

Program Options to Cap and Reduce Greenhouse Gas Emissions

Final Report

Submitted to: The Office of Governor Kate Brown
By: Oregon Department of Environmental Quality
June 2020



**Department of
Environmental Quality**

**Office of Greenhouse
Gas Programs**

700 NE Multnomah St.
Suite 600
Portland, OR 97232
Phone: 503-229-5696
800-452-4011
Fax: 503-229-6124

www.oregon.gov/DEQ

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State of Oregon
Department of
Environmental
Quality

This report prepared by:

Oregon Department of Environmental Quality
700 NE Multnomah Street, Suite 600
Portland, OR 97232
1-800-452-4011
www.oregon.gov/deq

Contact:
Lauren Slawsky
Slawsky.Lauren@deq.state.or.us

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.

Table of Contents

Introduction	3
1. Existing Authorities to Regulate Greenhouse Gas Emissions	5
1.1. The EQC’s Authority to Regulate Air Pollution, Emissions of Air Contaminants, and to Require Permits.....	5
1.2. The EQC’s Authority to Regulate Sources that Emit Air Contaminants	6
1.3. The EQC’s Authority to Set Greenhouse Gas Emissions Caps.....	8
1.3.1. Setting Emissions Caps.....	8
1.3.2. Trading and Alternative Compliance Pathways.....	8
1.3.3. The EQC May Assess Permit Fees, but May Not Sell or Auction Greenhouse Gas Emissions Rights	9
2. Program Development and Stakeholder Engagement Process	10
2.1. Overview	10
2.2. Phase 1: Engagement on Process	11
2.2.1. Purpose.....	11
2.2.2. Goals	11
2.2.3. DEQ Commitment	11
2.2.4. Strategies.....	11
2.3. Phase 2: Policy and Program Scoping.....	12
2.3.1. Purpose.....	12
2.3.2. Goals	13
2.3.3. DEQ Commitment	13
2.3.4. Strategies.....	13
2.4. Phase 3: EQC Formal Rulemaking.....	15
2.4.1. Purpose.....	15
2.4.2. Goals	15
2.4.3. DEQ Commitment	15
2.4.4. Rulemaking.....	15
3. Key Policy Considerations and Options	18
3.1. Overview	18
3.2. Policy Considerations.....	18
3.3. Initial Key Policy Questions and Options	19
3.3.1. Greenhouse Gas Emissions Reduction Goals, Sectoral Caps, Limits for Particular Entities, and the Trajectory(ies) of Reductions.....	19
3.3.2. The Scope of Program Coverage, Greenhouse Gas Emissions Thresholds, and Regulated Entities	20
3.3.3. Distribution of Compliance Instruments	21
3.3.4. Cost Effectiveness and Cost Containment	21
3.3.5. Options to Avoid or Minimize Program Effects on Particular Communities and Economic Interests	22
4. Next Steps.....	23

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 submitted a preliminary report to the Governor by May 15, 2020, and this final report 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 January 1, 2022.

While the Executive Order included broad directives regarding climate planning for many state agencies, this report is specific to the cap and reduce directive and is focused on the process and desired outcomes of DEQ’s development of a cap and reduce program or programs. DEQ will consider the cap and reduce program design in the context of other state GHG reduction programs both within DEQ and in other state agencies and continue to coordinate with other state agencies on this specific effort. However, this report and the proposed process are not intended to describe DEQ’s comprehensive GHG strategy or the overall state response to climate change.

Following delivery of the preliminary report to the Governor on May 15, DEQ held a comment period until June 15 in order to receive input on the preliminary report to inform the final report. This allows for public and stakeholder input into the program development from the onset of this effort. During that comment period, DEQ also held three webinars to describe the preliminary report, take clarifying questions from the public participants, and to describe how to submit written comments for consideration in the final report.

DEQ received 33 written comments on the preliminary report from a wide range of members of the public and stakeholder organizations. All comments have been made available on the cap and reduce webpage at www.oregon.gov/deq/ghgp/Pages/ghg-cap-and-reduce.aspx

Commenters generally expressed support for DEQ's proposed process, including the proposal for a program scoping phase to occur before a formal rulemaking process. Many comments also supported DEQ’s inclusive approach to developing a cap and reduce program or programs, action on climate, and the need to reduce greenhouse gas emissions. Some key issues raised in comments aligned with those DEQ presents in Section 3, including the need for considerations relating to program costs, avoiding making emission reductions in Oregon simply by shifting those sources to other jurisdictions, and the importance of equity and inclusion. This final report reflects changes to the preliminary report throughout as informed by the comments received. A high-level summary of DEQ’s response to comment as included in this final report includes:

- Clarification of the term ‘impacted communities’;
- Clarification of DEQ’s intention for cross-program and cross-agency coordination;
- Bolstering of DEQ’s commitment to making meetings and information accessible and understandable, including a note that the agency has contracted with a firm to provide meeting facilitation and other external engagement and communication support;
- Clarification of how DEQ will engage the public and stakeholders and receive input;

- Agreement with the need to provide funding to ensure underrepresented communities are fully engaged in the rulemaking process;
- Broadening the scope of potential workshop topics;
- Broadening the scope and representation of potential rulemaking advisory committee members;
- Clarification of the purpose and opportunities to provide input on DEQ's contracted analyses; and
- Clarification of DEQ's interest in program design that takes sectoral differences into account, and considers potential risks to trade-exposed industries.

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, such as underrepresented populations, rural communities, and Oregonians that may disproportionately experience the impacts of climate change, to assure that decision-makers fully understand the consequences of options, along with the interests and concerns of communities that could be affected. In this section, DEQ outlines a pre-rulemaking 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 stay informed on this topic. This final report will act as a guide for DEQ throughout the subsequent program development process. Some core values for DEQ throughout this process that are embedded through this report include:

- Offering a transparent and robust process that engages a wide range of interests and results in a cap and reduce proposal that is responsive to input received;
- Recognizing and actively addressing the need for equity in access and involvement in the decision-making process; and
- Acknowledging prior work in Oregon on initiatives to reduce greenhouse gas emissions while recognizing this regulatory process is different than past legislative efforts and the Environmental Quality Commission is the decision-maker in this 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. Comments received after the submission of the preliminary report demonstrated a widespread understanding of the importance of engaging these communities. DEQ will ensure there are meaningful opportunities for public and stakeholder engagement and input throughout the new emissions cap and reduce program development process. As part of this engagement, DEQ is evaluating how best to support communities of color and other groups that have traditionally been under-represented in policy-making concerning air pollution and public health. Relatedly, DEQ is participating in an inter-agency workgroup considering the effects of climate change on communities of color and other vulnerable communities.

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.

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. There is also a directive to four state agencies, including DEQ to implement the Statewide Transportation Strategy. DEQ recognizes the potential interplay between new emissions cap and reduce programs, the expansion of the clean fuels program, and the development of other state and local programs to reduce greenhouse gas emissions. DEQ is coordinating across the full range of programs it is developing, as well as participating in coordinating efforts across agencies. DEQ is also involved in discussions with local and private sector entities that are leading work to reduce emissions as part of its overall engagement work.

DEQ is especially sensitive to the limited availability and resources of those representing impacted communities, and their challenges to engage in multiple different state agency processes on similar topics. DEQ will be conscious of such competing requests and endeavor to coordinate requests for their involvement across various state processes.

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 and will continue to provide alternative means of participation to meetings, such as options to join by phone. DEQ does not anticipate hosting any public meetings in-person in any areas of the state remaining under restrictions on group gatherings. 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 the preliminary report was submitted to the Governor and June 30, 2020, when this final version of the report is submitted. This phase was 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

DEQ identified the following goals for Phase 1:

- 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 was not in a formal rulemaking process during Phase 1, DEQ followed many 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 publicized the preliminary report and posted it to DEQ's webpage and the Governor's webpage. DEQ hosted a webinar shortly after the May 15, 2020 submittal. The webinar described 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 sought input on the process proposed in Section 2 of the preliminary report through a variety of means, including but not limited to:

1. Written comments: DEQ held a comment period to accept written comments on the preliminary report from May 15 to June 15, and received 33 comments.
2. Listening sessions: DEQ hosted three identical listening sessions on May 26, June 1, and June 8 at varying times to encourage participation by all to present the preliminary report, seek feedback, and to allow for questions. Over 200 participants joined one or more of the listening sessions, which were open to the public, advertised through DEQ GovDelivery, and webinar and call-in participation information was made available on DEQ's cap and reduce webpage.
3. Environmental Justice Engagement: DEQ has begun outreach to key environmental justice organizations, including conversations with individuals representing the Environmental Justice Task Force, to seek input on the development of a meaningful stakeholder engagement process toward the development of a cap and reduce program for Oregon. In the coming months, DEQ will continue broad outreach, including but not limited to, participation in the Interagency Working Group on Impacted Communities led by the Governor's Office, to ensure environmental justice principals are fully incorporated into the scoping and program development and community leaders representing environmental justice and impacted communities are part of the decision making process.
4. Tribal Engagement: DEQ formally notified all nine of Oregon's federally recognized tribes of this report and the proposed policy development process. The agency requested 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. Additional tribal consultation is expected during the coming months.

This final report is informed by input received during the initial engagement process. 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 many 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 accept input through a number of means including verbally, written comment submitted during meetings through forms, as well as through web-based surveys. DEQ will also compile a scoping report summarizing the input and information received during this Phase 2. DEQ will also make an effort to provide information and materials in ways that may be understood by all, regardless of level of expertise on the topics at hand.

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.

DEQ has engaged Kearns & West to assist in the design, planning, and implementation of stakeholder and public engagement activities in order to elicit broad feedback and ensure far-reaching participation. This firm will help DEQ develop agendas and meeting materials that are accessible and understandable. DEQ believes the addition of a third-party facilitator will result in more robust, informative, and productive policy conversations during the program scoping phase.

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. In addition to topic-specific meetings, DEQ may host additional public meetings or meetings for invited stakeholders to address specific issues raised. 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 also recognizes there are stakeholders with technical and sector-specific expertise and intends to rely on this knowledge to help inform program development.

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. DEQ believes a topic-specific structure is the best approach that will enable more robust conversation through participation by the general public and non-industry groups together, as well as encourage discussion across sectors in order to ensure a more holistic approach to program design. 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 the counterproductive outcome of shifting emissions out of Oregon without making true reductions, potential impacts of design options, interactions between regulated entities and those indirectly impacted, etc.;
- Cost containment: approaches to address external market disruptions, ways to lower overall compliance costs, costs to small businesses, 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.
- Additional topic areas for workshops may include those that are of particular interest to tribes, impacted communities, potentially regulated businesses, and the general public.

Environmental Justice Engagement

DEQ has requested 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. 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 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 affected 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 Oregon Administrative Procedures Act 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. DEQ understands and appreciates the value of providing funding to support the participation and engagement of underrepresented communities. DEQ will commit resources to this work and is currently evaluating the ways such support can be most effective over the course of policy development. One particular aspect of this will be to provide key materials in plain language translation.

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 reflect the social and geographic diversity of Oregon, as well as the communities and businesses that may be directly or indirectly affected by a cap and reduce program or programs. These interests should include at least the following:

- Potentially regulated sectors (large stationary sources, fuel suppliers, including natural gas suppliers, and major categories of fuel consumers);
- Environmental and public health advocates;
- Representatives of impacted communities;
- Consumer advocate groups;
- Trade associations;
- Technical and/or climate change experts; and
- Tribal representatives.

Given the broad scope of the rulemaking and diverse interests, DEQ is considering using an application process for RAC membership. By receiving input and nominations from the many different groups, this approach may help ensure fair representation and equal voices needing to be heard on the RAC. In the fall of 2020, DEQ will release additional detail about the application process and selection criteria.

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 thorough analyses evaluating the societal, public health, and economic effects of cap and reduce program options, including but not limited to program effectiveness in reducing emissions and the economic effects on potentially regulated businesses, small businesses, communities, the general public, and Oregon's broader economy. The analyses and program options evaluated 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 made available 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 Administrative Procedures Act). 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 January 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.

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, and the cumulative environmental and public health impacts of policies on vulnerable communities, and ways to prioritize actions that will help address these impacts (including but not limited 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, energy facility siting, 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 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 Governor’s 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. Actions in other programs may reduce compliance obligations for regulated entities under a cap and reduce program or programs.

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 either or 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). DEQ believes that, depending on the business sector and how a program is designed, there are risks that cap and reduce programs can result in transferring activity and emissions out-of-state rather than accomplishing overall emissions reductions. This is particularly the case with emissions from electric generation, where in-state generation can readily be shifted to out-of-state facilities. 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, the EQC likely does not have authority to regulate emissions occurring outside the state. This includes emissions from electricity generation outside of Oregon. Oregon obtains a portion of its electricity from imports of power generated from fossil-fuels (coal and natural gas). In fact, about 75% of the greenhouse gas emissions associated with generation of electricity consumed by Oregonians comes from generating facilities located outside the state. The EQC cannot regulate emissions from fossil-fueled electric generation outside of Oregon, even if the electricity is used within Oregon.

Furthermore, if the EQC were to regulate the emissions from electric generation in Oregon, there is a risk that energy suppliers (particularly those with obligations to supply power at least cost) would 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 may be needed to effectively address greenhouse gas emissions associated with the electricity sector.

Program design elements regarding coverage and thresholds may vary across the program in response to leakage concerns, as well as differing considerations for the potentially regulated entities, trade-exposed industries, and covered sectors.

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. Additionally, given the long-term nature of the program, periodic program reviews may be a useful design tool to account for changing economies and technologies over time.

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, Minimize and/or Reduce Environmental, Public Health and Adverse Economic 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 and small regulated businesses). More attention also is beginning to focus on cumulative effects of environmental and land use policies on disadvantaged communities as an important baseline that should be considered in developing any new policies. And, 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

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. After delivery of this final report, DEQ will begin Phase 2 (scoping) with public meetings and workshops over the summer and into the fall of 2020 to discuss policy and program scoping.

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/ghgp/Pages/ghg-cap-and-reduce.aspx>.