



October 25, 2021

Colin McConnaha
Manager, Office of Greenhouse Gas Programs
Oregon Department of Environmental Quality
Via email to GHGCR2021@deq.state.or.us

Re: Comments on Climate Protection Program Draft Rules

Dear Mr. McConnaha:

The Green Energy Institute at Lewis & Clark Law School is a nonprofit energy and climate law and policy institute within Lewis & Clark's top-ranked environmental, natural resources, and energy law program. We appreciated the opportunity to participate in the Rulemaking Advisory Committee (RAC) for the Department of Environmental Quality's (DEQ) Climate Protection Program (CPP), and respectfully submit these comments on the draft rules.

We support DEQ's efforts to cap and reduce greenhouse gas (GHG) emissions from transportation fuels and natural gas used in Oregon, and to regulate industrial process-based emissions from large stationary sources of air pollution. We have provided extensive input on the proposed CPP rules through our participation on the RAC and in written comments submitted throughout the rulemaking process, and we do not intend to revisit all of our previous recommendations in these comments.¹ Given the urgency and severity of the climate crisis, however, we continue to urge DEQ to maximize ambition under the CPP and strengthen key rule provisions to enable the program to achieve just and equitable emissions reductions as quickly as possible.

We strongly urge DEQ to strengthen the CPP in three key ways: First, increase the program's emissions cap to reflect the best available science by requiring a 50% reduction in baseline emissions by 2030 and a 100% reduction in baseline emissions by 2050. Second, establish mandatory, declining emissions limits for stationary sources with industrial process-based GHG emissions. And third, eliminate the exemption for emissions from fossil fuel-fired power plants that are not regulated under HB 2021 or otherwise subject to GHG emissions limits that are at least as stringent as those established under HB 2021.

In addition to these three key opportunities for strengthening the CPP, we also encourage DEQ to revise the draft rules to limit the redistribution of excess or unused compliance instruments and establish a more just and equitable methodology for allocating community climate investment funds. Finally, we encourage DEQ to retain the draft rules' focus on reducing anthropogenic GHG

¹ The Green Energy Institute's comments are available on our website. Green Energy Institute, *GEI's Policy Recommendations: DEQ's Climate Protection Program*, https://law.lclark.edu/centers/green_energy_institute/projects/.

emissions resulting from the combustion of fossil fuels and other industrial processes. Our comments discuss these key opportunities and recommendations for strengthening the CPP rules.

1. Strengthen the Emissions Cap to Reflect the Best Available Climate Science

The Intergovernmental Panel on Climate Change’s (IPCC) most recent assessment of the science determined that “unless there are immediate, rapid and large-scale reductions in greenhouse gas emissions, limiting warming to close to 1.5°C or even 2°C will be beyond reach.”² According to the IPCC, anthropogenic greenhouse gas emissions must decline substantially between now and 2030 and must reach net-zero by 2050 to prevent catastrophic climate change this century. Given the gravity of the climate crisis, it is imperative that state climate policies reflect the best available science and establish emissions reduction targets that are consistent with the global scientific consensus. We strongly encourage DEQ to revise the draft rules’ interim and final emissions targets and declining cap to reflect the latest scientific findings by requiring a 50% reduction from baseline emissions by 2030 and a 100% reduction from baseline emissions by 2050.

2. Establish Mandatory, Declining Emissions Limits for Process-Based Emissions

The CPP rules should require mandatory reductions in process-based GHG emissions that increase in stringency over time in alignment with the program’s science-backed, declining emissions cap. We generally support the proposal to regulate industrial process-based emissions through on-site controls and processes, rather than allow large stationary sources to purchase compliance instruments from other regulated entities. Requiring on-site reductions in process-based emissions will support the CPP’s climate and equity objectives by reducing emissions of GHGs and co-pollutants in environmental justice communities. However, we are very concerned that the proposed “best available emissions reduction” (BAER) approach will fail to achieve these outcomes because it does not include mandatory emissions reductions targets. We strongly urge DEQ to impose mandatory and declining GHG emissions limits on stationary sources subject to BAER that are consistent with the GHG reduction targets established by statute and EO 20-04. Declining limits on process-based emissions will incentivize covered facilities to install advanced technologies and pursue innovative industrial processes to reduce emissions that will help Oregon’s manufacturing sector remain competitive as the state, national, and global economies continue to decarbonize.

The CPP should also aim to deter development of new stationary sources of process-based GHG emissions that would undermine the integrity of the CPP and negatively impact local communities. New industrial facilities are frequently sited in environmental justice communities that already face disproportionate threats from air pollution and the impacts of climate change. The Oregon legislature recognized and accounted for these risks in HB 2021, which established mandatory GHG reduction targets for Oregon’s regulated electricity sector while simultaneously prohibiting construction of new fossil fuel-fired power plants in the state.³ We urge DEQ to add comparable safeguards to the CPP rules to protect local communities and prevent new industrial sources from undermining Oregon’s climate progress. First, any new stationary source that has the potential to emit GHGs in any quantity should be required to complete a BAER assessment prior to commencing construction and comply

² Intergovernmental Panel on Climate Change, *Climate Change Widespread, Rapid, and Intensifying* (Aug. 9, 2021), <https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/>.

³ H.B. 2021, 81st Leg. Assem., Reg. Sess., §§ 3, 28 (Or. 2021).

with a DEQ BAER determination. Second, any proposed stationary source with a potential to emit 5,000 MTCO₂e or more process-based emissions per year should be subject to mandatory and declining GHG emissions limits that are consistent with the CPP emissions cap.

3. Eliminate Exemptions for Power Plant Emissions Under DEQ’s Jurisdiction

Because many GHG-emitting sectors and processes are exempt from emissions regulations under state law, it is imperative that the CPP cover *all* GHG emissions that DEQ is legally authorized to regulate and that are not otherwise regulated under separate state programs. We are concerned that the draft rules’ broad exemptions for all GHG emissions from electric power generating plants located in Oregon creates a loophole that could potentially enable natural gas-fired power plants to avoid GHG regulations in certain contexts. We are specifically concerned that this loophole could incentivize regulated electricity providers to sell their existing power plants to unregulated, energy-intensive industries, such as cryptocurrency miners, or export electricity from these plants to states that lack GHG restrictions. To prevent these outcomes, we urge DEQ to eliminate the power plant loophole by revising the emissions exemptions in section 340-271-0110 of the draft proposed rules and ensure that the CPP cap applies to any power plant emissions that are not otherwise regulated in Oregon or other states.

In 2021, the Oregon Legislature adopted House Bill 2021 (HB 2021), which established ambitious emissions reduction mandates for electricity producers regulated by the Oregon Public Utility Commission (PUC). Under HB 2021, the owners and operators of Oregon’s existing natural gas plants must comply with clean energy targets that require an 80 percent reduction in baseline emissions by 2030 and a 100 percent reduction in baseline emissions by 2040.⁴ While these legislative targets require quicker and steeper emissions reductions than those proposed by the draft CPP rules, they only apply to emissions from electricity imported, sold, allocated, or distributed by retail electricity providers (including investor-owned utilities and electricity service suppliers) for use in Oregon.⁵ This means that GHG emissions from electricity produced by in-state gas plants for use outside of Oregon would not be subject to regulation under state law or the CPP. Moreover, HB 2021’s clean energy targets only apply to *retail* electricity providers; the mandates do not apply to wholesale electricity providers, consumer-owned utilities, or large power consumers that wish to produce electricity for their own use.⁶

Taken together, these two exclusions under HB 2021 create a loophole that would enable the owners and operators of existing gas plants to avoid GHG regulation by exporting power outside of Oregon, and create an incentive for the plants’ existing owners to sell the facilities to entities that are not subject to Oregon’s GHG regulations under the CPP or HB 2021. For example, a utility or ESS could sell a gas-fired power plant to a wholesale electricity provider, a consumer-owned utility operating in Oregon, or a retail electricity provider that serves customers in other states. There is also a significant

⁴ HB 2021 § 3(1). Oregon’s existing natural gas-fired power plants are each fully or partially owned and operated by electric companies (PGE or PacifiCorp) or electricity service suppliers (subsidiaries of Avangrid or Calpine) that sell electricity to customers in Oregon.

⁵ See ORS § 468A.280 (specifying the GHG reporting requirements that will determine compliance with HB 2021’s clean energy targets).

⁶ HB 2021 defines “retail electricity provider” as “an electric company or electricity service supplier,” as defined under ORS § 757.600. HB 2021 § 1(3), (9). The statutory definitions of “electric company” and “electricity service supplier” exclude consumer-owned utilities. ORS § 757.600(11), (16).

risk that large power consumers, such as Bitcoin mining operations, could purchase Oregon's existing natural gas plants to produce electricity for their own facilities.

This outcome is already playing out in the United States. In New York, a Bitcoin mining firm purchased a retired coal plant and converted it into a natural gas plant that now powers its cryptocurrency mining.⁷ The power plant is expected to emit about one million tons of CO₂ a year, and is currently enabling the miners to produce Bitcoin for less than \$3,000 per coin.⁸ Another Bitcoin mining firm has purchased two coal-fired power plants in Pennsylvania, and is looking to purchase a third plant as well.⁹ The coal plants also enable the company to produce Bitcoin for under \$3,000 per coin. With Bitcoin currently selling for more than twenty times that amount and some investment analysts predicting that Bitcoin values could hit \$100,000 before the end of 2021, cryptocurrency miners have an extremely strong financial motive to purchase their own power plants.¹⁰ By exempting *all* power plant GHG emissions from regulation under the CPP, the draft rules fail to close this loophole.

The power plant loophole is particularly alarming because Oregon law doesn't otherwise restrict GHG emissions from operating natural gas-fired power plants. While Oregon has design-oriented carbon dioxide (CO₂) standards for new natural gas-fired power plants that are administered by the Oregon Energy Facility Siting Council (EFSC), these standards don't limit the quantity of GHG emissions produced by operating plants. Fortunately, the statutory provisions establishing the EFSC CO₂ standard do not preempt DEQ from regulating GHG emissions from existing power plants.¹¹

The EFSC standard is a pre-construction standard that applied to the design of new fossil fuel-fired power plants.¹² It required new plants to incorporate efficient design elements and technologies to meet output-based emissions limits that restricted the quantity of GHGs a plant could permissibly emit for every kilowatt-hour of electricity it generated.¹³ Proposed power plants were required to demonstrate compliance with standard in order to receive a site certificate from EFSC.¹⁴ After passing a one-time, one-year heat rate test, operating power plants did not have to demonstrate ongoing compliance with the emissions limit.¹⁵ If a plant was unable to achieve the emissions rate standard, it had the option of paying a monetary offset rate for the excess emissions the plant was

⁷ Jonathan Hilburg, *A Power Plant in New York Ramped Back Up to Mine Bitcoin, but Opponents are Pushing Back* (April 14, 2021), <https://www.archpaper.com/2021/04/greenidge-power-plant-mine-bitcoin-raising-fears-of-a-climate-crash/>.

⁸ *Id.*

⁹ Max Binder, *A Bitcoin Miner is Buying Power Plants to Mine Crypto Now* (Sept. 26, 2021), <https://mashable.com/article/bitcoin-mining-power-plant>.

¹⁰ Billy Bambrough, *Crypto Price Prediction: \$100,000 Bitcoin Could Come Even Sooner than You Think with Ethereum Leading the Way*, FORBES.COM (Sept. 27, 2021), <https://www.forbes.com/sites/billybambrough/2021/09/27/crypto-price-prediction-100000-per-bitcoin-could-come-even-sooner-than-you-think-with-ethereum-leading-the-way/?sh=bc8e7491748a>. On October 25, 2021, Bitcoin was trading for around \$64,000.

¹¹ ORS § 469.503.

¹² HB 2021 prohibits EFSC from issuing site certificates for fossil fuel-fired power plants that would emit GHGs into the atmosphere, effectively nullifying Oregon's existing CO₂ standard.

¹³ ORS § 469.503.

¹⁴ In 2021, the legislature adopted HB 2021, which prohibits EFSC from issuing site certificates for fossil fuel-fired power plants that would produce GHG emissions.

¹⁵ OR. ENERGY FACILITY SITING COUNCIL, OREGON EFSC'S CARBON DIOXIDE EMISSION STANDARDS (2018), <https://www.oregon.gov/energy/Get-Involved/rulemakingdocs/2018-03-21-CO2-RAC-Background.pdf>.

expected to produce.¹⁶ The standard was therefore designed to incentivize new power plants to apply the most efficient technologies available at the time of construction, rather than limit the total quantity of GHG emissions produced by the plant over time.¹⁷

The EFSC CO₂ standards were added as permanent conditions to a facility's site certificate, which generally apply for the duration of the facility's life and displace other state and local laws. However, the statute includes two exceptions that allow future regulatory requirements to be incorporated into an existing site certificate. First, EFSC may require a facility to comply with regulations adopted after the site certificate was issued if there is "a significant threat to the public health, safety or the environment that requires application of later-adopted laws or rules."¹⁸ Second, if a facility holds a permit issued by another state agency (such as an air pollution discharge permit or Title V permit issued by DEQ), the facility must comply with any future regulatory requirements that are incorporated in its permit.¹⁹ This means that DEQ has authority to incorporate new GHG emissions limits into a power plant's air quality permit, and these updated limits will automatically be incorporated into the facility's site certificate.

If the power plant loophole enables natural gas-fired power plants to avoid regulation under the CPP and HB 2021, it would compromise Oregon's ability to achieve its climate goals. We strongly urge DEQ to protect the integrity of the CPP by revising the proposed emissions exemptions to clarify that power plant emissions will be subject to the cap if they are not otherwise subject to regulation under HB 2021 or other more stringent regulatory limits. We encourage DEQ to revise sections 340-271-0110(4)(B)(iv) and 340-271-0110(5)(B)(viii) to specify that emissions from an electric power generating plant are not covered under the CPP, *except where such emissions are not subject to regulation under HB 2021 or are not otherwise subject to more stringent emissions regulations than those established under HB 2021.*²⁰

4. Maximize Ambition and Integrity by Retiring Excess or Unused Compliance Instruments

Given the magnitude and urgency of the climate crisis, it is imperative DEQ takes every opportunity to maximize ambition and integrity under the program by retiring excess or unused compliance instruments. We support the draft rules' proposals to gradually reduce the number of compliance instruments deposited into and held within the compliance instrument reserve, and we appreciate that the draft rules allow DEQ to retire excess compliance instruments as the reserve shrinks. We also appreciate that the draft rules give DEQ discretion to retire any remaining compliance instruments held by entities that cease to be covered fuel suppliers. We also recognize that as the applicability threshold for non-natural gas fuel suppliers declines over time, DEQ may need to distribute compliance instruments from the reserve to new fuel suppliers that trigger the declining emissions threshold. However, we are concerned that the draft rules also give DEQ discretion to redistribute

¹⁶ ORS § 469.503.

¹⁷ This is somewhat analogous to the regulatory framework for motor vehicle emissions. Section 209 of the Clean Air Act gives EPA exclusive authority to set emissions standards for new vehicles and engines that apply to vehicle manufacturers, while retaining states' authority to regulate in-use emissions from vehicles operating within the states.

¹⁸ ORS § 469.401(2).

¹⁹ *Id.*

²⁰ The Oregon Legislature adopted clean energy targets for retail electricity providers, including electric companies and electricity service suppliers, under section (3)(1) of HB 2021.

compliance instruments to existing covered fuel suppliers as the reserve size decreases, or redistribute compliance instruments from entities that cease to be covered fuel suppliers.²¹ If DEQ chooses to exercise this authority and redistribute excess or unused compliance instruments to existing covered fuel suppliers, it could delay or deter emissions reductions and weaken the integrity of the program.

We understand that under very limited, extreme scenarios, compliance instrument redistribution may be necessary to protect equity under the program.²² Under these scenarios, however, any redistribution should be limited in scope (either geographic or otherwise) to the degree necessary to prevent equity impacts. The draft rules' proposal to redistribute compliance instruments to each covered fuel supplier based on their total emissions profiles would fail to protect equity and could undermine the integrity of the program. We therefore urge DEQ to revise the draft rules to 1) only permit the redistribution of compliance instruments if necessary to support equity and prevent harms to identifiable environmental justice communities, and 2) limit the redistribution to the degree necessary to mitigate equity impacts. We encourage DEQ to establish additional parameters and eligibility requirements for the redistribution of excess compliance instruments from the reserve account. For example, to be eligible to receive redistributed compliance instruments, fuel suppliers could be required to demonstrate that they have implemented emissions reduction plans, fair and responsible labor standards, and diversity, equity, and inclusion policies. The rules should also prohibit compliance instruments from being redistributed to fuel suppliers that cause or contribute to air pollution that threatens public health in environmental justice communities.

5. Promote Just and Equitable Community Climate Investments

We support the proposed Community Climate Investments (CCI) program and its expressed purposes to reduce anthropogenic emissions of GHGs and other co-pollutants, promote benefits for environmental justice communities, and accelerate the transition away from fossil fuels. We strongly agree with the draft rules' proposal to prioritize CCI projects that achieve significant GHG emissions reductions, reduce co-pollutant emissions, and benefit environmental justice communities. DEQ's proposal that CCI projects achieve one-to-one GHG emissions reductions on an aggregate basis, rather than a project-by-project basis, is a reasonable approach to ensuring that CCI projects achieve the dual objectives of reducing emissions and benefiting impacted communities. We also want to express our strong support for the requirement that CCI projects reduce anthropogenic GHG emissions. The science is clear that massive reductions in fossil fuel emissions are necessary to prevent catastrophic climate change, and the CCI program provides a mechanism for reducing anthropogenic emissions while also supporting a just and equitable energy transition in Oregon.

We appreciate that the proposed CCI entity eligibility criteria prevent covered fuel suppliers from serving as CCI entities or CCI subcontractors, or from receiving CCI funds. These provisions will help minimize potential conflicts of interest between CCI entities and covered fuel suppliers and help ensure that CCI projects benefit communities, rather than regulated entities. Moreover, because the proposed rules do not prohibit covered fuel suppliers from independently investing in CCI-like

²¹ Draft CPP Rules §§ 340-271-0130(1)(f)(B), 340-271-0420(3)(c), 340-271-0430(3)(b)(B).

²² For example, if a rural environmental justice community is only served by two covered fuel suppliers, and one fuel supplier chooses to leave the market, the remaining fuel supplier may lack sufficient compliance instruments to meet community needs.

projects, fuel suppliers may ultimately choose to replicate successful CCI projects through their own compliance strategies.

While we agree that the CCI rules should prevent covered fuel suppliers from exerting influence over the use of CCI funds, and particularly over where and how these funds are spent, we have some concerns about the proposal to require covered fuel suppliers to contribute equal CCI funds to every approved CCI entity. Oregon's environmental justice communities have diverse populations and unique needs and opportunities, and CCI entities serving these communities will have varying resource needs and capacities. A one-size-fits-all approach to distributing CCI funds could potentially discourage small yet effective organizations from participating in the CCI program, and could prevent larger CCI entities from securing sufficient funds to meet the needs of their communities.

We agree that the CCI rules should include objective criteria to ensure that funds are fairly and equitably allocated to CCI entities across the state. However, we are concerned that *equal* distribution of CCI funds may not achieve the most fair and equitable outcomes. We encourage DEQ to consider alternative criteria for allocating funds that will support successful implementation of CCI projects in differently situated communities. One option would be to categorize CCI entities into tiers based on the size of their respective budgets, capacities, and/or project proposals, and apply a funding multiplier for higher-tiered entities. Under this approach, the rules could allow CCI entities to request re-categorization if their budgets, capacities, project funding needs increase or decrease over time. We encourage DEQ to develop a more right-sized approach for allocating CCI funds that will better support successful deployment of projects that achieve just and equitable emissions reductions across Oregon.

6. Retain Existing Focus on Reducing Anthropogenic Emissions

We appreciate the draft rules' focus on reducing anthropogenic GHG emissions in Oregon, and we strongly support DEQ's decision to exclude carbon sequestration offsets from the CCI program and the broader CPP framework. While biogenic carbon sequestration is an essential process for drawing down historical GHG emissions from the atmosphere, in the cap-and-trade context, carbon offsets delay reductions in fossil fuel emissions and have the potential to contribute to climate change.²³ Research indicates that forest carbon offsets have caused GHG emissions to increase under California's cap-and-trade program; the state has issued an estimated 20 million to 39 million credits that failed to offset carbon emissions.²⁴

Due to the potential for carbon sequestration offsets to delay climate progress or even contribute to climate change, carbon offsets are an inappropriate mechanism for demonstrating compliance with the CPP, and sequestration projects should not be eligible for CCI credits under the program. However, we recognize that biogenic carbon sequestration is an essential mechanism for drawing

²³ We discussed the risks and uncertainties associated with carbon sequestration offsets in greater detail in our comments on the seventh meeting of the CPP's rulemaking advisory committee. Green Energy Institute Comments on Climate Protection Program Rulemaking Advisory Committee Meeting Number 7, July 16, 2021, <https://law.lclark.edu/live/files/32247-geis-comments-on-cpp-rac-7>.

²⁴ Lisa Song & James Temple, *The Climate Solution Actually Adding Millions of Tons of CO2 Into the Atmosphere*, PROPUBLICA.ORG (April 29, 2021), <https://www.propublica.org/article/the-climate-solution-actually-adding-millions-of-tons-of-co2-into-the-atmosphere>.

down atmospheric carbon concentrations, and we support efforts to increase carbon sequestration through other state and private programs. We encourage DEQ to collaborate with other agencies and stakeholders to explore opportunities to increase carbon sequestration on Oregon's public and working lands. We also encourage DEQ to monitor biogenic carbon emissions resulting from wildfires and other climate events. If these emissions continue to increase at current rates, DEQ should consider lowering the CPP's interim or final emissions targets to help mitigate the rise in biogenic carbon emissions.

Climate change represents an urgent and growing crisis in Oregon, and the CPP will provide the state with an important tool to reduce emissions from the transportation, building, and industrial sectors. The CPP also has strong potential to support economic growth in Oregon, particularly within industries and sectors that design, produce or install technologies and equipment that support the clean energy transition. Oregon's transition to a decarbonized economy will create jobs and economic opportunity, and will benefit public health and wellbeing by reducing air pollution caused by the combustion of fossil fuels in vehicles and buildings. Strong and ambitious CPP rules that are effectively implemented and enforced will support a just and equitable energy transition in Oregon. We strongly encourage DEQ to strengthen the CPP draft rules to maximize ambition, preserve integrity, and protect and support equity through the requirements and implementation of the program. We appreciate your consideration of our comments and recommendations.

Sincerely,

Melissa Powers
Jeffrey Bain Faculty Scholar & Professor of Law
Faculty Director, Green Energy Institute at Lewis & Clark Law School

Amy Schlusser
Staff Attorney, Green Energy Institute at Lewis & Clark Law School

Carra Sahler
Staff Attorney, Green Energy Institute at Lewis & Clark Law School