

# MEMORANDUM



**To:** Oregon Global Warming Commission

**From:** Cathy Macdonald, OGWC Chair  
Alan Zelenka, Assistant Director for P&I  
Zachariah Baker, Senior Climate Policy Analyst

**Date:** November 3, 2022

**Re:** Draft Recommendations for Roadmap to 2035

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This year the Oregon Global Warming Commission (OGWC or Commission) will produce two reports: the biennial report to the Legislature that we are statutorily required to complete and a Roadmap for further decarbonizing Oregon's economy based on the analyses staff from the Oregon Department of Energy (ODOE) and our consultants have done over the course of the last year. The 2022/2023 Biennial Report will provide the current sector-based greenhouse gas (GHG) emissions inventory data, a summary of recent work the state has done to reduce emissions, and our new projection for future emissions reductions based on our [TIGHGER project](#) analysis. The Roadmap is intended to be a watershed report, providing an overview of the analyses we completed in the TIGHGER project including a discussion of the background, methods, modeling, and scenarios, as well as recommended strategies and actions that should be pursued to further reduce Oregon's GHG emissions. At the November 17<sup>th</sup> meeting, we will discuss how we want to frame the Roadmap recommendations with the goal of finalizing the recommendations in mid-December or mid-January.

## FRAMING FOR THE DRAFT RECOMMENDATIONS

We propose the Commission consider advancing six overarching strategy recommendations:

1. Support continued implementation of climate programs and regulations adopted and under development.
2. Adopt updated state greenhouse gas reduction goals.
3. Recommend a set of actions for legislative or executive branch action (e.g., authorization and funding) that helps the State meet the accelerated greenhouse gas reduction goal.
4. Fund future studies to continue to guide climate action over time.
5. Strengthen governance and accountability for Oregon climate action.
6. Position the state to take full advantage of federal investments in climate action.

The following memorandum is designed to walk us through the choices the Commission could consider in framing these recommendations. *The framing considerations below in italics are what we will discuss at the meeting.* As an overarching consideration running through many of the items below, the Commission will need to decide if we should confine the Roadmap to the TIGHGER analyzed policies and programs or include other important policies and programs described in the [2022 ODOE Biennial Energy](#)

[Report](#), the Commission's [2020 Biennial Report](#) to the Legislature, and [Executive Order 20-04](#). In addition, we will discuss what if anything is missing from the overarching recommendations.

### **1. Support continued implementation of climate programs and regulations adopted and under development.**

Our analysis of the GHG emissions reduction benefits of the Programs and Regulations Adopted and Under Development (PRAUD) as part of the TIGHGER analysis demonstrates the importance of these climate programs. The analysis projects that with continued implementation of the PRAUD, the state will be on track to meet the EO 20-04 sector-based GHG emission reduction goal for 2035. Some of the largest emissions reducing programs are just getting off the ground (e.g., DEQ's Climate Protection Program and HB 2021) with significant implementation and compliance work still ahead. As a result, it is imperative that these, and the other PRAUD programs, stay in place and operate as planned with adequate staffing and resources to be successful over the long run.

In addition to the programs evaluated as part of the TIGHGER analysis, several other existing state programs were not analyzed that will play a role in reducing emissions (e.g., DLCD's Climate-Friendly and Equitable Communities program which was put into place after the PRAUD analysis was completed). Many of these programs are listed in ODOE's 2022 Biennial Energy Report section cataloging state climate programs.

*The Commission will need to decide if we should confine the Roadmap recommendations to just the TIGHGER analyzed PRAUD programs and regulations, or include other important existing policies and programs called out in ODOE's 2022 Biennial Energy Report, the Commission's 2020 Biennial Report to the Legislature, and Executive Order 20-04.*

### **2. Adopt updated state greenhouse gas reduction goals.**

In 2007 the Oregon Legislature established the following GHG emission reduction goals:

- By 2010, Oregon will arrest the growth of greenhouse gas emissions and begin to reduce emissions;
- By 2020, Oregon will achieve greenhouse gas levels that are 10 percent below 1990 levels; and
- By 2050, Oregon will achieve greenhouse gas levels that are at least 75 percent below 1990 levels.

In 2020, through Executive Order 20-04, Governor Brown added a new interim goal and updated the 2050 goal:

- By 2035, Oregon will achieve at least a 45 percent reduction below 1990 levels.
- By 2050, Oregon will achieve at least an 80 percent reduction below 1990 levels.

Given that the best available science continues to indicate the need to go further and faster to reduce GHG emissions, Commissioner interest, and public comments, a scenario analysis was conducted as part of the TIGHGER project to evaluate accelerating achievement of the 2035 goal by 2030. This analysis shows that it is possible to achieve a 45 percent reduction below 1990 levels by 2030 with a suite of additional state climate policies and programs, or actions. The TIGHGER analysis also shows substantial economic and health benefits resulting from achieving the 2035 goal by 2030. The TIGHGER analysis projects significant net benefit through 2050.

- a) *The Commission could consider recommending that the legislature update the state's statutory GHG emission reduction goal to include an interim goal before 2050 by either:*
- (i) Adopting the EO 20-04 2035 goal;*
  - (ii) Accelerating achievement of the EO 20-04 2035 goal by 2030; or*

*(iii) Strengthening the EO 20-04 2035 goal*

In addition, the Commission could also consider strengthening the 2050 goal. As described above, the EO 20-04 2050 goal is at least 80% below 1990, while the statutory 2050 goal is at least 75% below 1990. As reported in Table 1 (page 10), of our 2020 Biennial Report to the Legislature, the federal government and a growing number of states have adopted more aggressive 2050 goals than those currently in Oregon statute or in EO 20-04. While the TIGHGER analysis focused on accelerating the EO 2035 goal, the same rationale could be said of accelerating or strengthening the 2050 goal.

- b) Some of the ways the Commission could consider recommending that the legislature update the state's 2050 statutory GHG emission reduction goal, include but are not limited to:*
- (i) Adopting the EO 20-04 2050 goal;*
  - (ii) Accelerating achievement of the EO 20-04 2050 goal to 2040;*
  - (iii) Strengthening the 2050 goal to at least 90 percent; or*
  - (iv) Establishing a net zero goal (consistent with federal government and other states)*

**3. Recommend a set of actions for legislative or executive branch action (e.g., authorization and funding) that helps the State meet the accelerated greenhouse gas reduction goal.**

[NOTE: The Commission will have more data to inform the above once the Commission finalizes the co-benefits and other evaluation criteria and staff is able to analyze and score the actions using those evaluation criteria. With that in mind, we suggest that the Commission discuss this issue at a high level during the November 17<sup>th</sup> meeting and defer a discussion of the details of this recommendation until our December meeting.]

Achieving the 2035 goal by 2030 or strengthening the 2035 goal would require a suite of additional state climate policies and programs. The TIGHGER analysis evaluated dozens of actions, and created two scenarios (a combination of actions) entitled “Electrification” and “Hybrid”. The Electrification scenario focused exclusively on actions that shifted energy use to electricity, while the Hybrid scenario expanded the use of alternative fuels such as renewable natural gas and clean hydrogen, but also included many electrification actions. The majority of actions were common to both scenarios with only a handful of actions unique to each of the two scenarios. The specific scenario results and actions in each of the scenarios are listed in our August 18<sup>th</sup>, 2022, meeting presentation – [August Roadmap to 2035 Presentation](#), (pages 12 and 13). The [October 7, 2022, meeting slides](#) had a slightly updated list of actions and noted that two actions (DEQ's Recycling Modernization Act and Landfill program) would be included in the PRAUD analysis.

- a) The Commission could consider recommending:*
- (i) One of the specific scenarios (the Electrification or Hybrid scenario);*
  - (ii) Only the actions common to both scenarios;*
  - (iii) A mix of common and unique actions from each scenario; or*
  - (iv) All of the actions from both scenarios*

In addition, there are recommendations regarding new policies and programs from the Commission's previous Biennial Report that the Commission may wish to refresh and include.

- b) Should the Commission consider carrying forward relevant recommendations from our [2020 Biennial Report](#) to the Legislature (See Recommendations 6-9, 11-15, 17-19, 22-23, 26-27, and 29). While some of these recommendations relate to actions in the TIGHGER scenarios,*

*others do not (e.g., establishment of a state-sponsored Green Bank; a study of climate migration).*

#### **4. Fund future studies to continue to guide climate action over time.**

The TIGHGER analysis is based on a snapshot in time. How utilities and other regulated entities meet the requirements in House Bill 2021 and the Climate Protection Program will become clearer in the next few years; as will actions the state can take to support the efficient and effective implementation of these and other programs. New data inputs will be available as the years progress which will inform new policies and programs that may need to be put into place. Ongoing regular data collection and analysis will aide the State in making sure it stays on track to meet its GHG emission reduction goals.

- a) To make sure there is up-to-date data and analysis to ensure the state is staying on track to meet its GHG emission reduction goals, the Commission could consider recommending that the TIGHGER analysis is funded and updated each biennium. The OGWC could then use the updated analysis to inform its ongoing biennial reports to the Legislature and agency rulemaking.*

In addition, there were limitations to what we were able to evaluate and the extent to which we could engage the public due to the limited grant funding we received for the TIGHGER project. While the TIGHGER analysis focused on “what” – which actions could get us to the accelerated emission reduction goal, it did not focus on “how” the programs should be designed and implemented. This limitation was particularly evident when Commissioners discussed the method to assess the co-benefits of the actions. For example, Commissioners raised questions about whether and how underserved communities would be prioritized in program design and implementation. Commissioners also noted the importance of engaging underserved communities in that conversation.

- b) The Commission could consider including recommendations for funding more extensive public engagement – ideally in partnership with community-based organizations – to inform the program design and implementation of actions in this Roadmap as well as future iterations of the Roadmap.*

One of the strengths of the TIGHGER modeling our contractors completed is that it was built from the bottom up – with county-level data. As a result, the differences in impacts of policies and programs can be evaluated at the county level ([August Roadmap to 2035 Presentation](#), see examples on pages 28 and 31). This information could be used to help inform program design and implementation.

- c) The Commission could consider recommending expanding the analysis of, and public engagement around the county level data provided by the model to inform Legislative actions and/or agency rulemaking.*

The TIGHGER analysis focused on sector-based emissions – which is the basis of our state GHG emissions reduction goals. There are also consumption-based emissions – which include emissions produced around the world due to the state’s consumption of goods and services like cars, food, fuels, appliances, clothing, etc. – many of which are produced in other states or overseas. According to [DEQ’s consumption-based inventory](#) (pages 29-41), more than half of the state’s consumption-based emissions are not included in the sector-based inventory. As a result, considering consumption-based emissions can tell a more complete story of how Oregon contributes to climate change and, by extension, opportunities to reduce emissions.

- d) *The Commission could consider recommending that more work be done to quantify, consider, and incorporate the state's consumption-based emissions. This could mean including related Commission 2020 Biennial Report recommendations 23 (framework for measuring embodied carbon), 33 (DEQ reuse and repair grants), and 34 (GHG emissions reductions in state procurement) into the Roadmap.*

### **5. Strengthen governance and accountability for Oregon climate action.**

The state has made significant progress in setting the stage to meet our GHG emission reduction goals. However, as described in the Commission's 2020 Biennial Report to the Legislature, because of the broad agenda needed to address climate change and the current executive branch structure and authorities, it is challenging for the Commission to assess the progress the state is making toward meeting our GHG emissions reduction goals.

The increased extent and breadth of climate-related efforts and the accelerating impacts of climate change are making the OGWC's role in creating a comprehensive climate action plan even more important, including the contributions from the sector-based actions from TIGHGER and the natural and working lands study. Yet, the Commission continues to be minimally staffed (0.3 FTE) and has not changed since 2007. The Commission's 2020 Biennial Report to the Legislature recommended added staffing as well as additional funding to carry out the OGWC's work.

- a) *The Commission could consider recommending additional resources for the Commission as well as specific resources to contract with experts to update the TIGHGER modeling every biennium [also noted in recommendation 4(a)], to conduct other studies, to conduct additional public engagement, and to advance our natural and working lands proposal. These resources would allow us to gather additional input to inform legislative and executive branch action and agency rule making.*

In addition, there are a number of state agencies named in EO 20-04 that are doing climate work but are not on the statutory list of ex-officio non-voting members of the OGWC. Key ones in particular include Department of Land Conservation and Development, Oregon Health Authority, Business Oregon, Department of Administrative Services, Department of Consumer and Business Services, Oregon Department of Fish and Wildlife, and the Oregon Watershed Enhancement Board.

- b) *The Commission could consider recommending that the Legislature update the statutory list of OGWC ex-officio non-voting members to include all or some of the agencies listed above.*

EO 20-04 also includes a number of requirements for agencies to report on their climate work. These reports have been helpful in understanding the extent of state agency climate work. The OGWC is not specifically named as a recipient of these reports but is charged with reporting on the state's progress toward meeting our GHG emissions reduction goals.

- c) *The Commission could consider recommending that the Legislature include a requirement for agencies to report on their climate work and progress to the Commission to help the Commission carry out its mandate. This was also mentioned in the Commission's 2020 Biennial Report (Recommendation 3).*

In addition to the state’s GHG emissions reduction goals, the state now has carbon sequestration goals. Further, the state has a consumption-based inventory of emissions. All of these are important data points in tracking how the state is meeting its goals. Similarly, there is a lot of related agency climate action that could benefit from being tracked all in one place to inform decisionmakers and the public (see the extensive list of the initiatives being undertaken by state agencies in ODOE’s 2022 Biennial Energy Report section entitled “Oregon State Climate Programs and Actions”). A one-stop dashboard to collect and display this data could potentially help with tracking climate progress.

*d) The Commission could consider recommending funding for the Commission to create a state climate action dashboard as part of our statutory tracking and education responsibilities.*

Further, EO 20-04 included general directives to agencies to include consideration of climate mitigation and adaptation in all decision-making.

*e) The Commission could consider recommending that the Legislature put these directives in statute as well. (See also Recommendations 3 and 4 of the 2020 Biennial Report suggesting reinforcing this direction through legislation and protecting funding for this work, respectively.)*

Similarly, EO 20-04 also included directives to agencies to prioritize climate actions that help vulnerable populations and impacted communities and consult with the Environmental Justice Task Force (now the Environmental Justice Council) on climate policies. The Commission included similar recommendations in the 2020 Biennial Report (Recommendations 1 and 2) for funding to build agency capacity to address climate equity; agency adoption of climate equity frameworks (following the lead of other state agency and commission equity work); and increasing representation of traditionally underrepresented communities on all agency Rules Advisory Committees.

*f) The Commission could consider recommending the Legislature, via statute, reinforce these equity provisions included in the EO 20-04 and recommended by the 2020 Biennial Report.*

## **6. Position the state to take full advantage of federal investments in climate action.**

The federal Infrastructure Investment and Jobs Act and the Inflation Reduction Act passed during the TIGHGER analysis, but it will take time to develop and finalize those program specifics. As a result, the potential funding provided by these two programs was not incorporated into the TIGHGER analysis. These programs are very likely to help reduce the costs involved in meeting the state’s GHG emissions reduction goals.

*The Commission could consider recommending that the state position itself to apply for and maximize the use of those funds – and to ensure the funds are being used to engage and serve communities most in need.*

## **NEXT STEPS**

At the November 17<sup>th</sup> meeting we will discuss the pros and cons of the draft recommendations and considerations, specifically we would like comments on and will discuss:

- Whether the framing of the recommendations included are on target?
- Whether the additional considerations identified are useful to address?

- Whether any additional recommendations should be advanced?

The public is encouraged to submit written comments in advance of the meeting – by Sunday, November 13<sup>th</sup>. The public will also have an opportunity to comment at the meeting and additional written comments can be submitted after the meeting through November 29<sup>th</sup>.