing the state's greenhouse gas emissions, please accept OFA's brief comments following the first Rules Advisory Committee (RAC) meeting on the creation of a Cap-and-Reduce / Climate Protection Program:

- **Support 300,000 MtCO2e threshold**. OFA represents many small businesses throughout Oregon. An appropriate threshold is critical to helping reduce administrative costs on these small businesses while simultaneously meeting the state's GHG reduction goals. As stated during the RAC meeting, it will be difficult for businesses, especially small businesses, to comply with a standard if they are regularly moving in and out of the regulatory threshold. A 300,000 MtCO2e threshold provides the most efficient and consistent way to regulate the vast majority of Oregon fuel and meets agency's rulemaking objectives outlined in ORS 183.336 (cost of compliance effect on small business) and ORS 183.540 (Reduction of economic impact on small business).

- **Program must include price protections**. Much like the Clean Fuels Program (CFP), this program should include provisions that would keep costs to fuels affordable for all

communities. This means closely tracking the supply, demand, and price of compliance instruments in the secondary market. If prices reach a high price, the program should stabilize before further reductions are required. While this was not included in the meeting, we believe this is an important issue for our customers and communities.

- **CPP must support the CFP**. OFA members have made significant investments and been key to the success of Oregon's Clean Fuels Program. This program has helped small, local businesses reduce greenhouse gas emissions in the fuel that they sell. It is important that provisions in this new program do not conflict with existing success of the CFP. To achieve this goal, it may be necessary to adopt an emissions intensity greenhouse gas emissions cap consistent that aligns with the progress made under the CFP.

- **Affordable transportation fuels is an equity issue**. According to Isabel V. Sawhill, a senior fellow in Economic Studies at the Brookings Institution, higher gas prices hurt the poor. She states:

> *[H]igher gas prices drain purchasing power from the economy. That means that these families get hit twice: once by the direct impact on their household budgets but a second time when higher prices retard the economic recovery.*
> ***
> *Rising gas prices produce a level of hardship for a group that is already suffering from high levels of unemployment and stagnant or declining real wages.*[1]

Similarly, The Urban Institute found the following:

- *The majority of workers, with incomes both above (78.9 percent) and below the poverty level (64.7 percent), commute to work by car, alone;*
- *Low-income commuters on average have slightly shorter commutes (19.5 minutes) than those with incomes above the poverty level (23 minutes);*
- *However, because their incomes are much lower, poor commuters spend a much higher proportion of their wages on gas (8.6 versus 2.1 percent at $4/gal);*
- *As gas prices double, the increase in costs represents a disproportionate increase in the burden for below-poverty commuters—from $2/gal, the increase takes 4.3 percent of income from below-poverty commuters and 1.0 percent from those above poverty;*
- *There are some variations in commuting times, income, and gas cost burden by race/ethnicity and geographic area, though the variations are much less than the gap between those above and those below the poverty line;*

[1] Isabel V. Sawill, How Higher Gas Prices Hurt Less Affluent Consumers and the Economy. https://www.brookings.edu/opinions/how-higher-gas-prices-hurt-less-affluent-consumers-and-the-economy/#:~:text=That%20said%2C%20rising%20gas%20prices,%2D%20and%20moderate%2Dincome%20households.&text=Every%20dollar%20increase%2C%20holding%20the,an%20extra%20%24530%20per%20year

- *The estimated numbers may actually understate the relative burden on the poor, since we assume exactly the same gas mileage for commuters in the two groups— if lower-income people tend to have older, less well-maintained (therefore, less fuel-efficient) cars, they will tend to get lower gas mileage.* [2]

Programmatic costs leading to increased costs to transportation fuel cannot be ignored and ensuring compliance costs remain low is critical to addressing equity goals of this rulemaking.

Modeling Policy Scenarios
Please make the following change to the Modeling Policy Scenario Proposal (see slide 71).

- Scenario 3 "Allowable Use of Alt Compliance" should model up to 25% or 50% of compliance obligation per year. The difference between 8% and 12% is not enough. This is a critical component in looking at long term costs of fuel. Allowing 50% compliance obligations per year could mean reducing the same amount of emissions at a lower cost. That should be the goal of this program.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Mike Freese
RAC Member
Oregon Fuels Association

[2] Impact of Rising Gas Prices on Below-Poverty Commuters (2008).
https://www.urban.org/sites/default/files/publication/32031/411760-Impact-of-Rising-Gas-Prices-on-Below-Poverty-Commuters.PDF

January 21, 2021

Colin McConnaha
Manager, Office of GHG Programs
Oregon Department of Environmental Quality
GHGCR2021@deq.state.or.us

Comments on Oregon Climate Protection Program: Rulemaking Advisory Committee Meeting 1

Dear Colin,

Thanks to you and your colleagues for organizing a well-structured RAC meeting for this important new program. The OLCV Metro Climate Action Team (MCAT) is a community of experienced volunteers working to steward significant greenhouse gas reduction legislation into law in Oregon, and several of our members attended the meeting.

Goals

DEQ's presentation of the overall program goals was disappointing and did not recognize the growing number of studies showing that stronger action is needed, and that the current goals in the Executive Order are not sufficient to the need. Rather than include modeling options that increased ambition, such as a scenario that considers zero emissions from covered sectors by 2050, DEQ has considered eliminating the interim target which would weaken the early ambitions of the program, when we know that early GHG reductions will be much more beneficial than later ones. We strongly encourage DEQ to keep the 2035 interim target and consider at least one modeling scenario that examines the greater ambition so that the incremental costs and benefits can be evaluated.

Scope

DEQ's presentation of the program scope was also discouraging in regard to the staff conclusion that the program is not well-suited to regulating emissions from the electricity sector. We recognize that DEQ cannot regulate emissions from imported electricity, but we do not believe that the leakage concern will be significant if the program only regulates in-state generation.

Portland General Electric, who owns five of the eight in-state natural gas power plants has recently made a commitment to companywide net zero greenhouse gas emissions by 2040, which makes it unlikely they will replace their own in-state generation with imports from out-of-state. The three remaining plants, two other utility plants and one independent power producer have an existing customer bases that seem unlikely to shift significantly to out-of-state suppliers. We urge DEQ to do a more detailed analysis of the leakage potential, so that a more informed scoping decision can be made.

Stringency

We found DEQ's presentation on program thresholds to be very insightful, and recognize the need to balance inclusion against potential leakage risks and the efficiency of program administration. Although

it may make sense to start with fairly high thresholds, we urge DEQ to consider mechanisms to adjust these thresholds over time as market conditions change and as climate science demands.

Cost

DEQ has characterized the program goals as balancing significant GHG emission reductions with social equity concerns and cost containment for businesses and consumers. However, the goal of cost containment is defined too narrowly. It appears to place a focus on near-term financial impacts rather than on long-term cost effectiveness and it completely ignores the cost of inaction, which is significant[1].

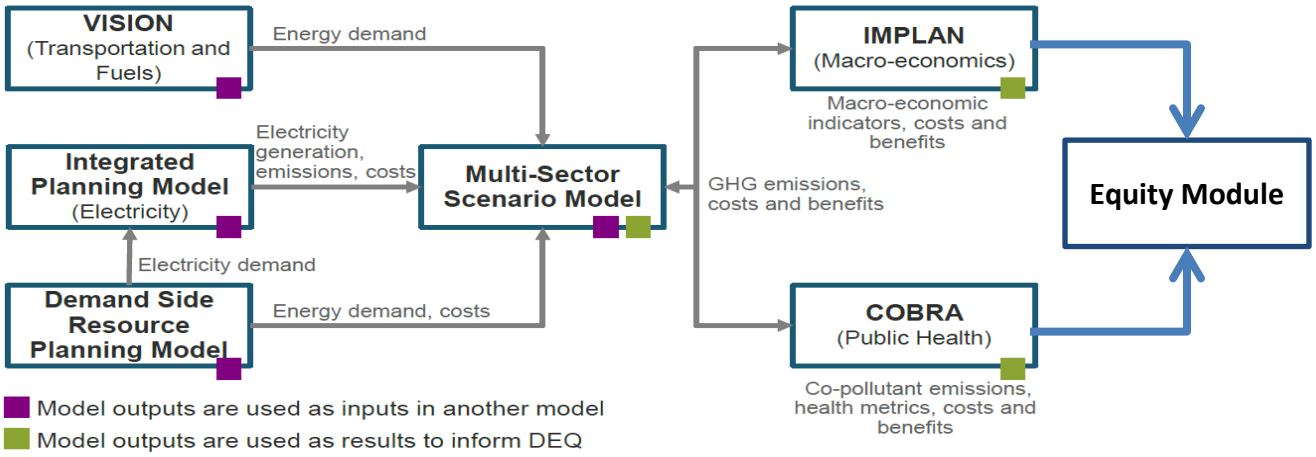
Compliance

We recommend that distribution of allowances be based on an entity's share of covered emissions starting from a base year, but with a methodology to adjust for share changes at the end of each compliance period. We recognize the flexibility value provided by having a multi-year compliance period, but given the urgency of the climate crisis and the need for early reductions, we recommend two-year compliance periods and will oppose any compliance period greater than three years.

Finally, we strongly recommend that DEQ limit the use of alternative compliance options to a percentage of regulated entities' compliance obligation, and that DEQ develop protocols for alternate compliance options that reduce emissions and provide co-benefits to Oregon communities.

Modelling Approach and Equity

As noted by several RAC members at the meeting, the modeling approach proposed by DEQ does not implicitly or explicitly include social equity results. We recommend that DEQ consider the inclusion of an Equity module, as shown below, which will use the outputs from the macro-economic and public health modules to determine impacts to environmental justice and other impacted communities. Equity metrics will need to be developed, such as relative energy burden impacts, relative proximity to co-pollutants, ability to afford clean energy solutions, etc.



[1] http://www.nreconomics.com/reports/2018-08-13_CC_Costs_to_OR.pdf

Modeling Scenarios

The Reference case policy assumptions proposed by DEQ are acceptable as a base, but there should be a Reference Plus case that includes other policies proposed under the EO that impact fuel types covered by the program, such as the expansion of the Clean Fuels program and vehicle electrification goals. Such an added scenario will allow any interactions between the different policies to be examined

In addition, we urge DEQ to reconsider the current set of policy scenarios as follows:

- Cap & Trajectory: Scenario 1 - 45% by 2035, 80% by 2050; Scenario 2 - 80% by 2050; Scenario 3 - 50% by 2035, 100% by 2050.
- Regulated sectors: Scenario 1 and Scenario 2 – same as proposed; Scenario 3 – Same as Scenario 1.
- Sector Exclusions: In-state electricity generators should be included in all scenarios, and Scenario 3 should include stationary source process emissions above the threshold.
- Allowable Use of Alternate Compliance Options: Scenarios 1 and 3 should be 8% and scenario 2 should be 6% because of the shallower slope of the reduction curve.

The MCAT would like to attend any informal session of the data inputs to the modeling work, as requested by several RAC members, and we hope DEQ will make these open events.

Sincerely,

OLCV MCAT Steering Committee:

Brett Baylor, Rick Brown, Pat DeLaquil, Dan Frye, Debbie Garman, Mark McLeod, KB Mercer, Michael Mitton, Rich Peppers, Rand Schenck, and Jane Stackhouse

MEMORANDUM

To: Richard Whitman, Director, Oregon Department of Environmental Quality
Sent via email: GHGCR2021@deq.state.or.us

From: Oregon Manufacturers and Commerce
Shaun Jillions, sjillions@oregonmanufacturers.org

Date: January 21, 2021

Re: Feedback on Oregon Climate Protection Program: Rulemaking Advisory Committee Meeting 1

Thank you for the opportunity to provide feedback in response to the questions posed by the Oregon Department of Environmental Quality ("DEQ") at the first meeting of the Oregon Climate Protection Program: Rulemaking Advisory Committee. As a reference, Oregon Manufacturers and Commerce ("OMC") is an association dedicated to promoting, protecting, and advancing Oregon manufacturers and their allied partners.

As was outlined in our November 2020 comments to the Environmental Quality Commission, OMC has continued to advocate for a policy framework that provides sufficient pathways to compliance; minimizes leakage from energy intensive, trade exposed (EITEs) entities; and treats natural gas ratepayers equally. However, after the first advisory committee meeting, we are concerned about the lack of detail surrounding compliance pathways as well as the leakage risk posed by some of the scenarios outlined on slide 71. We expand on these concerns below.

In response to the agency's prompt to provide feedback on its policy "leanings," OMC supports policy options that provide Oregon-based manufacturers with regulatory certainty and flexibility to pursue innovation where it is possible and as necessary to meet Oregon's ambitious climate goals. To that end, OMC supports the use of compliance instruments, broad banking flexibility, broad trading flexibility for buying and selling compliance instruments, and alternative compliance options as mentioned in the DEQ "leanings" slides. Regarding alternative compliance options and topics posed for the next meeting, OMC does not support limiting the use of alternative compliance options to a percentage of a regulated entity's compliance obligation. We also question whether the agency has the legal authority to limit the purchase of alternative compliance instruments to projects in Oregon.

DEQ poses three additional questions to stakeholders regarding its leanings:

(1) How should annual caps or emissions limits align with 2050 targets? With interim targets?

In 2020 OMC submitted comments to the EQC outlining our concerns with the ambitious and unfeasible carbon reduction goals outlined in Executive Order 20-04. A goal of 80% reduction of greenhouse gases in Oregon by 2050 is simply not achievable with today's technology. At the height of the COVID-19 crisis, with planes, trains, and cars grounded for the second quarter of 2020, global greenhouse gas emissions were reduced by a mere 8%.[1] It is clear that without a technological revolution, the agency's proposed Climate Protection Program will likely result in a shut-down of large sectors of Oregon's economy and the displacement of thousands of working Oregonians.

With those concerns in mind, DEQ should construct a program framework that provides maximum flexibility to regulated entities to encourage innovation and provide pathways for compliance so as to avoid leakage. DEQ should not adopt interim targets, which detract from that goal. Furthermore, DEQ does not have the legal authority to adopt interim targets.

(2) What data and methodology should DEQ use for compliance instrument distribution?

OMC respectfully asks the agency to provide more information about how a single, mass-based cap would accommodate product output-based distribution of compliance instruments. While a product output-based distribution of compliance instruments is worthy of discussion, additional stakeholder outreach is necessary to understand how the two compliance mechanisms work together. OMC also is concerned about how compliance instruments would be distributed equitably in a product output-based distribution system if sector-specific needs are not considered. These questions must be addressed before we can provide further feedback.

(3) Should there be multi-year compliance periods? How should they be structured?

OMC urges DEQ to consider compliance periods of no less than five years. The adoption of greenhouse gas reduction technology does not happen overnight, nor will it occur on a 1-, 2- or 3-year time interval. These technologies, if they even exist, take time to identify, purchase, and permit within the state. Without sufficient time and flexibility built into compliance periods, DEQ risks leakage. DEQ should work with stationary sources to identify a multi-year compliance period that is achievable and provides Oregon-based companies with sufficient flexibility to weather economic downturns and unstable market conditions as well as make investments in greenhouse gas reduction technologies.

As for the questions for future discussion on slide 55, OMC provides the following feedback.

[1] *The Economist*, May 21, 2020. Countries should seize the moment to flatten the climate curve. https://www.economist.com/leaders/2020/05/21/countries-should-seize-the-moment-to-flatten-the-climate-curve

(1) Should emissions from natural gas combustion at stationary sources be regulated upstream at utilities?
DEQ did not provide stakeholders with enough detail to answer this question at this time. We encourage the agency to outline compliance pathways for regulated entities in scenarios 1, 2, and 3. For instance, if DEQ selects policy scenarios 2 or 3 and the regulation of emissions is upstream at the utility, what options does an energy intensive, trade exposed facility have if there aren't compliance instruments available? There is a very real risk of leakage in this scenario.

Additionally, we want to highlight the need for a stable natural gas market in order to support local manufacturers. Stationary sources cannot operate with significant or unpredictable price swings, and we are concerned that scenarios 2 and 3 fail to provide certainty and relief to ratepayers.

(2) How should the program address stationary source process emissions?
We are unable to provide feedback on this question without more information. Specifically, OMC asks the agency to outline what it means by "process emissions."

(3) What threshold(s) should be set for fuel suppliers and stationary sources?
In its slide presentation to the rules advisory committee, DEQ outlined regulatory thresholds of 5,000, 10,000, and 25,000 $MTCO_2$. As a starting place for discussion, these thresholds are too low. DEQ should increase the threshold significantly to minimize leakage in the beginning.

As a final point, OMC is concerned that DEQ overlooked EITEs during this first rules advisory committee meeting and made little mention of leakage risk. As currently outlined, there is a very real potential for adverse environmental and economic impacts due to leakage. DEQ must make provisions to minimize harm to EITEs entities, which are the most likely to suffer from potential carbon leakage as a consequence of this program. These accommodations will help to prevent leakage and job loss and maintain a manufacturing footprint in a state with strict environmental standards. The concept of designating EITEs for the purposes of cap and reduce regulation was also considered in the Vivid Economics Study, commissioned by Governor Kate Brown, and by the Oregon Legislature.

Thank you for the opportunity to provide the agency with feedback during the public comment period. OMC looks forward to future engagement with the DEQ on this important issue.

To: Richard Whitman, Director, Department of Environmental Quality

From: Jana Jarvis, President & CEO

Date: January 21, 2021

Subject: Oregon Trucking Associations Comment Letter for RAC #1

Thank you for allowing the RAC members to provide comments on the process and content of our meetings. At the conclusion of our first meeting, I would like to ask the DEQ to consider the following as they work to find solutions to implementing the Governor's Executive Order 20-04.

The trucking industry domiciled in Oregon is diverse and competes with many regional and national carriers for freight both inside and outside of our state. Our cost of doing business is critical to the success of these carriers and it is essential that this cost be comparable to those of out-of-state trucking companies operating in Oregon. Already, Oregon has the highest highway use taxes on heavy trucks in the nation. The date for 2019 from the American Transportation Research Institute (ATRI) shows that a typical truck operating in Oregon pays approximately $30,410 per year in Oregon State and federal highway use taxes. California is a distant number two at $23,030. It is imperative that as we consider adding costs through new and expanded programming to meet the carbon reduction goals outlined in this executive order, that you seek for solutions that do not add significant cost to our industry or there may no longer be an effective and efficient trucking industry in Oregon.

As has been demonstrated over the past several months of the pandemic, trucking is critical to Oregon's economy. Over 75% of Oregon communities depend exclusively on trucks to move their goods, and over 80% of Oregon's freight is moved by truck. One in seventeen jobs in this state is a trucking industry job. And as we have seen in recent months, these numbers are growing. The pandemic significantly altered the growth curve for e-commerce and consumers are becoming increasingly dependent on trucks delivering their needs to their front door. Keeping Oregon-based trucking companies in business should be one of the critical considerations of this RAC.

Another issue related to cost would be the stacking of an expensive new program on top of Oregon's Low Carbon Fuel Standard. In addition to the additional cost of the program

details called for in expanding Oregon's LCFS, the same carbon molecules will be subject to the additional cost of whatever new program is designed to meet the carbon goals of the transportation sector. We would ask that you consider placing reasonable cost containment provisions to protect consumers from both unforeseen price spikes and the possible reduction in the availability of transportation fuels. This is the approach that has been utilized in many European countries during the Great Recession because of the adverse impact on their economies and citizens.

We recognize that this Cap and Reduce program will not allow many of the traditional elements of a Cap and Trade program and it is concerning to us that the agency has not clearly articulated how fuels and transportation related parties will comply. We realize that the transportation sector is key to implementing an effective program, but we do not see a clear compliance pathway. We cannot analyze the impact of the program until the agency defines this for us and this will be central to the modeling exercise and scenario development discussed at our first RAC meeting.

Lastly, I would like to comment on the process of the RAC. This committee will have the opportunity to review a large amount of technical data and I appreciate the advance distribution of the meeting materials and the detailed process explanation so that we can be productive participants. However, there were several occasions when the facilitator called on individuals who had commented frequently while leaving others with no chance to comment publicly. My hope is that as this process continues the facilitator will become more familiar with the participants so that all have a chance to comment and ask questions.

Thank you again for the opportunity to comment. Please do not hesitate to contact me if you have any additional questions.

To: Colin McConnaha,
Manager, Greenhouse Gas Program
Department of Environmental Quality
Re: Climate Protection Program RAC Meeting 1
Design of land-based offsets as an alternative compliance mechanism
(EO 20-04, ss. 3.A, 3.C(1), 4.C, 12.A)
Date: 1/21/21

Dear Mr. McConnaha,

We welcome the opportunity to submit written testimony on the three proposed modeling scenarios for DEQ's proposed "Climate Protection Program" (formerly cap and reduce) rulemaking. We wish to comment on the proposed inclusion of alternative compliance mechanisms, and specifically how to appropriately scope and design forest-based emissions offsets as an alternative compliance mechanism.

We support the inclusion of alternative compliance mechanisms as they can help drive down costs and speed the timeline for achieving decarbonization goals. Forest carbon offsets specifically can offer numerous co-benefits if designed effectively, but first and foremost, emitters must utilize or commit to utilizing best available technology to reduce emissions as quickly as possible. An offset component should only be for emitters where effective reduction technologies do not already exist.

Industrial scale logging operations in Oregon are one of the largest sources of greenhouse gas emissions in the state, and should also be accounted for within an emissions-capping rulemaking. While we recognize that DEQ may not have the statutory authority to directly regulate biogenic greenhouse gas emissions, we do feel that DEQ should make every effort to incorporate this source of emissions into its rulemaking via the employment of alternative compliance options.

Notably, a carbon offsets program within Oregon has the potential to provide financial support for forest protections on private lands. While there are existing policy mechanisms for requiring better management practices on Oregon's corporate timber lands, there are comparatively far fewer opportunities for incentivizing better practices on private lands that have smaller forested areas. Current tax and financial incentives are geared strongly towards short rotation logging as opposed to protecting valuable carbon stocks. Therefore, we believe a forest offset program should be tailored to incentivize participation by small forest owners as opposed to large corporate forest owners, as a targeted alternative compliance option mechanism within the broader cap and reduce program.

But while a carbon offset program holds promise as a climate solution, even an alternative compliance mechanism targeted at small forest owners could have its effectiveness undermined if not designed properly. As such, DEQ should take these policy priorities under consideration:

1) Any future carbon offset program policies must incorporate strong integrity mechanisms that do not enable the continuation of any toxic air or water pollution as a result of the offset program, with

special consideration for communities of color and lower income areas that are already facing higher pollution burdens.

2) DEQ should work closely with small family forest owners to ensure an open and transparent decision-making process in regards to a forest offset program, and ensure informational resources are readily available in rural communities.
3) DEQ should permit and create incentives for small family forest owners to qualify for offset programs by aggregating small acreages.
4) Any future offsets program should focus on privately owned lands, especially small private forest owners, as there are few options for ensuring protections of these forests and they have significant potential in terms of carbon sequestration — data have shown that the carbon stocks on privately owned forests in western Oregon's Coast Range are only a third of their ecological potential. Publicly owned forests are already, by law, held to higher standards for balancing multiple values and should therefore not be included in offset mechanisms.
5) A future forest offset should be designed in a manner that makes it compatible with other existing forest offset programs, though Oregon's program should require outside investments to meet the state's standards. By expanding the market for offsets beyond the state and linking jurisdictions, Oregon can access additional funding for forest offsets in its carbon rich forests.
6) Forest offset projects must be durable and aim toward long-term storage — that is, they should not only sequester carbon, but also be managed to withstand the stresses of a changing climate in the long-term. Forest projects should be managed for species diversity and climate resilience, with an emphasis on natural forest composition (i.e., high biodiversity and diversity in tree species, size widths, density and spacing).
7) Forest offset projects must be additional — that is, they must incentivize forest practices that are better for the climate than business-as-usual as opposed to rewarding people for current practices. Further, an offset program should incorporate requirements for credit replacement by forest owners for any intentional reversals (they must pay back the credits if they log or develop the offset project).
8) The carbon benefits of any projects must be quantifiable and verifiable, and therefore DEQ must establish a working third-party accountability program with the capacity to ensure this. This program must account for industry-based greenhouse gas emissions assessed in terms of their carbon dioxide equivalent, including emissions from fuel use in industry operations, emissions from road construction, soil and native vegetation disturbance during harvest operations, slash burning and transport of slash offsite, emissions from trucking in and spraying pesticides, and the estimated loss of carbon when a tree is harvested, transported, and processed into wood products. Approved offset transactions must be subject to third-party follow up monitoring to ensure compliance over time, with meaningful penalties should a party violate their commitments.
9) An offset program should incorporate meaningful buffer accounts that are large enough to mitigate for natural processes (natural or human-induced) that impact carbon sequestration, including wildfires. A forest buffer account is a holding account for offset credits issued to forest projects and acts as a general insurance mechanism against unintentional reversals for offset credits issued to forest projects.
10) Any offset program must avoid leakage of greenhouse gas emissions in unregulated sectors.

We believe an alternative compliance option that complies with the above priorities, as part of the design of the overall Climate Protection Program rulemaking, would provide the best balance between maximizing emissions reductions, accounting for equity considerations, and minimizing cost burdens to businesses and consumers.

Sincerely,

Lauren Anderson
Forest Climate Policy Coordinator
Oregon Wild

Danny Noonan
Climate Policy and Legislative Affairs Manager
Beyond Toxics

Alan Journet
Co-facilitator
Southern Oregon Climate Action Now (SOCAN)

Rand Schenck
Member
OLCV Metro Climate Action Team, MCAT

Joseph Vaile
Climate Director
KS Wild

Julia DeGraw
Coalition Director
Oregon League of Conservation Voters

January 21, 2021

Colin McConnaha
Manager, Office of GHG Programs
Oregon Department of Environmental Quality
GHGCR2021@deq.state.or.us

Comments on Oregon Climate Protection Program: Rulemaking Advisory Committee Meeting 1

Dear Colin,

Thanks to you and your colleagues for organizing a well-structured RAC meeting for this important new program. I have a long professional experience in energy system modelling and policy analysis, and in this letter, I provide some specific comments regarding the modeling approach and the policy scenario options.

Modelling Approach and

The modeling approach ICF has provided DEQ combines results from two sector-specific national-level models (Vision and IPM) and integrates these inputs through a Demand Planning model and a Multi-sector scenario model, which I would expect to be Oregon specific models developed by ICF.

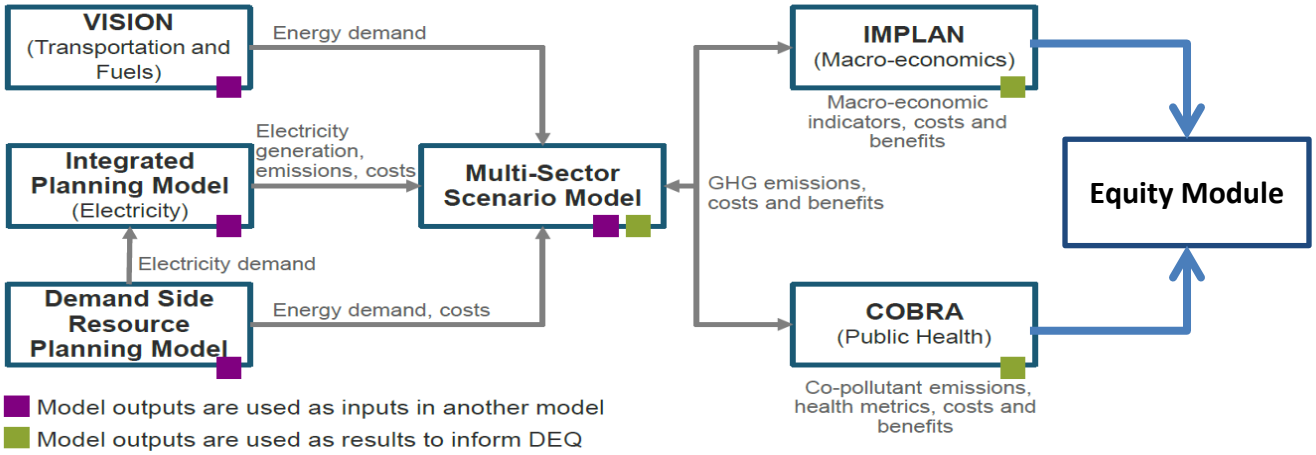
The Demand Planning model is shown to provide an electricity demands to IPM and energy demands and costs to the Multi-sector scenario model, but it is unclear if these "energy demands" are fuel demands or useful energy demands. The latter is needed if energy efficiency options are to be properly considered.

It is also unclear as to how the Multi-sector scenario model will model the buildings (commercial and residential) and industry sectors. Generic representations of these sectors will not provide the specific results that will be needed to guide DEQ in the proper design of this program.

Furthermore, the IPM model is an electric sector model with detailed results down to the power plant unit level, and this would make it quite easy for DEQ to consider policy scenarios including in-state electricity generation. In any event the IPM model will make projections of the impacts of the policy to the electric sector and report GHG emissions from that sector, and DEQ should report these in its presentation of results – even if they are excluded from the scenario.

Equity Inclusion

As noted by several RAC members at the meeting, the modeling approach proposed by DEQ does not implicitly or explicitly include social equity. I recommend that DEQ consider the inclusion of an Equity module, as shown below, which will use the outputs from the macro-economic and public health modules to determine impacts to environmental justice and other impacted communities. Equity metrics will need to be developed, such as relative energy burden impacts, relative proximity to co-pollutants, ability to afford clean energy solutions, etc. Some new thinking is needed here to use demographic and geographic approaches to convert sector-based results into impacts to specific communities and income brackets. I believe there are several RAC members who can help DEQ work out an acceptable set of equity metric, which could be developed based on results from the existing modeling approach.



Modeling Scenarios

The Reference case policy assumptions proposed by DEQ are acceptable as a base, but there should be a Reference Plus case that includes other policies proposed under the EO that impact fuel types covered by the program, such as the expansion of the Clean Fuels program and vehicle electrification goals. Such an added scenario will allow any interactions between the different policies to be examined

In addition, I am puzzled as to DEQ's reluctance to discuss more than three policy scenarios. For the many similar I have undertaken, once the models are built, running scenarios is relatively simple and often a much larger set of policy options are considered. However, if DEQ is limited contractually to three policy scenarios, then I urge DEQ to redesign the current set of policy scenarios to provide: 1) a core policy scenario that follows the EO targets; 2) a less ambitious policy case; and 3) a more ambitious case. The current policy designs could easily be modified as follows:

- Cap & Trajectory: Scenario 1 - 45% by 2035, 80% by 2050; Scenario 2 - 80% by 2050; Scenario 3 - 50% by 2035, 100% by 2050.
- Regulated sectors: Scenario 1 and Scenario 2 – same as proposed; Scenario 3 – Same as Scenario 1.
- Sector Exclusions: In-state electricity generators should be included in all scenarios, and Scenario 3 should include stationary source process emissions above the threshold.
- Allowable Use of Alternate Compliance Options: Scenarios 1 and 3 should be 8% and scenario 2 should be 6% because of the shallower slope of the reduction curve.

I would like to attend any informal session regarding review of the data inputs to the modeling work, as requested by several RAC members, and we hope DEQ will make these open events.

Sincerely,

Dr. Pat DeLaquil
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Gresham, OR 97080
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January 21, 2021

Steven D. Smith
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Ms. Nicole Singh
Oregon Department of Environmental Quality
Office of Greenhouse Gas Programs
700 NE Multnomah St., Suite 600
Portland, OR 97232

Submitted Electronically to: GHGCR2021@deq.state.or.us

Re: Comments on Oregon Climate Protection Program - RAC Meeting #1

Dear Ms. Singh,

Phillips 66 appreciates the opportunity to comment on the materials and discussion from the first Oregon Climate Protection Program RAC meeting on January 14, 2021. We appreciate the opportunity to be a RAC member and are hearing important viewpoints from other stakeholders.

Phillips 66 Participation – Phillips 66 participation on the RAC is to communicate the specific positions and recommendations of Phillips 66. Our participation should not be misconstrued as full representation of the positions of other major transportation fuel suppliers or the Western States Petroleum Association (WSPA).

The online meeting format is necessary due to Covid-19 concerns. We encourage DEQ to continue to strive for balanced input from all RAC members. That said, ODEQ should make every effort to solicit and welcome input from major fuel suppliers, WSPA and others with potentially large compliance obligations under the program.

Support WSPA Comments – We support the comments submitted by the Western States Petroleum Association, which address many of the "leanings" presented on January 14. Our comments below emphasize key points.

Equitable Treatment for all Sectors – The potential exclusion of some sources from the program would weaken the program and reduce program flexibility. We strongly encourage further discussion on the proposed exclusion of electricity generation and certain stationary sources and request that the proposed modeling include cases with those sources fully in the program. With this modeling, RAC members can understand the resulting environmental and economic impacts of including or excluding these sources.

Where DEQ may be limited by legislative authority (i.e. imported electricity), options to address that authority should be on the table.

Transportation Fuels Objective – As outlined by DEQ, it appears that the cap and reduce program could potentially impose large and immediate GHG reduction obligations on transportation fuel suppliers. In parallel, the Clean Fuels Program requires reductions in transportation fuel carbon intensity. There is obvious overlap between the two programs without clear additional benefit. We believe this deserves discussion; since it is highly technical in nature, this may deserve discussion separate from the scheduled RAC meetings.

Greenhouse Gas Emissions Detail - We appreciate the granularity of emissions data presented in slides 32 and 37-40 of the January 14 presentation. As the RAC process proceeds, it will be important for stakeholders to see even more granularity ion this data and understand the distinctions between overall state GHG inventory, forecasts and reduction goals, and cap and reduce program GHG inventory and reduction goals.

Thank you for this opportunity to submit comments. You can reach me at 832-765-1779 or steven.d.smith@p66.com.

Best Regards,

Steven D. Smith

To: ODEQ GHG reduction taskforce

From: Ralph M Cohen, PE

Subject: Rulemaking Session #1 (01/14/21) comments

Date: 01/20/21

Thank you for the opportunity to participate in the Cap and Reduce program. I am submitting these comments to document my response or concerns to the material presented at the meeting and to respond very briefly to RAC member comments.

I am currently a part-time, independent engineering consultant/concerned citizen with many years of experience across a wide range of industries in mechanical design, energy conservation, and pollution control. As a member of Professional Engineers of Oregon (PEO), I am keeping them apprised of the workshop proceedings, but views and comments I provide are strictly my own and have not been reviewed in advance or endorsed by PEO.

Comments in response to the slides presented at RAC meeting 1:

1. Summarizing the data on slides 32 – 38 and 42 indicate the following
   - ~ 65 million MT CO2 equivalent emission in Oregon
   - 24.1 million MT CO2 equivalent emission from all fuel suppliers (transportation, off-road, building heating)
   - 16.9 million MT CO2 equivalent emission from all natural gas (exclude 49% for electric generation)
   - 4.5 million MT CO2 equivalent emission from all stationary sources (excl. electric generators and landfills)

Therefore, the maximum pool for reduction under this program = 24.1 + (16.9 x 51%) + 4.5 = <u>37.2 million MT</u> or ~ 57% of total CO2 emission. To achieve 80% reduction of 2019 emissions in this program, only 7.4 million MT CO2 equivalent can remain. Can rules for reducing the above energy sources be made without complimentary plans to replace a portion of that energy with a non-CO2 producing energy source such as massive "clean" electric power? Is ODEQ and the government being realistic?

2. At earlier meetings, industrials were often cited by attendees as a potentially large target to regulate. The data on slide 40/41 indicates that cement/concrete, semi-conductor, iron/steel, and "other" account for only 1.5 million MT per year or 4% of the total CO2 emissions (1.5 / 37.2) making this a very small part of the problem and available solution.
3. I would like to lend support to statements of several RAC members (N. Johnson and M. Freese) that mentioned the need to determine which companies have been proactive in applying best available technology to reduce emissions ahead of future regulations so as to not apply a "one solution fits all" set of rules, if possible.
4. The presentation covering the ICF model was unclear regarding how and if it will determine capital investment requirements and increases in fuel and gas costs to achieve the required reductions. It seems most important to estimate and report the financial impact on those bearing the burden of the reduction as well as the life style and infrastructure changes that will be required.
   [END of COMMENTS]

January 21, 2021

Oregon Department of Environmental Quality
Office of Greenhouse Gas Programs
700 NE Multnomah St., Suite 600
Portland, OR 97232

Sent Via Email To: *ghgcr2021@state.or.us*

RE: Greenhouse Gas Emissions Program 2021

Dear members of the Environmental Quality Commission, Director Whitman, DEQ staff and members of the Rulemaking Advisory Committee,

Thank you for undertaking the rulemaking advisory committee (RAC) process for development of Oregon's Greenhouse Gas Emissions Program 2021 and for accepting public comment during that process. We have significant concerns about the direction the program is currently heading in and appreciate the opportunity to voice those concerns now, towards the beginning of the process. Specifically, we are concerned that the program, as currently designed, will create adverse impacts for underserved and underrepresented communities across Oregon; these environmental justice communities are already suffering the worst impacts of climate change and will continue to suffer disproportionate impacts in the years to come. Additionally, the program, as currently designed, will very likely not achieve the state's carbon reduction goals or meaningfully address the problems associated with co-pollutants such as volatile organic compounds (VOCs). We appreciate the open discussion and effort by DEQ and RAC members, but we feel a sense of urgency at the beginning of the process to correct these serious deficiencies by identifying the biggest polluters and and holding them accountable for their impacts on communities rather than focusing on ways for polluters to pay for their costs with the greatest ease for their investors.

In that vein, we offer the following specific policy notes and recommendations at the outset of the RAC effort. We recognize that some of these issues extend beyond the specific items that were discussed in the first meeting, however, because the issues are interconnected

and impossible to address in isolation, we ask you to consider these adjustments to the program's design now—before locking in the discussion and program framework for months to come. Failure to address these significant issues now will likely result in a program that will not only be met with disapproval from the public and frontline communities but will fail to meet the state's overall climate goals.

I. The Modeling Approach for the Greenhouse Gas Emissions Program 2021 Must Capture the Impacts on Frontline Communities.

As currently designed, the modeling approach DEQ intends to rely on uses state and national data—data that fails to capture community-level impacts. DEQ must adjust the modeling approach to capture data that correlates census data or other community-level indicators of how low-income, minority, and other marginalized communities are experiencing increased exposure to environmental pollution, including the co-pollutants of greenhouse gases (GHGs) like diesel particulates and VOCs. You can see an example of this type of work in the Washington Department of Health's Environmental Health Disparities Map.[1] By combining demographic and environmental health data, Oregon would be able to actually see the problems that it purports to address in the greenhouse gas program—specifically, the burden of toxic and criteria co-pollutants on frontline communities.

As currently designed, DEQ intends to conduct its modeling by relying on state and national data which will not necessarily capture community-level impacts. By failing to incorporate community-level data, the modeling results will not accurately reflect the effects of the program on those most likely to be impacted by it. The modeling approach would perform better with more rigorous data that correlates demographics with environmental exposures. The proposed correction to this action is to adjust the modeling approach to incorporate more granular data that incorporates variables that are focused on addressing impacts to frontline communities.

In DEQ's own words, one of the primary program goals is to "[p]rioritize equity by promoting benefits and alleviating burdens for environmental justice and impacted communities." To achieve that goal, DEQ must focus its sensitivity analyses on the issues the program is designed to be sensitive to—namely, the potential health, safety, and climate impacts

[1] Washington Department of Health. 2021. Environmental Health Disparities Map. https://www.doh.wa.gov/DataandStatisticalReports/WashingtonTrackingNetworkWTN/InformationbyLocation/WashingtonEnvironmentalHealthDisparitiesMap. "The map was a collaborative project that took several years to develop. It went live to the public in December of 2018. Those involved in the collaboration include: University of Washington's Department of Environmental and Occupational Health Sciences, Front and Centered, Washington State Department of Health, Washington State Department of Ecology, and Puget Sound Clean Air Agency. The effort included listening sessions with communities in Washington State. The communities gave input that informed development of the map."

of fossil fuel pollution. Measuring the sensitivity and reactivity of the model for these factors is the best use of RAC time and resources and the most direct way for DEQ to achieve its stated goal.

The modeling approach has other potential gaps and flaws. It is not reasonable at this time to assume in the reference case that "30% of utility natural gas supply [will] be RNG by 2050".[2] Unless this is assuming an absolute reduction in actual use of fracked gas—using less fracked gas in absolute terms than we use today—the blending of RNG into the pipeline system should not be used to mask the long-term public health and climate impact of fracking on the climate. We question both the assumption that there is this much industrial methane available to capture from CAFOs and waste facilities, but we also question whether this use of RNG will prop up and incentivize expanded fracking that harms frontline communities. Capturing methane should happen as a best practice through direct regulation, not as a way to trade and warp the system that allows more pollution to occur in communities who deal with fracking, already.

II. DEQ Must Include Fracked Gas Power Plants in the Proposed Program.

DEQ must include fracked gas power plants in the Greenhouse Gas Emissions Program 2021—excluding the largest climate polluters in the state will result in an ineffectual program that fails to meet the state's climate goals and ignores the significant harm these facilities pose to frontline communities. The proposed exclusion of fracked gas power plants also disproportionately burdens other potential polluters who will have to pay more as a result of the preferential treatment given to Oregon's top six polluters. According to the most recent data available from DEQ, the leading polluters in Oregon all emit roughly one million tons or more of carbon pollution each year, and all of them are fracked gas power plants.[3]

[2] Slide 65. https://www.oregon.gov/deq/Regulations/rulemaking/RuleDocuments/ghgcr2021rac1slides.pdf
[3] Oregon Department of Environmental Quality. 2021. Greenhouse Gas Emissions Reported to DEQ https://www.oregon.gov/deq/aq/programs/Pages/GHG-Emissions.aspx

Fracked Gas Power Plant Facility	County	POLLUTION (TONS/YEAR)
Portland General Electric Company - Port Westward I	Columbia	1027715
Klamath Cogeneration	Klamath	1350082
Portland General Electric Company - Boardman (CLOSED)	Morrow	2543943
Portland General Electric Company - Carty	Morrow	1152211
Portland General Electric Company - Coyote Springs	Morrow	1364780
Hermiston Generating Company, L.P.	Umatilla	1154923
Hermiston Power LLC	Umatilla	1700894
Perennial Power LLC (PROPOSED)	Umatilla	1000000 (approx)
Source: https://www.oregon.gov/deq/aq/programs/Pages/GHG-Emissions.aspx		

Exempting gas plants increases the program burden on others: if the largest polluters are not paying for their greenhouse gas pollution, others could potentially be forced to pay more. Exempting fracked gas power plants also exacerbates co-pollutant problems by allowing large quantities of pollutants like VOCs to continue to pollute impacted airsheds such as Umatilla County and the Columbia River Gorge. Furthermore, to exempt the top six polluters in the state would upend the purpose and impact of the program altogether. It obviates the whole reason for this rulemaking—to achieve significant greenhouse gas emissions reductions—by placing the burden of the regulation on everyone except the largest polluters.

We have heard DEQ argue that fracked gas power plants should be exempt because they are already regulated pursuant to the Oregon Department of Energy's (ODOE) carbon dioxide standard. This argument that they are "double regulated" lacks validity. Oregon's carbon dioxide standard is poorly administered and ineffective, as demonstrated recently by ODOE's handling of the proposed Perennial WindChaser Station facility.[4] Additionally, ODOE's carbon dioxide standard dramatically underprices carbon pollution and thus fails to properly signal the impact of carbon pollution to the market. As long as carbon pollution remains underpriced, there is little market incentive for fracked gas power plants to meaningfully reduce their emissions in the same way DEQ's program would require. DEQ should correct this problem by proposing to fully regulate all emissions—methane emissions as well as carbon dioxide emissions—from fracked gas power plants and the infrastructure that feeds them. By allowing any part of the gas supply system to escape regulation, DEQ would be unfairly burdening other, smaller polluting entities including greenhouses and fertilizer-using farms.

[4] *See* Ted Sickinger, *Conservation groups say state regulators are allowing power plant developers to avoid carbon fees* Oregonian, Aug. 31, 2020, *available at* https://www.oregonlive.com/politics/2020/08/conservations-say-state-regulators-are-allowing-power-plant-developers-to-avoid-carbon-fees.html

It would be monumentally ineffective and unfair governance to propose a regulatory program that places all the pollution reduction burden on small entities while giving the biggest polluters—who are causing the vast majority of the problem—a free pass.

III. DEQ's Must Stop Issuing Air Permits with Inflated Emissions Limits.

For DEQ's Greenhouse Gas Reduction Program 2021 to truly succeed, DEQ must also immediately stop issuing Air Contaminant Discharge Permits (ACDPs) to entities that include emissions limits far in excess of what they are likely to actually emit. Throughout Oregon, DEQ often issues ACDPs that include emission limits for criteria pollutants that are multiple times more than the permitted equipment requires. As a result of DEQ's overly generous permitting approach to facilities like processors, compressors, power plants, and other large polluters, there is ample opportunity for emissions of VOCs and other co-pollutants of fossil fuel pollution to increase over time. The ACDPs issued by DEQ should include emissions limits that are no higher than the emissions necessary to run the facility. To effectively reduce GHG and co-pollutant emissions within the state, DEQ has to stop giving these facilities so much extra space to increase their emissions.

The Coyote Springs compressor offers one example of DEQ's problematic approach. The compressor equipment appears likely to emit only 2.46 tons of VOCs per year, yet DEQ proposes to issue a permit that allows 39 tons of VOC pollution per year.[5] (See table below)

Source	PM	PM_{10}	$PM_{2.5}$	NOx	SO_2	VOC	CO	CO_2e
	(tons/year)							
CT-1 Solar Saturn 20 Turbine	0.54	0.54	0.54	30.05	0.06	1.01	37.61	9,649
Equipment Leaks	---	---	---	---	---	1.01	---	2,777
Venting	---	---	---	---	---	0.29	---	811
Pigging	---	---	---	---	---	1.10E-02	---	30
AUX-1 EGEN Caterpillar G3406	1.92E-03	1.92E-03	1.92E-03	5.09E-02	7.05E-05	2.55E-02	1.02E-01	12
(FGH) Fuel Gas Heater	4.08E-03	4.08E-03	4.08E-03	6.55E-02	3.91E-04	2.95E-03	3.95E-02	64
(SH) Space Heaters	4.41E-03	4.41E-03	4.41E-03	5.80E-02	4.22E-04	3.19E-03	4.87E-02	69
Total Potential to Emit	**0.56**	**0.56**	**0.56**	**30.43**	**0.06**	**2.46**	**38.24**	**13,402**
PSEL	**NA**	**NA**	**NA**	**39**	**NA**	**39**	**99**	**74,000**

NA – Not applicable because PSELs are not established for criteria pollutants emitting at less than diminimis in accordance with OAR 340-222-0020(3)(a).

[5] DEQ. Public Notice and Draft Permit.
DEQ Requests Comments on Gas Transmission Northwest, Coyote Springs Compressor Station's Proposed Air Quality Permit. December 16, 2021. Attachment A.

By continuing to issue ACDPs with inflated emissions limits, DEQ is directly hindering its ability to reduce emissions within the state.

IV. Conclusion

Despite the lofty goals expressed at the outset of the rulemaking, we are concerned that DEQ's process has been distorted by pressure to exclude and favor the largest polluters in Oregon, such as fracked gas power plants. Further, we are concerned that the program, as currently designed, will not accurately address the negative impacts to frontline communities without a model design that uses census-level data to identify and incorporate the harms those communities face from environmental pollution. By course-correcting now, we can work together to bring a calm, rational, and protective approach to the rulemaking that will benefit BIPOC and rural communities, the climate, and job growth. It starts by asking the right questions and solving the right problems. Let's focus on solving community problems and air quality issues, not protecting the bottom line of the fossil fuel companies that do not have to live with the worst impacts of its pollution. The polluter voice is heard too much already, and here their problem is not the one we are trying to solve.

Sincerely,

Allie Rosenbluth, Campaigns Director, Rogue Climate, RAC member

Dan Serres, Conservation Director, Columbia Riverkeeper

LMI Environmental, LLC

January 20, 2021

VIA EMAIL

Colin McConnaha
Manager, Office of Greenhouse Gas Programs
Oregon Department of Environmental Quality
700 NE Multnomah Street, Suite 600
Portland, OR 97232

Re: Comments on DEQ's Cap and Reduce Rule Advisory Committee Jan 14, 2021 Meeting

Dear Mr. McConnaha,

Thank you for the opportunity to comment on DEQ's materials presented at the Jan 14, 2021 Cap and Reduce Rule Advisory Committee (RAC) meeting. On behalf of Roseburg Forest Products and other affected manufacturing companies, I offer the following comments:

1. Flexibility for achieving compliance is essential:

   Upon rule adoption, Oregon will be one of the first states in the nation to impose a carbon reduction regulation on its stationary manufacturing facilities. This regulation will undoubtedly result in ever-increasing costs for Oregon's manufacturing base. These increased costs will make it difficult for these manufacturers to remain competitive in their respective markets, particularly since there are so few states who are attempting similar regulatory programs.

   Accordingly, it is essential that Oregon provide its manufacturing sources maximum flexibility to achieve compliance. To that end, we appreciate and support DEQ's leaning toward allowing:

   a. Banking of compliance instruments - Manufacturing is not static from month to month or year to year. Allowing facilities to bank unused compliance instruments for use in later compliance periods will allow for market and production fluctuations that are common in any sector.
   b. Trading, buying and selling of compliance instruments – Allows facilities that are seeing market growth to meet their compliance obligations while not increasing overall greenhouse gas emissions within the state. Allowing facilities to trade or buy and sell amongst each other will also encourage emission reductions from those sources who have feasible methods to do so, while allowing continuing viability of other sources who have

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less feasible means to achieve emission reductions.

c. Alternative Compliance Options (ACO) – will provide a mechanism for sources to engage in or seek other means to reduce emissions in order to satisfy their compliance obligation. ACO is a very important component to be included in any carbon reduction regulation and should be utilized to the fullest extent possible in order to achieve the greatest amount of emission reductions possible. We believe that ACO should include projects within and outside of the state as long as they meet ACO criteria. In addition, we encourage DEQ to increase the percentage of ACO allowed toward meeting the compliance obligation. We ask DEQ to consider a significantly increasing the percentage of compliance that can be satisfied with ACO.

2. Distribution of Compliance Instruments:

   DEQ explained that they are leaning toward distributing compliance instruments based on recent emissions. We understand that with such a short time to promulgate and implement the rule, it would be difficult to develop a production-based distribution program. However, we encourage DEQ to consider such a method, and more specifically a sector-specific distribution method, for a couple of reasons:

   a. Not all manufacturing sectors have the same ability to reduce emissions. If each source receives a percentage of the total allowable compliance instruments, some sectors will see a great disadvantage in having to compete with other sectors who have more practical emission reduction methods available. This approach creates an uneven playing field.
   b. Distributing compliance instruments based on a sector-specific production basis will encourage emission reductions in an achievable manner. Such a system will work to identify the most efficient production in practice for that sector, which encourages other facilities to improve their production practices in order to remain in the game.

   Assuming at least in the short term, DEQ will decide to distribute compliance instruments based on recent emissions, we encourage DEQ to look to the years prior to 2020 as the baseline. As we are all aware, the years 2020 and 2021 are not representative of typical production due to the COVID virus. Some sources realized lower anthropogenic carbon emissions while other sources realized higher emissions, but either way, their emissions were atypical. We encourage DEQ to not use these two years for the initial baseline or as valid data for the program going forward.

3. Multi-Year Compliance Periods:

   DEQ has requested feedback as to whether the compliance periods should be single or multi-year. We encourage DEQ to consider multi-year compliance periods for several reasons:

   a. Manufacturing is not static from year to year. Establishing multi-year compliance periods will allow facilities to better manage compliance over the longer term rather than having a potentially fatal short-term occurrence due to fluctuating market conditions.

b. Physical improvements/modifications that may be necessary to achieve emission reductions take time to identify, engineer, budget, permit and implement. It is unreasonable to expect sources to implement meaningful emission reduction projects in short timeframes. Doing so, may result in reducing production as the only achievable means to comply.
c. We encourage DEQ to adopt a 5-year compliance period to coincide with the source's Title V permit renewal cycle. Adopting such an approach would allow adequate time for sources to plan for and implement meaningful emission reduction strategies and would also create an efficient method for DEQ to review and determine compliance.

4. Point of Regulation:

DEQ has requested feedback as to whether the point of regulation should occur at the fuel supplier or at the emission source. There are pros and cons to each, but for the sources represented here, we believe that the point of regulation would be best placed at the emission source where company representatives will have oversight and control over managing their compliance instruments as well as their compliance options. In addition, there are some sources who are not served by the suppliers DEQ has identified for the program, so would likely be regulated at the source anyway.

5. Process Emissions:

DEQ has requested feedback as to whether process emissions should be included as emission regulated in the cap. We understand that there are few sources with process emissions and we also understand that there are unique challenges associated with reducing those emissions. We do not want to subject other manufacturing sources to an undue burden, but we have heard others comment that if process emissions are not included in the program, the sources who are regulated due to fuel use must reduce emissions by a quantity to make up for those unregulated process emissions. This approach would put those fuel-regulated sources in a very difficult situation. Accordingly, if DEQ is inclined to place that additional burden on the fuel-regulated sectors, we would encourage DEQ to include process emissions in the program.

6. Applicable Thresholds:

Regarding potential applicable thresholds, DEQ outlined in their presentation source thresholds of 5,000, 10,000, and 25,000 MT. We encourage DEQ to consider raising the source threshold to 100,000 MT (at least initially) for a couple of reasons:

a. Oregon manufacturing sources are leading the way to become subject to such a carbon emission reduction program. As such, they will face immediate competition pressures as their costs of production will rise. Raising the initial threshold to 100,000 MT will would align with Washington State would allow Oregon's manufacturing sector to identify methods with which to comply without placing them under such immediate pressure.

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b. Alternative Compliance Option markets are not yet mature. Increasing the initial threshold to 100,000 MT will provide the regulated sector time to comply while encouraging the orderly development of alternative compliance options and markets.

7. Emission Intensive and Trade Exposed (EITE) Manufacturers:

   The RAC has yet to discuss the future for EITE manufacturers, but we feel it is important to mention them here. As DEQ is aware, EITE manufacturers will be placed in a difficult competitive position once this carbon reduction program is adopted. These sources will be particularly vulnerable to competition from sources outside of Oregon. As such, we strongly encourage DEQ to recognize EITE sources in this program and provide them with long term protection from being potentially irreparably harmed by the unintended consequences. We suggest that DEQ provide adequate compliance instruments in a duration long enough to allow these sources to identify feasible methods to remain viable.

Again, thank you for the opportunity to provide these comments. We look forward to continuing working with you.

Sincerely,

Ellen Porter

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Southern Oregon Climate Action Now

SOCAN

Confronting Climate Change

https://socan.eco

Alan Journet Ph.D.

Co-facilitator
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Colleagues:

I write on behalf of over 1500 Southern Oregonians who are Southern Oregon Climate Action Now and who are committed to promoting understanding an awareness about the science of global warming and its climate change consequences as well as promoting individual and collective action to address it. I offer the following comments regarding the 1st Rulemaking Advisory Committee meeting on January 14th 2021.

Before offering my comments and concerns, I would first like to offer our appreciation to DEQ staff for their concerted and transparent efforts to develop a meaningful Oregon Climate Protection Program to reduce emissions from stationary sources and also to the members of the RAC who clearly came prepared to assist in this endeavor.

1) We would like to remind everyone that the goals identified in the Governor's Executive Order 20-04 are to achieve a 45% reduction from 1990 emissions by 2035 and at least 80% reduction by 2050. Since best available science as reported by the IPCC demands the global achievement of net zero emissions by 2050 the phrase 'at least' in the EO needs to be incorporated into agency thinking and planning. It is disturbing to see that DEQ seems to have adopted the approach that the Climate Protection Program it is developing for stationary sources does not need to meet the goals stipulated in the EO. It is not clear how firm this view is since, despite the expressed view, the model scenarios included the EO goals suggesting that these were considered important at some stage in the deliberations. This concern is amplified by my engagement with other agency efforts and a growing realization on my part about what these other agencies are doing. It seems that there is a covert consensus developing among agencies that none is committed to the EO interim target and ultimate goal. Clearly, it would appear to us, that if every agency is leaving the heavy lifting to everyone else. This means the Governor's EO goals are doomed.
2) If the EO goals are to be achieved, the program developed must be economy-wide requiring that all sectors are targeted with reduction. If this is not undertaken, the onus will fall more heavily on those sectors included, again undermining the potential for the program to achieve the EO goal. For example, if electricity generation is exempt, a sector that is responsible for some 25% of total regulated GHG emissions, then other sectors will necessarily be required to pick up the slack.
3) We realize that biogenic resources are defined as renewable in Oregon. However, they still emit greenhouse gases that contribute to the problem. The principle that biomass emissions result from the release of carbon dioxide back into our current atmosphere rather than being transferred to this

atmosphere from one several hundred million years ago is specious. We know that the time taken for vegetation to recapture the emissions resulting from the combustion of biomass is far too long compared to the decade we have to undertake substantial emissions reductions. Again, eliminating biogenic emissions results in other sectors having to pick up the slack. The continued use of biomass as an energy feedstock also dictates the need for the program to incentivize biomass combustion reductions and carbon sequestration through Alternative Compliance Options (ACOs) - see below.

4) It is well understood that we do not have centuries to address this problem. Urgency is imminent; we have a matter of decades to reduce emission substantially. This means that using the 100-year carbon dioxide equivalent to assess the threat posed by greenhouse gases is inadequate. A critical related concern is that assessments of the CO_2e are updated regularly as scientific progress is made. This means that using the CO_2e values from the IPCC AR4 renders the values outdated. We understand that the EPA uses outdated values, but that was during the Trump Administration which consistently resisted any effort to address global warming. There is no satisfactory justification for Oregon's DEQ to be locked into those outdated values. Thus, we urge using the 20-year CO_2e values and the values reported at least in AR5, and then AR6 when those values are available.
5) We recognize that the Climate Protection Program focus is on emissions reductions, but, as has been recognized by the IPCC, carbon sequestration is also essential. This is also a goal of the EO. While the DEQ Climate Protection Program has a primary focus on reducing emissions from stationary sources, it is important to remember that the DEQ program should also support the efforts of other agencies in achieving their goals. Thus, in the arena of Natural and Working Lands, it is expected that carbon sequestration will be encouraged. This will require financial incentives. Within the overall Oregon Climate Action Plan, pretty much the only potential source of funds to invest in forestry and agriculture will be through Alternative Compliance Options (ACOs - offsets) that allow polluters to achieve some of their emissions reductions by investing in carbon sequestration forestry or regenerative agriculture. While such options should be available, rules governing their availability should be carefully constructed such (for example) that limits exist on the amount (or percent of their obligation) of pollution that users can include in meeting their obligation. Additionally, ACOs should be available only if to entities that have either installed, or have firm plans to install, best available technology.
6) The program should acknowledge efforts already undertaken by entities so they are not treated prejudicially compared to entities that have, since 2007, been the recalcitrant cause of the failure of the state to achieve its 2007 targets.
7) It is critical that all efforts to reduce emissions or promote carbon sequestration should embed the concern about environmental justice and social equity. Failing to do so will not only undermine the specific inclusion of such concerns in the Governor's EO, but will also further the historic injustices and inequities, and lead to resistance to the program from those communities.
8) Finally, in terms of the rural-coastal / urban divide raised as a word of caution by one RAC member, I stress that this is largely a fabrication of the opponents of prior legislation. Opponents of prior legislation confused the public with erroneous claims about how proposals would negatively affect them and consistently refused to acknowledge the potential economic and health benefits that would accrue to Oregonians as a result of those proposals. That divide will only recur if opponents undertake similar campaigns of misinformation in connection with the Climate Protection Program in particular and the overall Oregon Climate Action Plan generally. In fact, many of us living in rural Oregon recognize that we are on the frontlines of climate change and that addressing the underlying cause is critical to protecting our way of life. In addition, many of us realize that a well-constructed Climate Action Plan can actually provide economic benefits to our regions of the state.

WSPA

Catherine Reheis-Boyd
President

January 21, 2021

Oregon Department of Environmental Quality
Office of Greenhouse Gas Programs
700 NE Multnomah St., Suite 600
Portland, OR 97232

Submitted electronically to: GHGCR2021@deq.state.or.us

Re: WSPA Comments on DEQ Cap and Reduce RAC Meeting #1

Western States Petroleum Association (WSPA) is a trade association that proudly 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.

The way the world produces and consumes energy is evolving. And the members of WSPA are on the cutting edge of those changes, investing in and developing the affordable, reliable, and ever cleaner energy sources and technologies of the future. We believe that, working together, we can rise to the challenge of a changing climate. As such, we appreciate the opportunity to comment on the DEQ's first RAC meeting on the proposed cap-and-reduce program.

RAC Process Has Excluded the Collective Voice of Oregon's Major Fuel Suppliers

The cap-and-reduce program, as envisioned, proposes to include major requirements for fuel suppliers in Oregon. This fact should have qualified WSPA – who represents the collective voice of major fuel suppliers in the state – as a significant stakeholder in this proposed rulemaking. However, DEQ denied our application to participate in the RAC. We believe it is important that the agency actively seek input from the industry which may have the largest obligation under this program. This is especially true as more and more sectors appear to be getting carved out of the proposed program, and it appears that our member companies will be left with the remaining obligation under this scheme. WSPA has strong experience with other greenhouse reduction programs including California's Cap-and-Trade program and Europe's ETS, and our input would be vital to include. Being excluded from the RAC, we are not being given the same ability to provide input into the process.

Modeling and Scenario Development Feedback

The following section includes feedback on DEQ's upcoming modeling and scenario development work.

- Equitable Treatment for All Sectors Is Needed - we believe that an effective market-based mechanism to address climate change should be as broad as possible. While we recognize that DEQ believes it does not have the authority to pull in certain sectors of the economy, we encourage you to take every opportunity to broaden the program scope as much as possible. As such, we believe that DEQ should not exempt stationary sources as proposed in Scenario 2 & 3 and should strive to use the 25,000 MT CO2e/year threshold for fuel suppliers as opposed to the 300,000 MT CO2e/year threshold. While WSPA recognizes the need for reasonable de minimis thresholds, we are also concerned with the climate and economic implications created by exempting a subset of fuel suppliers (which according to DEQ make up 13% of the fuel supply to the state). We suggest two principles: 1) the same threshold should apply to all sources in all sectors; 2) thresholds should only exclude a de minimis number of parties. With these in mind, a threshold of 25,000 tonnes of CO2e per year for fuel suppliers should be considered. We also have serious concerns with the equity, viability and feasibility of a program that would exclude the electricity generation sector. This is a potential fatal flaw in the program. If DEQ lacks legal authority to include imported electricity in its program, it should seek that authority.
- DEQ Staff "Leanings" – in general, we support maximum flexibility in program design. More specifically, we support DEQ leanings to utilize compliance instruments, provide allocation of instruments, allow alternative compliance instruments from sources, broad trading flexibility and banking. DEQ should consider modeling scenarios allowing greater than 12% alternative compliance instruments.
- Point of Obligation – we believe that the point of obligation should be as close to the emission sources as possible as this most often offers the best opportunity to reduce emissions. Therefore, we are concerned about the decision to move the obligation for stationary source combustion to natural gas and fuel suppliers. This will limit options for emission reductions under the program.
- BAU/Reference Case - we are particularly interested in weighing in on the reference case assumptions. To that point, we recommend that DEQ make publicly available the list of data sources which you will be using for your assumptions. We would like to be able to comment on that list and offer additional ideas for data sources.

- DEQ should make publicly available detailed assumptions that will be made regarding four key variables in the modeling: assumptions made for the state's Clean Fuels Program, Senate Bill 1044 (2019), state VMT, and federal CAFE.
- Need for Sensitivity Analysis – the analysis the agency will be developing is going to be highly dependent upon key assumptions, so we would recommend that you conduct sensitivity analysis that demonstrates how sensitive the macroeconomic findings are to changes in those key assumptions.
- DEQ staff discussed and alluded to the idea of being able to isolate the impacts of various program components' impacts on emissions and each program's relative contribution. This is extremely important, and the relationship between program components is going to be important to understand and evaluate. For example, how will the cap-and-reduce program interact with the state's Clean Fuels Program, especially since both attempt to reduce GHG emissions in the state's fuels. A key question is: **What is the Clean Fuels Program not accomplishing that you believe could be accomplished with this cap-and-reduce program?**
- For modeling of various scenarios, it will be important for DEQ to include a scenario that evaluates the inclusion of the electricity sector as well as a scenario that evaluates a higher allowable usage (e.g., 20%) of alternative compliance instruments. (The noted scenarios of 8% and 12% are too narrow to identify an outcome difference.)
- Regulators should pursue a multi-technology approach to reducing emissions in the state. To that end, it is important that regulators maintain optionality, ensuring that you are not foreclosing on potential solutions sets. One way to help avoid this is by ensuring that regulators are not "putting a finger on the scale" for one technological solution and instead are embracing a multi-technology approach.

Thank you again for the opportunity to comment. If you have any questions, please feel free to contact me or WSPA's Vice President of Regulatory Affairs, Tiffany Roberts at troberts@wspa.org. We look forward to meeting with you to further discuss these ideas and welcome an open dialogue with you and your staff.

Sincerely,

cc: Oregon Environmental Quality Commissioners
Tiffany Roberts, Vice President, Regulatory Affairs, WSPA

From: Casey Kulla <kullac@co.yamhill.or.us>
Sent: Thursday, January 21, 2021 4:14 PM
To: GHGCR2021
Cc: SINGH Nicole
Subject: Comments for first RAC meeting

I cannot recall all the specific questions, but here goes:

First, I think there should be incremental goals, not just 80% by 2050 or whatever it is. The rate matters, too: a fast rate and a taper would be better, to my view, than going slow at first and accelerating over time, if we are to actually address emissions.

Second, I think there should be alternative compliance instruments, preferably all from Oregon. I would prefer larger amounts issued than the 12% cap. This can be a huge opportunity for Oregon-based projects.

Third, regarding these instruments, I can see ODF or ODA acting as the issuer on behalf of DEQ, similar to how ODA is responsible for water quality for DEQ. Then, ODF and ODA can work with farms and forests and community organizations to do this work of compliance via sequestration, etc. We should not expect the people on the ground sucking up carbon to also fill out lots of forms and paperwork. Please make it easy.

I probably did not answer all the questions, but this is a start. Thank you for facilitating this discussion and this RAC.

Casey Kulla

Subject: Inexcusable to exempt fossil gas power plants

Dear Governor Brown,
(cc: Director Whitman)

I'm a proud Oregonian and celebrated the signing of the Oregon Climate Action Plan (EO 20-04) last year as potentially the biggest climate action Oregon has ever taken.

I'm writing today out of a deep concern you are letting some of the state's largest polluters entirely free rein to continue spewing climate pollution, before the Climate Protection Program (frm. cap & reduce) even begins a rule-writing process. There is no role for fossil fuel "natural" gas in a climate-safe future. Fossil gas-burning power plants in Oregon must be fully regulated by the Climate Protection Program, along with every other large polluter in the state.

Fossil gas power plants are the largest stationary sources of climate pollution in Oregon. One out of every 10 tons of climate pollution in Oregon comes from gas-burning power plants. We just finished the important work of closing the last coal-burning power plant here. Ignoring the next generation of polluting power plants in a "climate protection program" is unthinkable!

A second major area of concern for this program, as initial rulemaking gets underway, is the matter of near-term targets for reducing pollution. Oregon must not depend on decades-old science for setting the targets of the Climate Protection Program. So far, DEQ has refused to commit to strong targets for climate pollution reductions, especially an interim target.

We must cut climate pollution in half by 2030 according to the best available science. Our current state targets do not meet that threshold, and thus the Climate Protection Program, focused on the biggest sources of pollution, should be more ambitious than even the overarching state targets.

You are our protector from large polluters. You clearly value science and have a vision for a prosperous, clean energy economy for Oregon, as exemplified by the Oregon Climate Action Plan. This gross exemption cannot be allowed or the ambitions of your executive order will not become reality.

Please instruct the Department of Environmental Quality to include gas-burning power plants and all other large polluters in the Climate Protection Program and set truly ambitious targets to protect the health of Oregonians, move toward a more equitable state for all, and help our economy recover into a sustainable future.

Sent by the following 336 individuals:

Abby Klaasmeyer
Adama Hamilton
Adelia Horner
Al Beltram
Alexis Martin
Alice Shapiro
Alicia Williams
Alida Royse
Allyson Dugan
Amber Roth
Andrea Pellicani
Andrew Gray
Angela Wanak
Ann Lamer
Anne Ackley
Annie Capestany
Aurora Erlander
Barb McCown
Barbara Ray
Becky Lippmann
Beth Levin
Bill O'Brien
Bill Gorham
Bonnie New
Brad Nahill
Brent Rocks
Brian Durbin
Brian Stewart
Brian Torres
Bridget Wyatt
Caley Ream
Carina Zevely
Carla Hervert
Carmen Hammersmith
Carol Salami-Goswick
Carol Voeller
Carroll Johnston
Cathy Hume
Charles Dalton

Charles Hottle
Charles Lebold
Charles Mcsweeney
Charlie Graham
Charlotta Ball
Charlotte Maloney
Cherine Bauer
Chip Hall
Chiquita Rollins
Christina Castle-Rey
Chuck Gehling
Cierra Buer
Cindy Jensen
Clair Clark
Clarise T McGee
Claudine Paris
Clyde Alan Locklear
Colleen Whalen
Corinne Sherton
Craig Heverly
Craig Mackie
Damian Kilby
Dana Petre-Miller
Dana Weintraub
Dave King
David Baker
David Edwards
David Gardiepy
David Griffith
David Nichols
David Saul
David Williams
Davide Bergamasco
Dawn Dauble
Dawn Griffin
Dawn Wells
Deb Cook
Deborah Clark
Deborah Platten
Debra Lutje
Denise Duren
Dennis Fisher
Diana Talcott
Diane Chavez
Dianna Pounder
Dianne Ensign
Don McClure
Donna Hirt
Donna Tate
Drew Miles
Duncan Baruch
Eileen Ordway
Eileene Gillson
Elaine Hultengren
Eleanor Dowson
Elizabeth Coker
Elizabeth Eggers
Elizabeth Hardee
Ellen Levine
Ellen Saunders
Emily Giugni
Emily Herbert
Emily Platt
Eric Grimm
Erica Rubin
Erna Barnett
Evan Reynolds
Evelyn Pietrowski-Ciullo
Fabio Hennessy
Flavia Franco
Franklin Stahl
G. A. Kleiner
G. Ray
Gail OHara
Gail Streicker
Gary Cook
George Hug
George Hutchinson
Gina Norman
Glenn Tanguy
Greg Lyons
Gwen Stone
Harry Freiberg
Hazel Wheeler
Hillary Tiefer
Howard Shapiro
Hudson Henry
Ineke Deruyter
Jackie Johnson
Jacob Siegel
James Carthel
James Moos
Jan Accardo
Jan Montes
Jan Stone
Jane Michaud
Jane Stackhouse
Janet Lorenzen
Janet Weil
Janiece Staton
Jaymee Workman
Jean Lofy
Jean Wynn
Jeanne Crowley
Jeannine Cook
Jennifer Phillips
Jennifer Sprague
Jennifer Starkey
Jenny Lovold
Jess DePew
Jessica Karman
Jessica Scott
Jim Scheppke
Jim Steitz
Jo Six
Joan Viers
Joan Walker
Joe Craig
Joel Rosenblit
John Burns
John Fulbright
John Howard
John Livingston
John Nettleton
John Robbins
John Thornton
John Wesley Brown
Jordan Le Blanc
Joseph Witt
Joshua Berger
Joshua Olander
Juanita Rinas
Julie Thomas
Julie A. Richards
Julie Wainwright
Kaellen Hessel
Karen Springer
Karolina Newcombe
Kary Erickson
Kate Szrom
Kathleen Hudson
Kathleen Mitchell
Kathryn Robinson
Kathryn Sheibley
KB Mercer
Kenlynn Hamilton
Kerry DeLine
kim davis
Kirk Leonard
Kris Bauer
Kris N.
Krista Messer
Kristen Eberlin
Kurt Kreitzer
Laila Noll
Larry Martin

Lary McKee
Laura Fisher
Laura P
Lauren Thompson
Laurie Swenson
Lawrence Nagel
LD Song Scott
Leah Yamaguchi
Leigh Van Sickle
Leonard Bottleman
Lesley Atlansky
Letitia S.Tarver
Linda Alstad
Linda Blue
Lois Harris
Lori Kuebler
Lorraine Foster
Lucas Firestone
Lucia Massarella
Lucy Hitchcock
Lynda Lanker
Lynn Cardiff
Madison Daisy Hathaway
Maia Hixon
Mandy Buffington
Margaret Bowman
Margaret Dillender
Marilyn Krug
Mark Rochester
Mary Anne Spradlin
Mary Parham
Matt Riley
Matthew Hunter
Matthew Sheinin
Maxine Sheets-Johnstone
Meg Hummon
Meg Jefferson
Meg Rowe
Meghan Kearns
Melinda Fleming
Melissa Carr
Meredith Connolly
Michael Carter
Michael Fairhurst
Michael Halloran
Michael Heumann
Michael Wherley
Nadene LeCheminant
Nancy Carl
Natasha Myers
Nick Engelfried
Nna Utigaard
Nora Lehmann
Nykolee Charlton
P. Quillian
Pamela Vasquez
Patricia Hathaway
Patricia Parvin
Patty Wentz
Pedro Molina Sanchez
Peter Bergel
Peter Haglund
Peter Sergienko
Phil Goldsmith
Philip Ratcliff
Phillip Callaway
Rachel Nettleton
Rae Jesequel
Randall Nerwick
Randall Webb
Randy Harrison
Ray Quisenberry
Rebecca Gordon
Regna Merritt
Richard Eli Campbell
Richard Payne
Richard Sheperd
Richard Thomas
Robert Wright
Robert David McAlaster
Roberta Cade
Robin Gotfrid
Robin Rabiroff
Robin Woolman
Robyn Tatom
Rosemary Nord
Roxanne Caredio
S B Starlight
Sagen Smith
Sara Wilkes
Sarah Haynes
Sarah Deumling
Sarah Kreisman
Sarah Prowell
Satya Vayu
Scott Everist
Scott Kennedy
Sean Doyle
Shane Cotee
Sheila Spencer
Sheri Ambrose
Sherry Salomon
SJ Van Rees
Stephen Bachhuber
Stephen Bomber
Stephen Cutler
Steve Gutmann
Stuart Liebowitz (DCGWC)
Sue Hartford
Sunny Tabino
Susan delles
Susan Graves
Susan Heath
Susan Mates
Susan Newton
Susan Tanabe
Tamara Baldwin
Tammy Bittler
Tara Ohta
Tara Redfield
Terry Jess
Thomas Ellis
Timothy Jenkins
Tod Boyer
Tod Jones
Tom Armstrong
Tonya Stiffler
Tracy Richards
Udo Gorsch-Nies
Veronica Poklemba
Victoria McDonald
Virginia Tarango
Walt Mintkeski
Wendy Tsien
Wesley E. Stoker
William Clubb
William Barry Reeves MD
William M. Musser IV
Zach Mulholland
Zachary Surmacz
Zed Langston

Some writers highlighted additional points in their letters. These excerpts are included below:

“Natural gas is not a bridge fuel and deserves no special benefits in what we need to do to get to net zero emissions." – Andrew Gray

“Don’t gut the program out of the gate. Start strong and stay strong. Climate change is like a slow to develop pandemic and if we don’t stop it, it will kill far more people worldwide than the Covid-19 pandemic.” – Chiquita Rollins

“The fate of the environment is the defining issue of our time and protecting the environment is my highest priority.” – Dianne Ensign

“I WANT MY GRANDSON TO HAVE A CHANCE TO GROW OLD.” – Erica Rubin

“Before rule making on the DEQ climate protection program (cap & reduce) started Dir Whitman told legislators that gas power plants will be exempt from the program. Shouldn’t that decision be made after consultation with the RAC? I was at the signing of the Oregon Climate Action Plan (EO 20-04) last year and I’m deeply disappointed that it is already being undermined by state agencies. First, some of the state’s largest polluters have free rein to continue treating the atmosphere like an open sewer, before the rule-writing process even begins.” – Janet Lorenzen

“The planet needs us to do the right thing. Tax nike and pay for whatever we need to implement a realistic plan.” – Jenny Lovold

“As a former resident of Oregon, who hopes that my home state may yet lead the country in stabilizing our climate, I am alarmed that the rulemaking committee appears to be repealing the Climate Protection Program in all but name. If the purpose of this effort is to reduce pollution, then exempting the largest polluters is tantamount to simply refusing to execute the program. This being the case, I hope that you will instruct the rulemaking committee to actually reduce climate pollution, or be replaced with a new committee less prone to ideologically-driven insubordination.” – Jim Steitz

“Our world desperately needs us to eliminate the use of fossil fuels. For years, I’ve tried to figure out what I can do to help curb greenhouse gas emissions. I’m cutting out plastic, trip chaining, starting to compost. But I’ve realized that fossil fuel companies spent decades convincing us that it was our fault as individuals and that we needed to change, not society. There’s a lot that us individuals can do to adapt, but there’s nothing we can do that would be as powerful as eliminating all fossil fuels from Oregon’s power supply. We need a renewable energy revolution.” – Kaellen Hessel

“Use your powers for good and stop giving gas-burning power plants a free pass. You have a lot on your plate right now, but this affects future generations.” - Leigh Van Sickle

“I’m an Oregonian who treasures the clean air, clean water and mild climate.” – Lynda Lanker

“I have supported your work and leadership for decades and admire your principles and commitment to the common good for Oregonians. I know you are concerned for the health and well-being of Oregon children and families. Those children are relying on you and today’s elected representatives to act today to ensure a healthy, livable planet for their future. Failure to act courageously now, given what we know of the perils of continuous GHG emission is inexcusable.” – Meg Rowe

“The climate is a HUGE priority for me, and for all of us. I see the way our climate is changing first hand, as a mountaineer and ice climber, our glaciers are shrinking and our winter sports seasons are getting shorter. I could live without traversing the majestic glaciers of Mount Hood and Mount Rainier, but I simply won't accept the inequities that will come with climate change and raising sea levels. I can't stand by idly as my family risks losing their lives, homes, businesses, and communities, as happened this year for my family down in Ashland -- even driving through flaming streets mid evacuation to pick up my three year old nephew who was endangered when everything began to burn down. When I see shrinking glaciers, I feel loss of life, loss of community, and imminent disaster.” – Michael Fairhurst

“I am a mother to two small children, Sally, age 5, and Sydney, age 3. After the long, bruising, and frustrating battles to try and pass sweeping climate legislation, I celebrated the signing of the Oregon Climate Action Plan last year, and I thank you profoundly for that executive order. Of course, the devil is always in the details, and I'm worried and upset by the news that the DEQ is planning to exempt fossil gas-burning power plants before the rule-making process for the Climate Protection Program even begins!” – Nora Lehmann

“Do not exempt polluters. Push for solar power. Enable homeowners to install solar power. Push for solar powered cars and trucks. The technology is here. We do not need fossil fuels.” – Rachel Nettleton

“Fossil gas-burning power plants in Oregon must be RAPIDLY PHASED OUT by the Climate Protection Program, along with every other large polluter in the state… We just finished the important work of closing the last coal-burning power plant, and ignoring the next generation of polluting power plants in a “climate protection program” is laughable. Pathetic. Really disappointing… My daughters are counting on you.” – Steve Gutmann