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

Monday, October 25, 2021 ***Submitted via Email***

RE: Comments by Environmental Defense Fund (EDF) on the Oregon Department of Environmental Quality's Proposed Rules for the Climate Protection Program

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

Environmental Defense Fund (EDF) submits the following comments in response to the proposed rules for the Climate Protection Program (CPP). We are writing on behalf of our thousands of Oregon members and our supporters across the country who want to see swift, meaningful action to reduce climate pollution and put Oregon on the path toward a clean energy future. EDF appreciates the effort that DEQ has put into the process of developing draft rules for the CPP. However, we believe that the proposed program rules as drafted fall short of a level of ambition that is consistent with climate commitments in other western states and at the federal level. To remain a climate leader, DEQ must deliver the most ambitious CPP possible to protect Oregonians from the worst impacts of climate change.

Since the beginning of EDF's engagement in the program development process, we have been particularly interested in the economy-wide greenhouse gas (GHG) emissions impacts of DEQ's rule proposal alongside other existing policies, and were disappointed with the lack of attention to this question within the rulemaking given the centrality of this question. To better understand potential emissions reduction pathways, EDF contracted with Evolved Energy Research (EER) to conduct a study of the economy-wide emissions impacts of policy scenarios to inform both EDF's engagement with the Climate Protection Program rulemaking and future climate policy efforts in Oregon. The analysis was designed with the following goals:

- To create an updated baseline that includes existing and planned policies, including Oregon's 100% Clean Energy policy and the planned expansion of the Clean Fuels Program.
- To understand the economy-wide emissions reductions that various policy scenarios would deliver compared to the level of emissions reductions from existing policy, including:
    - DEQ's draft program rules for the Climate Protection Program, and
    - A deep decarbonization scenario consistent with a 90% reduction in anthropogenic emissions by 2045, net-zero energy and industry CO_2 emission by 2045, and a 60% reduction in non- CO_2 GHG emissions from 2019 levels by 2050 to achieve net-zero climate pollution economy-wide by 2050.

These comments detail the following key insights from EER's modeling study and our own complementary analysis:

- In the modeling results, the DEQ Proposal scenario shows emissions reductions beyond the Existing Policy scenario and that are consistent with the 2035 target but fall short of

delivering the emissions reductions needed to achieve Oregon's 2050 emissions reduction target. This is in a highly optimistic scenario that assumes CCIs achieve a 1:1 reduction in emissions for the emissions they are intended to offset. **EDF has strong concerns that this will not be the case, because DEQ's proposal does not actually guarantee a 1:1 reduction in emissions and does not even consider whether emissions reductions from CCI projects will be additional.** There is significant uncertainty that DEQ's proposal is ambitious enough to even deliver on current targets, let alone the increasing ambition that is needed to avoid the worst impacts of climate change.

- The DEQ Proposal scenario reduces fewer emissions cumulatively from now through 2050 than a straight-line decline in emissions from modeled 2021 levels to Oregon's 2035 and 2050 targets[1]. The DEQ proposal would fall even shorter if CCIs do not result in 100% of their intended emissions reductions.
- The Deep Decarbonization scenario illustrates a feasible pathway to swifter climate action that cuts emissions at a level of ambition that is consistent with the U.S. NDC's climate commitment and with climate targets in other western states. The Deep Decarbonization pathway would also result in substantial cumulative emissions reductions beyond what the DEQ Proposal provides, including in the next decade—a critical time for climate action.
- Additional, complementary analysis by EDF suggests that by setting the CPP's program caps at levels that will cut covered emissions in half by 2030 from 2017-2019 average emissions, economy-wide emissions would "catch up" to the emissions levels in the Deep Decarbonization scenario by 2030. For contrast, EER's modeling shows that DEQ's current cap proposal (alongside existing policies) won't achieve a 50% reduction in covered emissions until 2038.
- In the modeling results, usage of CCIs is not economical until after 2035. This suggests that CCIs will be a variable and uncertain source of funding for place-based investments in environmental justice communities, particularly during the first half of the program.

EER Analysis: Methodology and Approach

EER's study evaluates emission reductions for Oregon with a holistic approach, integrated across geographies, including beyond Oregon's borders, and economic sectors. The study explores pathways to achieve Oregon's electricity and emissions targets by considering the transition needed in all sectors of the economy. Modeling determines optimal investment in resources, constrained by scenario definitions, investigating different potential state objectives or uncertainties. The modeling also integrates electricity and fuels systems that extend beyond Oregon's borders to capture regional opportunities and challenges, which provides information about how other states' actions may impact the availability and cost of transitioning to clean energy.

The study pairs two tools developed by EER: (1) EnergyPATHWAYS, a bottom-up energy system model; and (2) Regional Investment and Operations (RIO), an optimal capacity expansion model. EER integrates a scenario planning exercise on the demand-side and an

[1] As explained in the section on the EER analysis methodology and approach, the model was run for 2021 and then with a five-year timestep from 2025 – 2050.

optimization of the supply-side of the energy system. Both models have been used extensively in successful engagements to develop national, regional, and state-level decarbonization pathways.

RIO optimizes supply-side decisions to understand electricity and fuels emissions reductions under different policy strategies; optimal deployment of biofuels to mitigate transportation energy demand, building, and industrial energy demands, electricity; and the deployment of low-carbon electric fuels (e.g., power-to-gas; hydrogen electrolysis).

The model was run for 2021 and then with a five-year timestep from 2025 to 2050. It includes Oregon, Washington, Utah, Wyoming, Montana, Idaho, Nevada, California, Colorado, New Mexico, and Arizona modeled as separate transmission zones.

EER modeled the following three scenarios:

1) **Existing Policy.** The Existing Policy scenario incorporates the recently passed 100% Clean Electricity policy and an extension of the Clean Fuels Program in line with the targets in E.O. 20-04.
2) **DEQ Proposal.** Expands on the policy baseline to include the DEQ rule proposal's caps on carbon dioxide (CO_2) emissions from covered sources.
3) **Deep Decarbonization.** Oregon achieves emission reductions in line with a 90% reduction in anthropogenic emissions by 2045, net-zero energy and industry CO_2 by 2045, and a 60% reduction in non- CO_2 GHG emissions from 2019 levels by 2050 to achieve net-zero climate pollution economy-wide by 2050. In this scenario, other states move at a comparable pace, with a rapid demand-side transformation.

The policy scenarios include the following assumptions:

Scenario Assumptions	Existing Policy Baseline	DEQ Proposal	Deep Decarbonization
Clean Electricity Policy	Clean Electricity Standard 80% by 2030, 90% by 2035 and 100% by 2040 from baseline. No new thermal plants. Decarbonized fuels, like green Hydrogen, are allowed.		
CO_2 limit beyond electricity	None	DEQ proposed emission caps (45% reduction by 2035 and 80% reduction by 2050 for covered emissions)	100% reduction by 2045 (in line with 90% reduction in anthropogenic emissions)*
Clean Fuels	Expansion to 20% reduction by 2030, and 25% by 2030.		
Transportation: Light-Duty Vehicles	EVs are 22% of sales by 2025 (ZEV1 from ICF analysis for DEQ)		Faster electrification, EVs are ~80% in 2030 and 100% by 2035

Transportation: Freight Trucks	Based on AEO 2021 projection	HDV long-haul: 50% electric, 50% hydrogen sales by 2045. HDV short-haul: 100% electric sales by 2045. MDV: 100% electric sales by 2045
Buildings: Electrification	Based on AEO 2021 projection	Fully electrified appliance sales by 2035
Buildings: Energy Efficiency	Based on AEO 2021 projection	Sales of high efficiency tech: 100% in 2035
Industry	Based on AEO 2021 projection	Generic efficiency improvements over Reference of 1% a year; fuel switching measures; 75% decrease in refining and mining to reflect reduced demand
Rest of West GHG limits	All binding emission reductions in other states (CA, CO, WA)	All states in the West go to net-zero
Transmission expansion	No limits on expansion	

* Net-zero energy and industry CO_2 along with a 60% reduction in 2019 levels of non-CO_2 emissions would result in a 90% reduction in anthropogenic emissions.

EER calibrates energy demand in the model to EIA's State Energy Data System (SEDS) 2019 data and incorporates EIA's AEO 2021 projections.[2] EER's modeling did not estimate reductions associated with implementing best available emissions reduction (BAER) requirements as these reductions are uncertain and not guaranteed by the emissions cap.

For additional details on the modeling please contact Kjellen Belcher at kbelcher@edf.org .

EER Analysis: Emissions Results

.The DEQ Proposal scenario shows emissions reductions delivered that are consistent with Oregon's current 2035 target. The DEQ Proposal scenario also shows emissions reductions that are approximately 3 $MMTCO_2e$ short of meeting Oregon's current 2050 target. **However, as the purple lines in Figure 1 and Figure 2 partially demonstrates, this is subject to significant uncertainty based on how many CCIs are used and whether each CCI reduces emissions by one metric ton**.

EDF performed an additional analysis[3] to explore the uncertainty that CCIs could introduce for emissions reductions. In a scenario where CCI usage does not result in any real, additional emissions reductions, usage of CCIs up to the CCI limit would result in an additional 65

[2] EER's analysis incorporates EIA's AEO 2021 projections, which estimate near-term impacts from COVID-19 in service demand; these projections show a large reduction in service demand during 2020, followed by an increase from 2020 levels in 2021, but with levels that are still below 2019 levels. A steep reduction in coal electricity generation also contributes substantially to lower modeled emissions in 2021.

[3] Note that this analysis doesn't include any banking of CCIs.

$MMTCO_2e$ of cumulative climate pollution through 2050. It would also mean that Oregon could miss its current 2035 target by approximately 3.4 $MMTCO_2e$, and could miss its current 2050 target by approximately 4.2 $MMTCO_2e$. These results help illustrate the potential risk that CCIs could pose for the environmental integrity of the program and for Oregon's ability to guarantee emissions reductions.

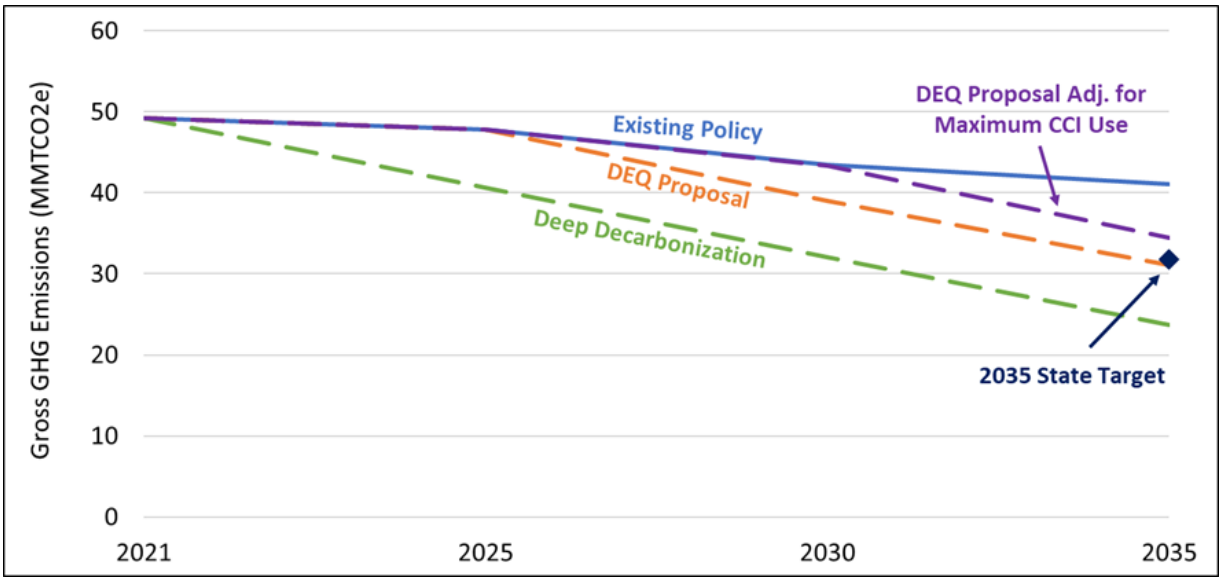

Figure 1. This figure shows Oregon's current 2035 target as well as the modeled Existing Policy scenario to 2035, the modeled DEQ Proposal scenario to 2035, and the modeled Deep Decarbonization scenario to 2035. It also shows EDF's assessment of the additional emissions that could result if all allowable CCIs are used and they do not result in emissions reductions.

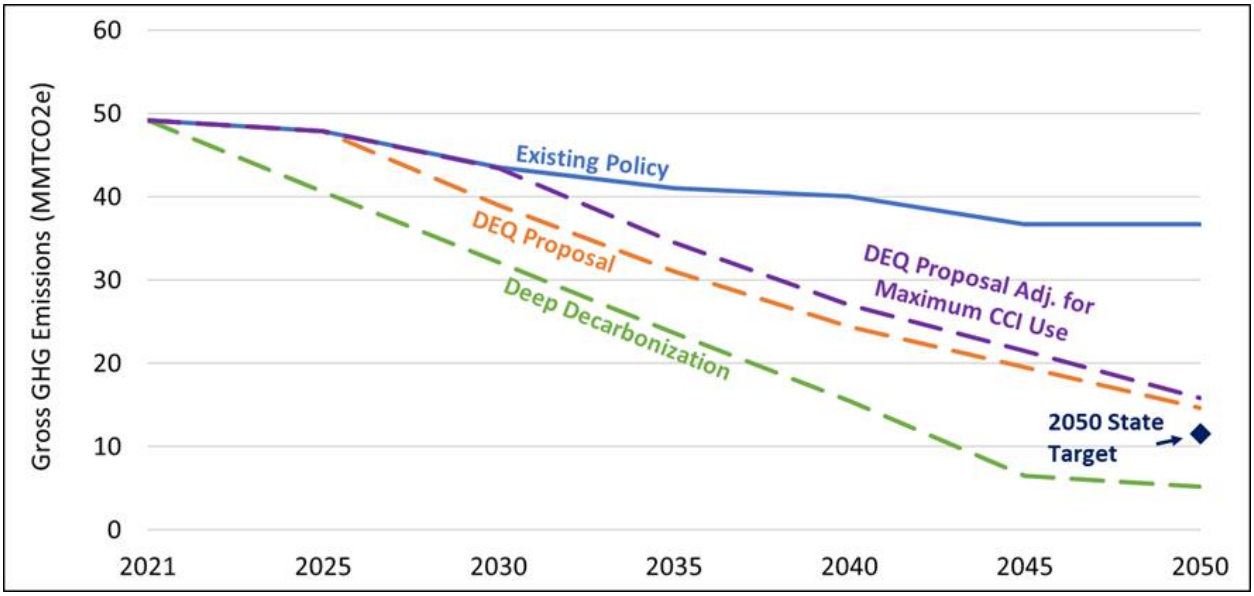

Figure 3. This figure shows Oregon's current 2050 target as well as the modeled Existing Policy scenario to 2050, the modeled DEQ Proposal scenario to 2050, and the modeled Deep Decarbonization scenario to 2050. It also shows EDF's assessment of the additional emissions that could result if all allowable CCIs are used and they do not result in emissions reductions.

The Deep Decarbonization scenario delivers more rapid reductions in climate pollution, with emissions that are substantially lower than both the 2035 and 2050 targets (Figures 1 and 2).

As seen in Figures 1 and 2, EER's modeling suggests that the DEQ Proposal will not drive emissions below the Existing Policy scenario until after 2025. This suggests that the program cap in DEQ's draft rules is not binding until after 2025—or stated another way, **the program cap is not stringent enough to drive additional emissions reductions beyond the reductions from existing policy until after 2025.** This decreases the cumulative pollution reductions that Oregon will achieve, and would be a failure to require emissions reductions from the start of program implementation—it illustrates yet another reason why it is essential that DEQ tightens the program cap. **If we consider the uncertainty that CCIs introduce, the difference becomes even more stark, with the program potentially not driving emissions reductions beyond Existing Policy until after 2030.**

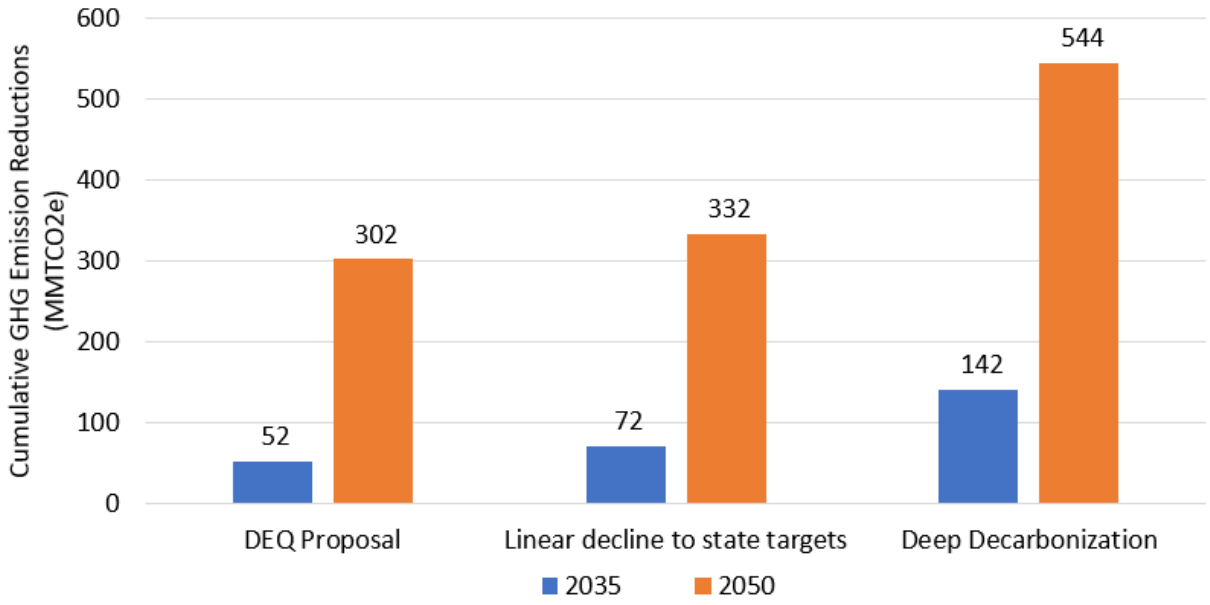

Figure 3. Cumulative emissions reductions in 2035 and 2050 from the modeled DEQ Proposal, the modeled Deep Decarbonization scenario, and an EDF analysis of a straight-line emissions decline trajectory to Oregon's 2035 and 2050 climate targets.

The DEQ Proposal scenario results in 302 $MMTCO_2e$ of cumulative emissions reductions by 2050 when compared to emissions in the Existing Policy scenario. Cumulative reductions are an even more critical metric of analysis than achievement of single-year targets because they provide a fuller picture of the greenhouse gases that will accumulate in the atmosphere. However, the uncertainty introduced by DEQ's proposed CCI approach could—yet again—lead to fewer cumulative emissions reductions.

As an example, consider a scenario where all available CCIs are used over the lifespan of the program, and those CCIs are only 50% effective at achieving a 1:1 emissions reduction for the emissions they are intended to offset. This would result in approximately 32.5 $MMTCO_2e$ of additional cumulative emissions.

The Deep Decarbonization scenario results in a substantially greater level of cumulative emissions reductions than the DEQ Proposal scenario, reducing climate pollution by 544 $MMTCO_2e$ compared to the Existing Policy scenario.

Figure 3 shows the level of cumulative emissions reductions (compared to the Existing Policy baseline) in 2035 and 2050. It also shows the level of cumulative emissions reductions we would expect to see if emissions declined in a straight-line trajectory from modeled 2021 emissions to the 2035 target and then from the 2035 target to the 2050 target.

As shown in Figure 3, the DEQ Proposal will reduce cumulative emissions less than a linear decline to state targets. The DEQ Proposal delivers 20 $MMTCO_2e$ fewer cumulative emissions reductions than a linear decline to Oregon's 2035 target, and 30 $MMTCO_2e$ fewer cumulative emissions reductions than a linear decline to Oregon's 2050 target.

EER's analysis shows DEQ's proposal achieving cumulative emissions reductions that already fall short of the cumulative reductions we would see if emissions declined on a straight-line trajectory to the 2035 and 2050 targets (Fig. 4). In a scenario where CCIs are used to the maximum allowable extent, and CCIs are only 50% effective at reducing emissions, Oregon would be placed substantially further from achieving its targets, illustrating the magnitude of the environmental integrity risk that DEQ's proposed program design could allow.

Once again, we note that the mechanism of community climate investments (CCIs) as currently designed does not guarantee that CCIs will reduce GHG emissions by one metric ton of CO_2-equivalent for every CCI used. The modeling assumes that each community climate investment (CCI) will reduce one metric ton reduction of climate pollution, and that emissions reductions from CCIs will be fully additional, so actual emissions are likely to be higher than the model results suggest. EDF has previously expressed our concerns about the environmental integrity of CCIs in DEQ's proposed program design, both in terms of the magnitude and additionality of emissions reductions from CCIs.

Figure 3 also shows that the Deep Decarbonization scenario will reduce cumulative emissions substantially more than both the DEQ Proposal and a linear decline to state targets. By 2035, the Deep Decarbonization scenario yields an additional 70 $MMTCO_2e$ of cumulative emissions reductions more than the linear decline to state targets, and 90 $MMTCO_2e$ more than the DEQ Proposal. By 2050, the Deep Decarbonization scenario yields an additional 212 $MMTCO_2e$ in emissions reductions than a linear decline to state targets, and 242 $MMTCO_2e$ more cumulative emissions reductions than the DEQ Proposal. The difference from the DEQ proposal is the equivalent of taking almost 193 million passenger vehicles off the road for a year.[4]

We strongly recommend that DEQ maximize cumulative emissions reductions over the course of the program, with particular emphasis on near-term emissions reductions. EER's analysis shows DEQ Proposal resulting in fewer cumulative reductions than a straight-line trajectory to the state's climate targets and shows the Deep Decarbonization scenario as a feasible pathway for substantially larger emissions reductions. **We strongly recommend that DEQ increase the stringency of the CPP's emissions caps.**

Comparison of Oregon's Climate Targets to Ambition at the State and National Level

Oregon must increase its climate ambition to remain a climate leader, and DEQ should deliver a program with pollution limits that match the level of ambition we are currently seeing in commitments at the national level and in neighboring western states.

[4] https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

At the national level, the U.S. has put forward a nationally determined contribution with a target of cutting U.S. greenhouse gas emissions by 50-52% below 2005 levels by 2030.

In western states, we have seen climate targets that mirror the U.S. NDC's level of near-term ambition and require deep levels of decarbonization on a 2050 timeframe:

- **Washington State** is required to achieve a 45% reduction in climate pollution below 1990 levels by 2030, a 70% reduction below 1990 levels by 2040, and 95% below 1990 levels by 2050. Washington also passed the Climate Commitment Act, which creates an enforceable, economy-wide cap-and-invest program to ensure that the state will meet its emission reduction targets.
- **California** has committed in statute to a 40% reduction in climate pollution below 1990 levels by 2030, and also has an executive order directing the state to achieve carbon neutrality by 2045
- **Colorado** has committed to reducing its net emissions to 26% below 2005 levels by 2025, 50% below 2005 levels by 2030, and 90% below 2005 levels by 2050.

All three states have targets for reducing climate pollution that are more ambitious than Oregon's current targets.

In order for Oregon to remain a climate leader, Oregon must seek a greater level of ambition that is 1) consistent with the climate leadership we are seeing in Western states and 2) is at least as ambitious as climate commitments at the national level**.** EER's modeling results show DEQ's proposal (in combination with existing policies and the planned clean fuels expansion) resulting in a **32% reduction in emissions from 1990 levels and a 43% reduction from 2005 levels by 2030**. This is not a level of ambition that matches either the U.S. NDC or the ambitious targets that are being set in other western states.

The next decade is critical for climate action, and DEQ must ensure that the CPP will reduce emissions swiftly enough to protect Oregonians—especially communities who are disproportionately burdened by climate impacts and air pollution—from the most devastating impacts of climate change. The DEQ proposal already misses substantial opportunities to increase ambition within the program; a clear example is the exemption of industrial sources of emissions and exported natural gas electricity from a firm, declining limit on emissions.

EDF Additional Analysis: Emissions Results and 2030 targets

A large group of environmental and environmental justice groups in Oregon have aligned around the clear ask that DEQ increase the ambition of its program to deliver a 50% reduction in emissions below DEQ's proposed baseline by 2030. In addition to EER's modeling of the GHG emissions resulting from the proposed DEQ cap, EDF evaluated an accelerated emission reduction trajectory - a 50% reduction from the 2017-2019 average emissions by 2030 for covered sources. While this more ambitious cap was not included in EER's model runs, it provides a useful illustration of how a more stringent cap would reduce more emissions and put the state on track to achieve deep decarbonization by 2050.

As shown in figure 1 above, the currently proposed cap, along with all other state policies currently in place, is not consistent with a deep decarbonization scenario that achieves a 90% reduction in anthropogenic emissions by 2045, net-zero energy and industry CO_2 by 2045, and a 60% reduction in non- CO_2 GHG emissions from 2019 levels by 2050 to achieve net-zero climate pollution economy-wide by 2050. **However, if the state increases the stringency of the cap to achieve a 50% reduction by 2030, we estimate that economy-wide emissions would "catch up" to the Deep Decarbonization scenario by 2030,** reaching just under 32.4 $MMTCO_2e$ economy-wide, within less than 0.3 $MMTCO_2e$ of the modeled Deep Decarbonization trajectory emissions in 2030. Catching up to the Deep Decarbonization scenario would also be consistent with the U.S. NDC's commitment, as the Deep Decarbonization scenario would reduce emissions 53% from 2005 levels by 2030. Further, we estimate that this more ambitious cap could secure an additional 16 $MMTCO_2e$ of reductions cumulatively by 2030 compared to the current DEQ proposal.

For an additional point of comparison, DEQ's current program rules wouldn't achieve a 50% reduction in emissions from sources covered under the cap until 2038.

We urge DEQ to increase the ambition of its program to cut climate pollution by 50% by 2030. Doing so would be consistent with the Deep Decarbonization scenario that EER modeled and would represent a level of ambition consistent with the U.S. NDC and the climate leadership being demonstrated by other western states.

EER Analysis: Community Climate Investments

EER's analysis suggests that purchase of CCIs will not become economical until after 2035. EER's modeling does not capture the uncertainty, market dynamics, and sticky assumptions that we would expect if DEQ's proposal were implemented. All of these factors would raise capped sources expected marginal abatement price, likely leading to the purchase of CCIs before 2035. **However, these results suggest that CCIs will be a variable and uncertain source of funding for investments in communities, particularly during the first half of the program**.

DEQ has positioned CCIs as a primary mechanism for place-based equity within the CPP. But the variability and uncertainty of funding for investments in communities stands in stark contrast to the program's treatment of polluters. Throughout the rulemaking process, EDF has voiced strong objections to DEQ's decision to give all of the program's compliance instruments directly to covered entities for free. EDF estimated a minimum value of allowances under DEQ's proposed cap and found that this is a giveaway of over $20 billion dollars of allowance value directly to sources of climate pollution through 2050.[5] Of this value, over $15.5 billion will be

[5] To calculate the total value of allowances that will be given directly to capped sources of climate pollution through 2050, EDF used (1) the total number of allowances that will be distributed under DEQ's proposed CPP rules, and (2) an approximation of the floor price in California's cap-and-trade market. The floor price in California's market was $17.71 at the most recent auction, and will increase annually at a rate of 5% plus inflation. We have assumed a total increase in the floor price of 7% annually, assuming that inflation will be approximately 2%. Use of California's floor price means that these estimates of allowance value are almost certainly an underestimate, as we would expect prices to be higher in an Oregon-only program (relative to a program linked with the WCI), and because it's also likely that actual allowance prices will be higher than California's floor price.

given directly to oil companies. There is also a significant risk – one that DEQ has not even acknowledged - that this value will not be passed onto consumers but will instead be pocketed by shareholders that have already benefited from climate denialist strategies.

Community Climate Investments: Insights from California Climate Investments

Under DEQ's proposed program rules, DEQ may approve a CCI entity's proposed projects or proposed project types if DEQ determines that the project(s) will be located in Oregon, and the completion of the project is reasonably likely to reduce anthropogenic greenhouse gas emissions by an average of at least one $MTCO_2e$ per CCI credit distributed by DEQ. To further understand some of the challenges of CCIs as a design feature of the program, EDF analyzed data from the California Climate Investments, a California initiative that funds investments in reducing greenhouse gas emissions and improving public health and the environment.

EDF used project data from the 2021 Mid-Year Data Update to the California Climate Investments Annual Report to build an understanding of which project types have been funded in California and at what cost per ton of emissions reduced. The availability and feasibility of various project types will be different in Oregon than it is in California. Additionally, project types for proposed Oregon CCIs must reduce anthropogenic emissions and do not include carbon sequestration projects. However, California Climate Investment projects are a relevant real-world example with clear parallels to what Oregon is proposing and can provide useful insights that illustrate the potential challenge of successfully implementing CCI projects in Oregon.

Of the 65 project types that have been implemented and have funding data through California Climate Investments, 17 (or 26%) both 1) reduce greenhouse gas emissions and 2) have a cost per ton that is equal to or lower than the expected CCI price when it is at its highest, in 2050. Of those 17, 5 would be ineligible for proposed Oregon CCI funding because they do not reduce anthropogenic emissions—for example, California's Forest Health Program, or California's Wetlands & Watershed Restoration Program.

The remaining projects may or may not be eligible project types for CCI funding, depending on how the requirement to reduce anthropogenic emissions is implemented. These projects are included in the following table, along with their cost/ton of emissions reduced, the percentage of funding that benefits low-income communities, and the percentage of funding that benefits disadvantaged communities:

Program name	Cost/ton of greenhouse gas emissions reduced	Percentage of funding benefitting low-income communities	Percentage of funding benefitting disadvantaged communities[6]

[6] Disadvantaged communities in California are defined as the top 25% scoring areas from CalEnviroScreen, along with census tracts that score in the highest 5% of CalEnviroScreen's Pollution Burden but do not have an overall CalEnviroScreen score because of unreliable socioeconomic or health data. Disadvantaged communities are specifically targeted for investment of proceeds from California's cap-and-trade program.

Organics and Recycling Manufacturing Loans	$10	0%	0%
Low-Carbon Fuel Production	$28	0%	94%
Food Production Investment Program	$33	7%	79%
Recycled Fiber, Plastic, and Glass Grants	$38	Unknown	Unknown
Food Waste Prevention and Rescue Grants	$47	Unknown	Unknown
Organic Grants	$55	38%	24%
Woodsmoke Reduction	$72	92%	0%
Renewable Energy for Agriculture Program	$75	0%	0%
State Water Efficiency and Enhancement Program	$83	18.5%	18.5%
Low-Carbon Transit Operations Program	$90	53%	45%
Water-Energy Grant Program	$96	0%	43%
Training and Workforce Development Program	$111	31%	64%

Only six of the above projects have directed more than 40% of funding to disadvantaged communities. Only two have directed more than 40% of funding to low-income households and communities. This data from California Climate Investments illustrates a challenge of implementing CCI projects that provide substantial benefits to environmental justice communities—which is a requirement that must be foundational for CCIs.

DEQ has provided little information to demonstrate that there will be an adequate supply of CCI projects that meet the goals of equitable outcomes and environmental integrity. We remain concerned that, as drafted, the proposed rules will not adequately achieve these goals.

Additional Resources

EDF would like to incorporate by reference all of the comments that we have submitted since planning for this rulemaking began in June of 2020 including the following:

> Joint Comments by Climate Solutions, Oregon Environmental Council (OEC), Natural Resources Defense Council (NRDC), and Environmental Defense Fund on Program Options to Cap and Reduce Greenhouse Gas Emissions Preliminary Report, June 15, 2020
>
> EDF Comments on Technical Workshops 1-6, October 21, 2020.
>
> EDF Comments on Contracted Modeling Study "Business as Usual" Case, November 13, 2020.
>
> EDF Comments on Program Development to Reduce Greenhouse Gas Emissions: Illustrative Scenarios, December 9, 2020
>
> EDF Comments on Rulemaking Advisory Committee Meeting 1, January 21, 2021
>
> EDF Comments on Rulemaking Advisory Committee Meeting 2, February 26, 2021
>
> Joint Comments on Rulemaking Advisory Committee Meeting 4 and DEQ's Proposed BAT Approach for the Industrial Sector, April 30, 2021
>
> Joint Comments on Rulemaking Advisory Committee Meeting 5 and DEQ's Proposed BAER Approach for the Industrial Sector, June 9, 2021
>
> Joint Comments on Rulemaking Advisory Committee Meeting 7, July 16, 2021

We would also like to incorporate by reference the following:

> Resources for the Future's "Carbon Pricing in Oregon" Memoranda for the Oregon Climate Policy Office, January 2019**.** Available at: https://media.rff.org/documents/Rpt_19-01_Oregon.pdf
>
> "Oregon's Cap-and-Trade Program (HB2020): An Economic Assessment" Berkeley Economic Advising and Research Consultant Report for Carbon Policy Office. Available at: https://www.oregon.gov/gov/Documents/CPO_BEAR_HB2020_Economic_Assessment.pdf

Conclusion

The next decade is a critical moment for climate action. As EER's modeling analysis demonstrates, DEQ can and should deliver a higher level of ambition that is consistent with the climate leadership that is being demonstrated in other western states and at the federal level. We also remain highly concerned about the potential for CCIs to both undermine the environmental integrity of the program and to fail to achieve meaningful outcomes for environmental justice communities. The Climate Protection Program must place a firm, binding limit on climate pollution from all major emitting sources, as Governor Brown's executive order clearly directs—and we urge DEQ to establish a CPP that is consistent with reducing Oregon's emissions at least 50% by 2030 to put Oregon on track to achieve deep levels of decarbonization over the coming decade.

Thank you for your consideration of our comments.

Sincerely,

Erica Morehouse

Senior Attorney, U.S. Climate

Kjellen Belcher

Senior Analyst, U.S. Climate