

Program Options to Cap and Reduce Greenhouse Gas Emissions Preliminary Report

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By: Oregon Department of Environmental Quality
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Introduction

On March 10, 2020, Governor Brown signed Executive Order 20-04, directing state agencies to take actions to reduce greenhouse gas emissions and consider climate change in agency planning. The executive order established science-based greenhouse gas emissions reduction goals for Oregon of at least 45 percent below 1990 levels by 2035 and at least 80 percent below 1990 levels by 2050. The order contains several directives to the Environmental Quality Commission and the Department of Environmental Quality to take action consistent with existing legal authority to reduce emissions toward meeting the science-based goals. One of the specific directives is for the EQC and DEQ to “cap and reduce” greenhouse gas emissions from three sectors including large stationary sources, transportation fuels, and liquid and gaseous fuels, including natural gas. In accordance with directive 4.F.(2) of the executive order, DEQ is to submit a preliminary report to the Governor by May 15, 2020, and a final report by June 30, 2020 regarding program options to cap and reduce emissions from the three sectors. DEQ is also directed to develop programs on this topic that commence no later than Jan. 1, 2022.

This report is organized in four sections. Section 1 briefly describes the agency’s understanding of the EQC’s existing legal authority to cap and reduce greenhouse gas emissions in specific covered sectors, after consulting with the Oregon Department of Justice. This section identifies the broad legal authorities of the EQC to regulate emissions and identifies limits to that authority that may also narrow program design options. This is not meant to be an exhaustive analysis of all potential legal points, but to serve as a general guide to the EQC’s program development options within existing authority.

Section 2 sets out DEQ’s proposed process to engage the public and stakeholders in gathering input into program design options. This work includes a consistent emphasis of engaging impacted communities to assure that decision-makers fully understand the consequences of options, along with the interests and concerns of communities that could be affected. Following the publication of this report, there will be an opportunity for the public and stakeholders to comment on this proposed policy development process, so that this early input is incorporated into the program development from the onset of the effort. DEQ is proposing a pre-rulemaking public engagement process over summer and fall 2020, which will include workshops oriented around particular program design topics, as well as consultation with key communities, partners, and stakeholder groups. This scoping process will help define program options to then be considered in the more traditional rulemaking process, which will begin in late 2020 and extend through 2021.

Section 3 provides a preview of policy considerations and initial core program design elements consistent with the legal parameters described in Section 1. This section is meant as a preliminary identification of important elements and options that will define the contours and nature of a DEQ cap and reduce program. These elements and options include general policy considerations such as the scope of greenhouse gas emissions and regulated entities covered under the program, the distribution of compliance instruments, and cost containment considerations. Program design and policy options will be explored further throughout the process described in Section 2. DEQ is not recommending a particular program design or set of options in this report. Those elements will come later, following the scoping process, and following input from rules advisory committees.

Finally, Section 4 describes how the public and stakeholders can comment on this report. Those comments will be considered for the final report, which will act as a guide for DEQ throughout the subsequent program development process.

1. Existing Authorities to Regulate Greenhouse Gas Emissions

The following section of this report reflects DEQ’s understanding of the EQC’s existing authority granted by the Oregon legislature. Much of that authority stems from long-standing direction from the legislature to the EQC and DEQ to control air pollution in order to protect public health and the environment. This includes direction both predating the federal Clean Air Act, and broad authorizations that are contemporaneous with federal enactments.

1.1. The EQC’s Authority to Regulate Air Pollution, Emissions of Air Contaminants, and to Require Permits

The Oregon legislature has established both broad policy and specific direction to DEQ and the EQC with regard to the control of air pollution in Oregon. The legislature’s overriding policy for Oregon, as stated in ORS 468A.010, is “[t]o restore and maintain the quality of the air resources of the state in a condition as free from air pollution as is practicable, consistent with the overall public welfare of the state. To carry out this policy, the EQC is authorized, under ORS 468A.025, 468A.040 and 468A.045, to set standards for air purity in Oregon, to set emissions limitations on air contamination sources, and then to regulate air contaminant emissions in order to meet those standards. Further, ORS 468A.025(3) specifically authorizes the commission to “set forth the maximum amount of air pollution permissible” and to distinguish between air contaminants and air contamination sources when setting such standards.

The legislature defined the terms “air pollution,” “air contaminant,” and “air contamination source” in ORS 468A.005 in ways that demonstrate the scope of authority it intended to grant to the EQC under ORS chapter 468A. First, “air pollution” is defined in ORS 468A.005(5) as:

[T]he presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby.

In turn, “air contaminant” is defined in ORS 468A.005(2) to mean a “a dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter or any combination thereof.”¹ In other words, the presence of carbon and other gases in the atmosphere in quantities that endanger public health or the environment is air pollution under Oregon law.

And, finally, the legislature defines “air contamination sources” as meaning “any source at, from, or by reason of which there is emitted into the atmosphere any air contaminant, regardless of who the person may be who owns or operates the building, premises or other property in, at or on which such source is located, or the facility, equipment or other property by which the emission is caused or from which the

¹ The term “greenhouse gas” is defined in ORS 468A.210 to include “any gas that contributes to anthropogenic global warming including, but not limited to, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride.”

emission comes.” In other words, the legislature expected the EQC to address as air contamination sources both specific buildings and premises that emit air pollution, *and* facilities, equipment or other property that cause air pollution.

As has been documented by the legislature (as codified in ORS 468A.200), by the U.S. Environmental Protection Agency², and as referenced in Executive Order 20-04, current levels of greenhouse gas emissions in Oregon are injurious to the public welfare and to human, animal and plant life and thus meet the definition of air pollution. The increased and increasing concentration of these emissions in the atmosphere is forcing fundamental changes to the climate in Oregon, such as increasing average temperatures, increasing severity of storms, rising sea levels, ocean acidification and altered seasonal and hydrological cycles. These changes are injuring the public welfare, human health, the environment and property, and are significantly harming the “enjoyment of life and property” in Oregon. Thus, the EQC has authority to set greenhouse gas emissions-related air quality and emissions standards applicable both to buildings and premises that emit and to other facilities, equipment or property that cause such emissions to occur.

The EQC currently implements its authority to regulate air quality by requiring air contamination sources, including certain indirect sources such as large parking facilities, hospitals, and educational facilities that cause large volumes of traffic (and resulting mobile source emissions), to obtain permits under ORS 468A.040.

The process and authority for the DEQ to issue permits is provided in ORS 468.065. It applies to all environmental permits issued by DEQ, including air quality permits issued under the authority of ORS chapter 468A. Along with the authority to issue permits, section (1) of the statute requires the EQC to include conditions in such permits to ensure that air contamination sources comply with applicable standards adopted by the EQC. Aside from some statutes applicable to particular types of conditions³, there are no statutes that limit the Commission’s authority in terms of the types of permit conditions it may impose. Its authority to develop permit conditions is limited only by whether a condition is necessary to ensure compliance with the standards it has adopted.

These are the standard authorizing statutes for the air quality permitting program adopted by the EQC and administered by DEQ, in Oregon Administrative Rules chapter 340, divisions 216 and 218.⁴ Under that program, DEQ has issued and administers thousands of air quality permits issued to specified industrial and commercial sources of air contaminant emissions in Oregon. It follows, then, that the EQC could require any such source, currently subject to a requirement to obtain a permit under those programs, to also be required to obtain a permit, or be subject to additional permit conditions, based on its emissions. Certain limitations with respect to some sources are discussed further below.

1.2. The EQC’s Authority to Regulate Sources that Emit Air Contaminants

As discussed above, the EQC has authority to regulate greenhouse gas emissions from “air contaminant sources or classes thereof . . .” Whether a person, business or facility can be regulated depends on

² Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed Reg 66,496 (2009).

³ For example, ORS 468A.025(4) applies to conditions that are related specifically to requiring stationary sources to maintain “the highest and best practicable treatment and control of emissions.”

⁴ ORS 468A.310 through 468A.345 also authorize the federal air quality permitting program, OAR ch. 340, div. 218, that DEQ is delegated to implement under the Clean Air Act, by EPA.

whether it falls within the definition of “air contamination source.” As noted above, ORS 468A.005(4) defines that term as follows:

[A]ny source at, from, or by reason of which there is emitted into the atmosphere any air contaminant, regardless of who the person may be who owns or operates the building, premises or other property in, at or on which such source is located, or the facility, equipment or other property by which the emission is caused or from which the emission comes.

Under this definition, the EQC is authorized to regulate the person, business or facility in Oregon “at” or “from” which emissions of air contaminants come. Such sources can be referred to as “direct” sources, where the emissions occur directly from a person, business or facility. But the definition of “source” does not stop there, it also includes facilities and other property that cause emissions that occur elsewhere. These “indirect” sources, particularly activities that cause large volumes of traffic and resulting mobile source emissions, have long been regulated in Oregon through indirect source permits.

There are three key parts of the definition of “air contamination source.” They are, first and second, the words “source” and “by reason of which,” and, third, the modifying clauses that follow the initial statutory definition. The word “source” is not separately defined in statute, but its dictionary definition includes meanings that are applicable to the direct and indirect source concepts described above. The first relevant dictionary definition of “source” is as “a point of origin or procurement” or “a point of emanation.” That definition fits the concept of a direct source. The second relevant dictionary definition of “source” is “a generative force or stimulus; cause, instigator.” Coupling that definition with the phrase “by reason of which,” describes indirect sources—a business or operation that does not itself emit air pollution, but that causes air pollution to occur.

DEQ has long regulated large-scale uses that cause mobile source (mainly vehicle) emissions. The same reasoning applies to suppliers of liquid and gaseous fuels that are used in Oregon, including suppliers of transportation fuels as well as suppliers of other fuels such as natural gas. Such suppliers are the generative force, stimulus and cause of the emissions that result from use of the products they supply, notwithstanding that the air pollution is emitted from locations not owned or controlled by such suppliers, and from equipment owned and operated by others (e.g., motor vehicles). Such suppliers are therefore “air contamination sources” under the definition in ORS 468A.005(4), and the EQC may regulate them in order to meet standards for air purity to protect the public health, welfare and the environment.

There are limits to the EQC’s authority, however. First, it is likely that the EQC does not have authority to regulate air emissions that occur wholly outside of Oregon. ORS 468A.025(3) grants the EQC authority to set air quality and emissions standards “for the entire state or an area of the state.” As described above, the EQC has authority to regulate indirect sources of emissions, where the emissions come from equipment or a facility not owned or controlled by the permitted entity. However, the statutory language authorizing the setting of emissions standards references regulation only “for the . . . state,” which DEQ interprets to mean the emissions must occur in the state. This is particularly relevant to companies that provide electricity for use in Oregon, but where the electricity is generated outside of Oregon and the emissions that result from that generation occur outside of Oregon. In sum, DEQ believes that the EQC likely does not have authority to regulate air emissions that occur outside of Oregon.

Second, there are a series of exemptions to the EQC’s authority to regulate air quality, in ORS 468A.020. Those exemptions include, in section (1) of the statute, the regulation of air quality from most agricultural operations and residential barbecue equipment, and from certain residential heating equipment and fires for firefighting instruction. They also include an exemption, in section (3) of the statute, of “carbon dioxide emissions from the combustion or decomposition of biomass,” as further defined in the statute.

Therefore, DEQ recommends that any greenhouse gas emissions regulations that the EQC adopts not regulate any activities exempted by the legislature under these provisions.

1.3. The EQC’s Authority to Set Greenhouse Gas Emissions Caps

1.3.1. Setting Emissions Caps

Part of the EQC’s authority under ORS 468A.025(3), as described above, is the authority to establish “air quality standards including emissions standards” that “set forth the maximum amount of air pollution permissible” from particular “air contamination sources or classes of sources.” This statute authorizes the EQC to set greenhouse gas emissions caps—to establish the permissible limit of emissions that may come from a class of sources, as identified by the EQC, and from any individual source. The EQC has broad discretion to determine the appropriate levels of such emissions caps, within the overall air quality policy established in ORS 468A.010, “[t]o restore and maintain the quality of the air resources of the state in a condition as free from air pollution as is practicable, consistent with the overall public welfare of the state.” And the EQC has authority to adjust the cap over time, and in fact is legislatively directed in ORS 468A.010(2) to implement its air quality program “in a progressive manner . . .” Thus, the EQC may establish initial caps and then slowly reduce those emissions caps over time, if it determines that approach is appropriate.

The EQC would implement its emissions cap[s] by requiring sources to obtain permits from DEQ that authorized emissions of specified amounts of greenhouse gases. And the EQC could then authorize DEQ to include any conditions in such a permit to achieve the air quality benefits that were the purpose of setting the overall and facility-specific caps.

As with stationary sources currently operating under permits with DEQ, violation of an emissions limit in a permit will be subject to the imposition of civil penalties by DEQ, under ORS 468.140. In adopting the emissions standards, the EQC also could set the amounts of such civil penalties, under ORS 468.130.

1.3.2. Trading and Alternative Compliance Pathways

Once the EQC has established GHG emissions caps for individual air contamination sources, by including the caps in permits issued to the sources, in addition to having authority to enforce those limits against any source that emits GHGs above that limit, it could allow individual permittees that emit less GHGs than their limit to trade the unused portion of their emissions authority to other permittees. This reflects the structure of the Oregon statutes that speak in terms of first setting air purity standards to protect public health and welfare, and then setting emissions standards to meet those standards. Similar approaches have been used in other air quality regulation, including regulation of sulfur dioxide and the Oregon Clean Fuels Program. Trading, however, can raise a range of practical and policy issues that would need to be described, evaluated and (ultimately) considered and decided by the EQC.

A related concept to trading is allowing sources to choose alternative means of complying with an emissions limit, such as contracting with a third party to deliver reductions in emissions by actions at other locations. Again, DEQ believes that there is not a legal prohibition on the EQC allowing, by rule, for facilities to elect such alternatives to technological or operational controls. Such alternatives can raise complex practical and policy issues, but DEQ believes they could be considered by the EQC as part of the program the commission adopts.

1.3.3. The EQC May Assess Permit Fees, but May Not Sell or Auction Greenhouse Gas Emissions Rights

A state agency may assess fees or otherwise collect revenues only if authorized to do so by statute or other law approved by the legislature. The EQC has authority, under ORS 468.065(2) to assess fees for permits, but that authority is limited to an amount of fees necessary to cover the costs to administer the permits. The statute specifically authorizes fees for, as relevant here, “the anticipated cost of filing and investigating the [permit] application . . . of issuing or denying the requested permit, and of an inspection program to determine compliance or noncompliance with the permit.” In addition, DEQ notes that any fees that the EQC approves to pay for the program must be ratified by the legislature at the next regular legislative session after adoption of such fees, under ORS 291.055.

Prior legislative consideration of greenhouse gas regulation has included the programmatic aspect of an auction of compliance instruments. DEQ does not believe that the EQC has the authority to auction or otherwise sell rights to emit greenhouse gases. A further complication is that DEQ has no authority to receive or spend auction proceeds. As a result, one of the main differences between programs that the EQC may adopt under existing authorities, and programs previously considered by the Oregon legislature is that DEQ believes the EQC may not develop a program that is designed to generate revenues or proceeds to the state for investment in programs to speed reductions of emissions. Similarly, DEQ believes that the EQC also lacks authority to distribute compliance instruments (rights to emit greenhouse gases) to a non-profit, third-party, and then authorize or direct the third-party to sell the compliance instruments at auction, using the auction proceeds to fund greenhouse gas emissions reduction programs.

2. Program Development and Stakeholder Engagement Process

2.1. Overview

A critical aspect of establishing programs to cap and reduce greenhouse gas emissions in Oregon is strong public engagement in the program development process, particularly by communities that may be most affected by such policies. DEQ is actively soliciting feedback on the best ways to ensure there are meaningful opportunities for public and stakeholder engagement and input throughout the new emissions cap and reduce program development process.

For this effort, DEQ envisions three key phases:

- Phase 1 (spring 2020): process engagement
- Phase 2 (summer and fall 2020): policy and program scoping
- Phase 3 (fall 2020 through 2021): Rulemaking Advisory Committee work and EQC consideration of recommendations

This section provides an overview of DEQ's proposed roadmap for developing a new cap and reduce program or programs, and a description of each phase of development. DEQ is seeking feedback on this proposed process to inform the final work plan and report due to the Governor by June 30, 2020. Section 4 at the end of this report includes a description of how the public and stakeholders may provide input on the proposed outreach and engagement process described in this section.

Related to this development process, the executive order also directs DEQ to expand the existing Clean Fuels Program with the goal of reducing the average amount of greenhouse emissions per unit of fuel energy by 20 percent below 2015 levels by 2030, and 25 percent below 2015 levels by 2035. The expansion of the program and the establishment of a new cap and reduce program address different scopes of greenhouse gas emissions and solve for different emissions reduction targets. However, DEQ recognizes the potential interplay between a clean fuels expansion and a new emissions cap and reduce program for transportation fuels. As a result, DEQ also is considering how to best coordinate the public engagement aspects of both of these efforts, and invites comments and suggestions on this question in particular.

In response to the evolving COVID-19 situation, it will be necessary to use virtual meeting technologies for large groups, and (at least in the near-term) small groups, as well. DEQ has held a number of public hearings using these technologies, and continues to evaluate which systems work best for different types of groups and meetings. DEQ is particularly concerned about access to technologies for communities with limited or no internet access. Suggestions and input on how to engage with such groups or individuals are welcome and invited. DEQ recognizes that conditions concerning meetings, distancing, access, and interest are likely to vary around the state, and will do its utmost to reflect those differences in its engagement processes.

2.2. Phase 1: Engagement on Process

This subsection outlines DEQ’s proposed approach to the initial process development phase between May 15, 2020 when this preliminary report is submitted to the Governor and June 30, 2020 when a final version of this report is submitted. This phase is designed to gather input on how subsequent phases can best engage the public, stakeholders and impacted communities during the development of options and recommendations for the EQC, and that ultimately results in policy decisions by the EQC that are well-informed and that help meet the outcomes set out in EO 20-04.

2.2.1. Purpose

- Solicit input from the public, stakeholders and, impacted communities on the proposed development process described in this report for input to inform the final report due to the Governor by June 30, 2020.
- Inform the public and stakeholders of opportunities to engage in the program development process.
- Identify stakeholders and groups interested in or affected by a new cap and reduce program, or programs.
- Provide early and meaningful engagement opportunities for communities disproportionately impacted by climate change.

2.2.2. Goals

- Learn which engagement opportunities are most likely to be effective and meaningful in receiving input from different perspectives.
- Understand the important engagement opportunities and mechanisms for engagement with impacted communities.
- Develop a clear shared understanding between DEQ and interested stakeholders of how DEQ will proceed in scoping issues and developing options for consideration by rulemaking advisory committees and, ultimately, the EQC.
- Provide opportunities for stakeholders and the public to meaningfully inform the agency’s policy development process.
- Provide clear and transparent communications regarding the cap and reduce program development process.

2.2.3. DEQ Commitment

While DEQ will not be in a formal rulemaking process during Phase 1, DEQ will, however, follow some of the same underlying principles, such as advanced public notice and invitations to meetings, web-based posting of meeting materials, summaries, and comments received, and other means to make information fully accessible.

2.2.4. Strategies

DEQ will publicize this report and post it to DEQ’s webpage, the Governor’s webpage, and send it out via DEQ GovDelivery. DEQ will host a webinar shortly after the May 15, 2020 submittal. The webinar will describe all reports related to the executive order submitted to the Governor by DEQ, including the options for a cap and reduce program, but also the Clean Fuels Program expansion, and other directives to the EQC and DEQ.

DEQ is seeking input on the process proposed in this section through a variety of means, including but not limited to:

1. Written comments: DEQ is seeking written comments on the report from May 15 to June 15.
2. Listening sessions: DEQ will host at least three listening sessions after May 15 and before June 30 to present the Preliminary Report, seek feedback, and to ask questions. The listening sessions will be open to the public and may be organized to encourage focused participation from particular interests, including representatives of Tribes, representatives of impacted communities, environmental interests, local governments, representatives of the potentially regulated operations, and the general public.
3. Environmental Justice Task Force: DEQ has requested an opportunity to brief the state's Environmental Justice Task Force on the report and solicit feedback and input from task force members.
4. Tribal Engagement: DEQ will formally notify all nine of Oregon's federally recognized tribes of this report and the proposed policy development process. The agency will request an opportunity to brief the Natural Resources Cluster of the Legislative Commission on Indian Services on the report and solicit other direct engagement between the department, tribal councils and tribal staff.

The final report will be informed by input received during this initial engagement process. Section 4 of this report includes specific questions and issues the agency is most interested in receiving feedback and input on. DEQ will publicize the final report and post it to DEQ's webpage, the Governor's webpage, and send it out via DEQ GovDelivery.

2.3. Phase 2: Policy and Program Scoping

The following subsection outlines DEQ's initial concepts for scoping potential program elements and options, seeking input from the public, stakeholders and impacted communities in order to develop an appropriate range of options and questions for subsequent consideration in Phase 3 by rules advisory committees and, ultimately, the EQC in late 2021.

2.3.1. Purpose

- Introduce and frame key policy constructs and issues prior to the commencement of a formal rulemaking.
- Identify priority issues likely to need more time and specific attention during the formal rulemaking of Phase 3.
- Receive input on perspectives and representation needed for members that will comprise the Rulemaking Advisory Committee.
- Continue to engage stakeholders and the public on policy options in order to continue to inform DEQ's development of policy scenarios that will ultimately inform the formal rulemaking.

2.3.2. Goals

- Common understanding between DEQ and stakeholders of priority issues and concerns.
- Appropriate consideration of equity issues associated with major program options.
- Common understanding between DEQ and stakeholders of high-level program and policy considerations and parameters, including but not limited to legal constraints and potential policy mechanisms.
- Allow opportunity for the public and stakeholders to inform the design and direction of the formal rulemaking of Phase 3.

2.3.3. DEQ Commitment

Similar to the Phase 1 commitment, while DEQ will not be in a formal rulemaking process during Phase 2, DEQ will follow some of the same underlying principles such as advanced public notice and invitations to meetings, web-based posting of meeting materials, summaries, and comments received, and other means to make information fully accessible. DEQ will also compile a scoping report summarizing the input and information received during this Phase 2.

2.3.4. Strategies

Public Outreach and Engagement

DEQ will host three to five public meetings or listening sessions during summer and fall of 2020 focused on introducing key concepts and soliciting feedback and concerns from the public, with meetings times and venues set to encourage participation by the public. The intent of these meetings is to elicit values and priorities that Oregonians expect the agency and policy-makers to consider in the course of developing and implementing a cap and reduce program.

These public meetings are intended to be accessible to the general public and to generate feedback that represents the geographic, political, economic, and environmental diversity of the state. A high-level agenda for these public meetings will include an overview of the executive order, Oregon's greenhouse gas emissions status and trends, key outcomes that programs are to be designed to accomplish, and early ideas around key policy choices on how to achieve those outcomes.

Stakeholder Engagement

DEQ will host topic-specific workshops throughout the summer and fall of 2020 to collect input on key outcomes that a cap and reduce program should be designed to achieve, and alternative choices on how to achieve those outcomes. The workshops will be designed to help the agency identify and catalogue specific interests and considerations to be addressed in the formal rulemaking in Phase 3. Some workshop topics are expected to raise issues requiring coordination with other state agencies, particularly the Oregon Department of Transportation with regard to transportation fuels, and the Public Utilities Commission with regard to other fuels including natural gas.

DEQ is also soliciting feedback on topic areas for these workshops that are of particular interest to tribes, impacted communities, potentially regulated businesses, and the general public. Topic-specific workshops will allow all participants to hear the same information and perspectives at the same time in an inclusive setting that is transparent, and that will allow for a more meaningful dialogue. Topic areas for workshops may include:

- Program scope: the emissions that may be covered by the program and the entities that may be regulated;
- Program design options: the emissions reductions over time, mechanisms to allow or facilities trading of compliance instruments, alternative compliance mechanisms, tools for avoiding or minimizing leakage, etc.;
- Cost containment: approaches to address external market disruptions, ways to lower overall compliance costs, safety mechanisms to improve predictability in the operation of the program; and
- Impacted communities: approaches for reducing or avoiding impacts to vulnerable communities, options for improving the resilience of impacted communities to program impacts.

Environmental Justice Engagement

DEQ is requesting an opportunity to brief the Environmental Justice Task Force and other representatives from underrepresented and impacted communities, and to listen to experts from those communities about important potential impacts of cap and reduce policies, along with ideas for avoiding or minimizing negative impacts. This will include ensuring adequate environmental justice organization participation in issue-specific stakeholder meetings and creating opportunities to specifically address issues of environmental justice. These consultations will be important sources of input for incorporating environmental justice principles into the policy scoping and development processes, including the rulemaking of Phase 3.

Tribal Engagement

DEQ will provide regular updates to the Natural Resources, and Economic Development and Community Services Tribal Clusters of the Legislative Commission on Indian Services. DEQ also will confer with leadership in each of the nine federally recognized tribes of Oregon in the scoping phase.

Environmental Quality Commission Engagement

DEQ will provide an informational briefing to the EQC at its July meeting, currently scheduled to be held in Eugene. The briefing will introduce key policy constructs and issues that may be expected to be discussed during the summer 2020 public meetings and stakeholder workshops of this Phase 2. DEQ will follow-up with an informational briefing to the EQC in fall 2020 to review the feedback and results of the Phase 2 scoping activities.

Legislative Engagement

DEQ will also provide regular updates on the development to the Legislature. This will include written updates, sharing the final report from Phase 2, and providing informational briefings to relevant policy committees on the cap and reduce program development process and key issues.

2.4. Phase 3: EQC Formal Rulemaking

The following subsection outlines DEQ's initial concepts for rulemaking for the three specific areas of cap and reduce programs identified in the executive order. The formal rulemaking work is expected to begin with the appointment of a rules advisory committee in late 2020, then continuing for the next nine months to the fall of 2021. DEQ expects that the rules advisory committee may include several subcommittees to advance consideration of sector-specific program elements and options for consideration by the EQC beginning in October or November of 2021.

2.4.1. Purpose

- Formal rulemaking process to consider options for each key program element and develop recommendations for the EQC, in compliance with the Oregon Administrative Procedures Act requirements.
- Provide enhanced opportunities for stakeholders and the public to engage.
- Develop a fiscal impact statement that considers the impacts on effected entities and communities, the impact to Oregon's economy, and expected environmental and health effects of the program(s).

2.4.2. Goals

- Establish and implement a formal rulemaking process allowing for a robust and transparent process that allows for debate and consideration of key policy issues.
- Stakeholders and the public inform and help shape recommendations to the EQC.

- Stakeholders and the public understand the rationale behind key policy decisions.
- Impacted communities are effectively represented in developing recommendations to the EQC.
- Recommendations to the EQC reflect broad input and are designed with a high likelihood of meeting the emissions reduction outcomes established in the executive order.

2.4.3. DEQ Commitment

DEQ will establish a formal rulemaking process that includes many opportunities for engagement and feedback, beyond the minimum APA requirements. This will include advanced public notice and invitation to meetings, and web-based posting of meeting materials, summaries, and comments received, as well as agency response, where appropriate. Rulemaking Advisory Committee (RAC) meetings are intended to receive feedback from invited committee members. However, DEQ will open all of these meetings to public attendance and will allow for public comment at the meetings. DEQ will make an effort to provide committee members with meeting materials at least two weeks prior to each meeting.

Throughout the rulemaking process, DEQ will engage the tribes, representatives of impacted communities, stakeholder interest groups, businesses, the potentially regulated community, and the general public.

2.4.4. Rulemaking

Tentative Rulemaking Schedule to meet a Program Start-Date of January 1, 2022

- Fall 2020: the EQC will appoint RAC members.
- Winter/Spring 2021: DEQ will host RAC meetings and any additional public or invited stakeholder meetings.
- Summer/Fall 2021: Public Notice of Rulemaking packet and public comment period.
- Fall 2021: DEQ provides rulemaking packet to the EQC including staff report, response to comment, proposed new rules, and any proposed rule amendments, and recommends adoption.

Rulemaking Advisory Committee Members

Once the EQC opens a formal rulemaking to establish a cap and reduce program, the EQC will appoint the RAC and send convening letters to members. This is required as part of the formal rulemaking process. DEQ will recommend to the EQC that membership of the RAC include at least the following:

- Potentially regulated sectors (large stationary sources, fuel suppliers, including natural gas suppliers);
- Environmental and public health advocates;
- Representatives of impacted communities;
- Consumer advocate groups; and
- Tribal representatives.

Given the potential scope of the rulemaking and sectors implicated, DEQ seeks input and feedback on how to organize the RAC process to ensure all critical policy issues receive ample time and discussion. Additionally, the agency seeks input on critical perspectives and types of expertise needing representation on the RAC.

Tribal Engagement

DEQ will send formal tribal consultation letters to tribal chairs providing notification of the formal rulemaking and the opportunity for consultation.

Rulemaking Meetings

Topics to be discussed will include scope of rulemaking, rulemaking timeline, background, policy options, technical concerns, drafts of proposed rules, and the fiscal impacts analysis, which is required as part of the formal rulemaking process.

In addition to the RAC meetings, DEQ may host additional public meetings or meetings for invited stakeholders only to address specific issues raised during the scoping and rulemaking phases,

Contracted Analyses

Given the significance of a new greenhouse gas emissions cap and reduce program, DEQ is procuring contracts with independent experts to assist with several aspects of the proposed program. This will include conducting a thorough analysis evaluating the societal, public health, and economic effects of cap and reduce program options, including but not limited to the effects on potentially regulated businesses, small businesses, communities, the general public, and Oregon's broader economy. The analysis will be developed in consultation with DEQ and stakeholders. DEQ intends to use the results of the contracted analysis to inform the program design and the fiscal impacts analysis that the EQC will consider as part of any formal rulemaking. The full results of the contracted analyses will be provided to the RAC, the public and the EQC.

Public Notice and Public Comment Period

DEQ will post the public notice to DEQ's rulemaking webpage, including proposed rules, and open the formal public comment period on the proposed rules that will last no less than 60 days (double the minimum required by the Oregon APA). After the close of the comment period, DEQ will post comments received and its responses to comment. Finally, the agency will prepare a staff report for the EQC with any DEQ recommendations for proposed rule adoptions and any other proposed actions.

During the public comment period, DEQ will host at least three Public Hearing to receive verbal comments on the proposed rules. DEQ will set meetings times and venues to encourage participation by the public and community representatives. DEQ may recommend that one of the public hearings be held before the EQC.

DEQ Recommendation to the EQC

DEQ will deliver its staff report, responses to comment, and proposed rules to the EQC ahead of the EQC meeting(s) where the commission will act on the recommendations. DEQ expects to make its recommendations so that the EQC may act prior to Jan. 1, 2022.

3. Key Policy Considerations and Options

3.1. Overview

In this section of the report, DEQ presents an initial listing of key policy considerations and potential program options that it expects to be raised, discussed and refined during the scoping phase described in Section 2 of this report (beginning in July of this year). The policy considerations are legal, practical, economic and social concerns that decision-makers may take into account as they review proposed rules and program options. The key program options reflect DEQ's initial listing of some of the main choices to be considered in terms of *how* to achieve legal and other program goals and objectives.

These listings are presented to spur engagement in scoping. They do not reflect recommendations from DEQ, let alone any position of the EQC. If there are additional policy considerations or program options that reviewers of this preliminary report believe should be included in scoping, DEQ specifically requests that they be identified in comments submitted to DEQ prior to June 15, 2020.

3.2. Policy Considerations

DEQ has identified many high-level policy considerations that could be taken into account as part of the work of developing recommendations to the EQC for cap and reduce programs. DEQ notes that some of these considerations were addressed in earlier legislative work related to Senate Bill 1530 (2020) and/or House Bill 2020 (2019). However, interested parties should understand that the EQC's authority and resources for cap and reduce programs are constrained in important ways. As a result, those following this policy development effort should not assume that tentative decisions reached in prior legislative efforts around greenhouse gas emissions reduction will necessarily be possible or advisable for the EQC. DEQ will work to fairly represent prior information and analyses developed in connection with these legislative processes, but parties should not assume that the EQC will reach the same conclusions. The EQC will make its own decisions, applying existing legislative authorities and the direction provided by the executive order.

As stated above, the following list of policy considerations is intended to spur engagement on how the scoping process is designed, and to begin helping to frame key questions and issues that should be taken into account as we begin to outline the policy development work that will then frame questions for the rules advisory committee(s), and ultimately the EQC.

- The EQC's existing authorities and policy direction from the Oregon legislature;
- The Governor's executive order and other relevant policy direction;
- Existing greenhouse gas emissions reduction programs in Oregon, at the federal level, and in other states, and the interplay between those programs and cap and reduce programs;
- The relative effectiveness of policy options in achieving the desired reductions in emissions, including consideration of the potential for programs to shift emissions outside of Oregon;
- Reducing the overall costs of achieving emissions reductions, and avoiding disproportionate cost impacts to particular sectors;
- The design of options that support full compliance;
- The relative economic, social, and public health impacts (positive and negative) of policy options;

- The equity impacts of policy options, particularly on vulnerable communities, and ways to prioritize actions that will help vulnerable populations and impacted communities adapt to climate impacts;
- The potential fiscal impacts of policy options to consumers and businesses, including small businesses;
- The potential administrative burden to the agency and to regulated entities;
- The need for a well-designed program with clear expectations for covered entities;
- Limitations created by the responses to the COVID-19 pandemic, including the economic effects of those responses;
- The interplay between cap and reduce programs and other important governmental programs including, but not limited to, transportation management, regulation of utilities, and energy efficiency;
- The role of future innovation and technological developments; and
- The role of Tribes, local governments, communities and other partners in providing ongoing feedback to DEQ and the EQC in adaptively managing programs to reach to policy outcomes established by EO 20-04.

3.3. Initial Key Policy Questions and Options

DEQ will explore and refine policy options with the public and stakeholders prior to the initiation of the agency’s formal rulemaking. There will be opportunity for participants to discuss various approaches before DEQ begins drafting options for a rules advisory committee to consider. To begin this dialogue and set up engagement for the scoping phase, however, this preliminary report describes an initial summary of key policy options that are likely to be considered in developing an emissions cap and reduce program.

3.3.1. Greenhouse Gas Emissions Reduction Goals, Sectoral Caps, Limits for Particular Entities, and the Trajectory(ies) of Reductions

The executive order sets out the emissions reduction goals consistent with recent science: Oregon will reduce its emissions at least 45 percent below 1990 levels by 2035 and at least 80 percent below 1990 levels by 2050. The order directs DEQ to establish cap and reduce program programs to reduce emissions consistent with these science-based goals from three sectors: (a) large stationary sources, (b) transportation fuels, including gasoline and diesel fuel, and (c) all other liquid and gaseous fuels, including natural gas. This list does not include all state-wide sectors or sources of greenhouse gas emissions. The cap and reduce efforts will assist in reducing emissions from some of the most significant sources in Oregon, however the cap and reduce program is only one element of multiple reinforcing policies and actions that will be necessary to achieve statewide emissions reduction goals.

One important set of policy questions is whether each of the three sectors specifically identified in EO 20-04 should be expected to achieve the same level of reductions, and whether that level is necessarily the same as the level described in the EO. Another important question is the *rate* of reductions over various time periods, and whether to consider factors such as technological and economic feasibility, , the emissions reductions that are expected to be achieved through other complimentary programs, and whether to have a separate cap for each sector, or one overall cap (or some combination of the two).

A related set of issues is how to set limits for individual regulated entities within each sector. A cap or limit could be established either an absolute mass-based amount in tons of emissions, or as an intensity-based measure of tons of emissions per unit of output or activity, such as a quantity goods or delivery of an amount of energy. The first approach provides assurance of achieving overall mass-based emissions

reductions, while the latter can more easily account for underlying fluctuations in the sectors of Oregon's economy covered by the program.

3.3.2. The Scope of Program Coverage, Greenhouse Gas Emissions Thresholds, and Regulated Entities

Determining the emissions threshold levels for potentially regulated entities involves a consideration of each sector's total emissions that are covered under the program and the number of entities within the sector that are covered. As threshold levels are lowered, more emissions are covered as more entities become regulated.

The EQC has authority to limit emissions from direct stationary air contamination sources and from indirect sources, such as fuel suppliers, and therefore could include both as points of regulation under the program. For example, large stationary sources, such as certain industrial or institutional entities, could be directly regulated for their emissions resulting from on-site fuel combustion as well as their emissions associated with other industrial or manufacturing processes. Under this approach, there would be a larger number of directly regulated entities. However, emissions from smaller sources could still be limited indirectly, through limits applicable to fuel suppliers for the emissions resulting from the fuel they supply to smaller sources (including residential and commercial customers).

Alternatively, all emissions from all fuel use could be regulated through fuel suppliers, leaving only the manufacturing process emissions of a small number of entities to be regulated directly. Placing the point of regulation upstream, with fuel suppliers, reduces the number of entities regulated by the program, simplifying the program in some respects. However, placing all or much of the point of regulation at the level of fuel suppliers raises other issues, including the need to maintain a competitive landscape between and among fuel suppliers.

Another aspect of the scope of cap and reduce programs is options to minimize leakage (shifting emissions, over time, to other jurisdictions where there is no or less stringent control of emissions). If an emitting entity under the Oregon cap and reduce program shifts activity and therefore emissions at little or no cost to outside of Oregon, such shifts would undermine the broader goal of Oregon "doing its part" to reduce global emissions in addition to harming Oregon's economy.

As described in Section 1.2., above, the EQC likely does not have authority to regulate emissions occurring outside the state, which includes emissions from electricity generation outside of Oregon. Oregon currently obtains a portion of its electricity from imports of power generated from fossil-fuels (coal and natural gas). The EQC cannot regulate emissions resulting from fossil-fueled electric generation outside of Oregon, even if the electricity is used within Oregon. And, if the EQC were to regulate the emissions from electric generation in Oregon, it is very likely that energy suppliers (particularly those with obligations to supply power at least cost) would simply (over time) shift their resource utilization out of state. This form of leakage is a major policy issue in program design, particularly in the electricity sector. As a result, other programmatic approaches are likely to be more appropriate and effective in this area.

3.3.3. Distribution of Compliance Instruments

The EQC does not have the authority to charge a price for compliance instruments. Therefore, it is likely that the EQC cannot hold an auction to sell compliance instruments, and will need to consider forms of direct distribution of some level of instruments to regulated entities for their use to demonstrate compliance.

How DEQ distributes compliance instruments to each regulated entity may differ by sector and may depend on whether the emissions limit is an absolute mass-based emissions metric or an intensity metric.

In either case, baselines would need to be established to set the level(s) of initial distribution of compliance instruments. Baselines might be set using total emissions or an emissions intensity per quantity of fuel, activity, product, or some other measure. Baselines would also need to be set considering an appropriate historical period, particularly given the recent economic upheaval resulting from the COVID-19 pandemic. On a going-forward basis, the amount of compliance instruments distributed may need to take into account new entrants into regulated sectors, the exit of regulated entities, as well as sectors where market shares are highly dynamic over time.

3.3.4. Cost Effectiveness and Cost Containment

Some regulated entities will have lower marginal costs of reducing emissions and may find it relatively inexpensive to “over-comply” with a cap and reduce program, while other sources will have higher costs. As a result, it may be desirable, in terms of overall cost effectiveness, to allow and even facilitate voluntary market transactions between regulated entities (trading). Program design should consider this while also taking into account risks of market manipulation, the stability of price signals, and transparency to the public of the costs of the program.

Another important design question will be measures to moderate compliance costs so that regulated entities have a stable, predictable pathway for business planning and making investment decisions. There are a number of design elements that could be employed to contain compliance costs. Trading of compliance instruments, as described above, is one of these. To allow for trading, the program would need to be designed so that a compliance instrument for one regulated entity would be equivalent to and tradeable with an instrument held by another entity. If cross-sector trading would be allowed, then instruments would likely need to be equivalent across sectors. Trading of compliance instruments would establish a secondary market for those instruments. If appropriately designed and controlled, such a market could be an efficient means of achieving lower-cost reductions of emissions.

A final program option that DEQ expects to be discussed in the coming months is allowing for the creation of alternative compliance instruments through voluntary actions that create reductions in emissions outside the regulated sectors and sources. To assure that greenhouse gas reduction requirements are met, the program would need to include mechanisms for advance review and approval of alternative compliance instruments for additionality and durability, along with monitoring and verification measures. If properly designed and monitored, alternative compliance instruments could increase the number of total compliance instruments available to regulated entities, which could mitigate the costs of compliance, while simultaneously producing greater overall emissions reductions.

There are well-developed programs that include standards for alternative compliance instruments. These programs include a wide range of emission reduction actions. Oregon’s cap and reduce program could potentially utilize established programs, or could consider new programs, which would require a more significant investment of administrative resources. Ultimately, whether or how to include alternative compliance instruments, including limits on their usage by, or availability for, regulated entities will be an important program design consideration.

3.3.5. Options to Avoid or Minimize Program Effects on Particular Communities and Economic Interests

Past policy development efforts have considered options to avoid or minimize effects of emissions reduction programs on particular communities (including communities disproportionately affected by climate change and other pollution) and particular economic segments of Oregon’s economy (trade-exposed industry). Policy makers also have considered options to avoid or reduce potential price impacts to lower-income households. Options to achieve these policy outcomes can be complex, and often involve

trade-offs between program effectiveness and equity consideration, or shifting of relative impacts to achieve more equitable results. DEQ expects that these issues will be raised during the scoping phase, and that options to address them will be an important part of the policy development process.

4. Next Steps for Final Report

DEQ has presented a number of key legal and policy considerations and program options in this report, but is not making any design recommendations at this time. DEQ does not expect to make significant changes to Sections 1 for the final report.

However, DEQ is particularly interested in receiving input on the proposed stakeholder and public engagement processes outlined in Section 2, and whether this meets our objective of establishing a transparent, inclusive and robust process. DEQ also invites comment on the key policy questions and options described in summary form in section 3, particularly in terms of how to frame these questions for the scoping and public engagement process that will take place between July of this year and the beginning of formal rulemaking at the end of the year.

Please submit comments to DEQ by no later than June 15, 2020 for consideration as input for the final report. Comments may be submitted electronically to capandreduce@deq.state.or.us.

DEQ is especially interested in feedback and comments addressing the following questions:

1. How might DEQ best coordinate the public engagement aspects of both the effort described in this report on cap and reduce program or programs development and the Clean Fuels Program expansion?
2. How should DEQ engage with communities or individuals with limited or no internet access?
3. What additional engagement strategies should the agency consider during the Phase 2 scoping work?
4. Are the policy issues identified under “Stakeholder Engagement” in subsection 2.3.4. and those in subsections 3.2. and 3.3. appropriately inclusive of issues, concerns and considerations needing discussion?
 - a. What other issue areas should the agency convene stakeholder meetings for?
 - b. What other approaches to organizing stakeholder conversations should the agency consider?
5. How should the agency approach identifying and selecting interested parties to serve on the Rules Advisory Committee(s)?
6. What perspectives and expertise are critical in-terms of Rulemaking Advisory Committee member participation?
7. Given the potential wide-reaching scope of proposed rules, how should the agency organize the Rulemaking Advisory Committee process to ensure critical issues receive adequate attention and discussion?

Please visit DEQ’s webpage specific to this topic of a cap and reduce program for updates and more information: <https://www.oregon.gov/deq/Pages/ghg-cap-and-reduce.aspx>.