

Southern Oregon Climate Action Now

SOCAN

Confronting Climate Change

<https://socan.eco>

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SOCAN Comments on RAC 6

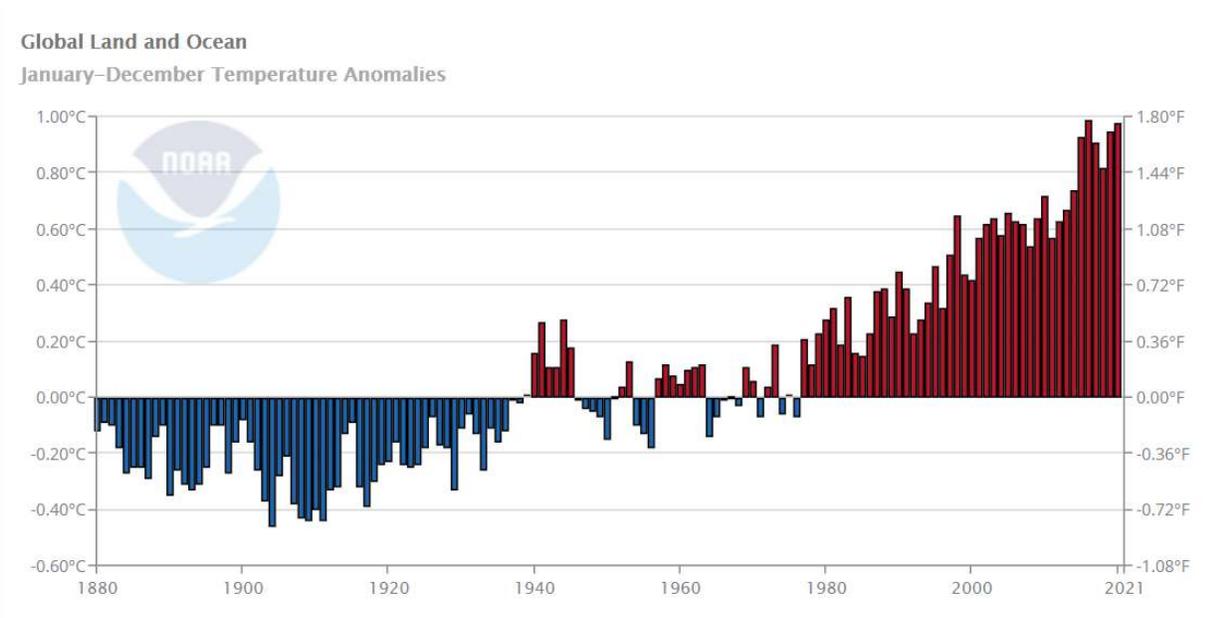
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Colleagues:

Once again, I write on behalf of Southern Oregon Climate Action Now, an organization of some 1500 rural southern Oregonians concerned about global warming and its climate chaos consequences to express opinions about the developing Climate Protection Program. SOCAN's mission is to promote awareness about the science of global warming and its climate change consequences and motivate individual and collective action to address the problem.

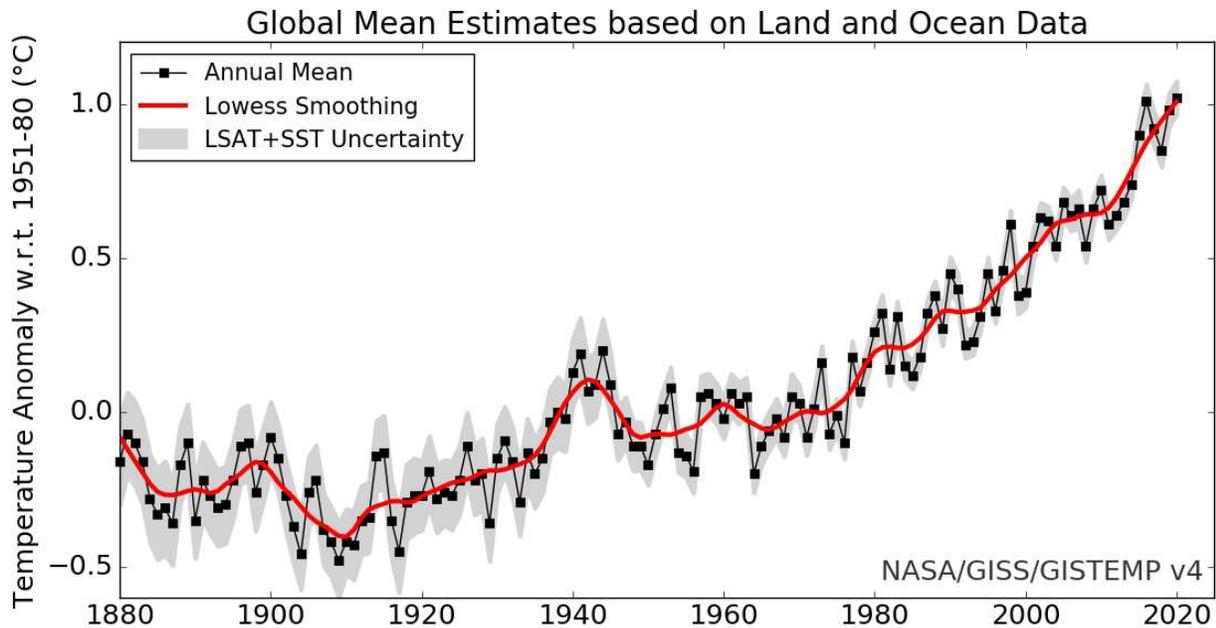
The Urgency:



As the NOAA National Center for Environmental Information reports, through this year 20 of the 21 hottest years on record have occurred this century with the 21st

occurring in 1998. Meanwhile, the 9 hottest years have all occurred since 2010 with 2011 and 2012 close behind. The baseline is 1901-2000. (<https://www.ncdc.noaa.gov/cag/global/time-series>).

Meanwhile, NASA data through 2020 reveal that 18 of the 20 hottest years have occurred this century, again with 1998 appearing as the 19th. The baseline is 1951-1980 (https://data.giss.nasa.gov/gistemp/graphs/graph_data/Global_Mean_Estimates_based_on_La

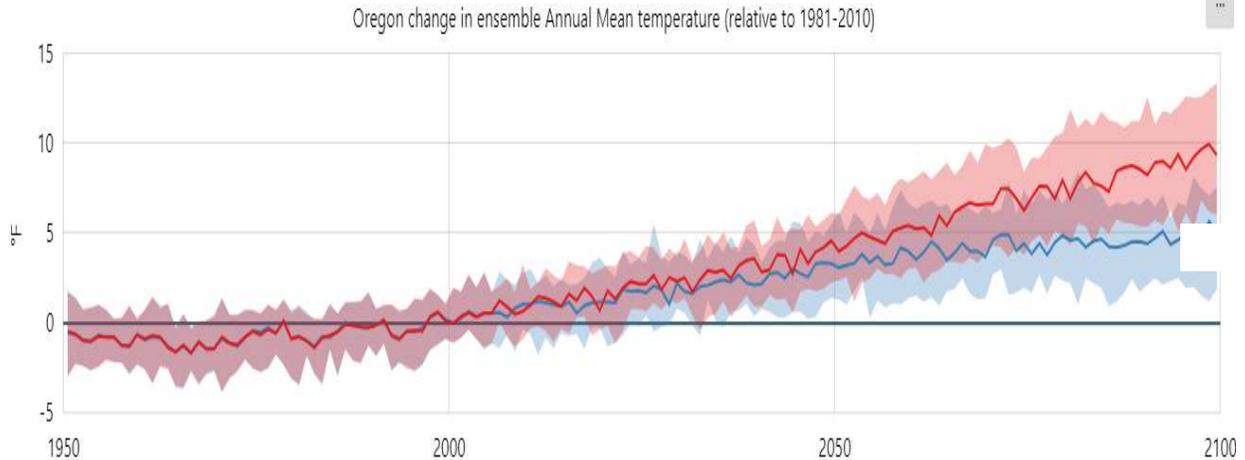


[nd and Ocean Data/graph.png](#)).

Can anyone familiar with the data doubt that this represents a real trend where warming has already reached one degree Celsius (1.8 degrees Fahrenheit) above the respective baseline.

If we now look at future projections for Oregon using the USGS models, we find that the trajectory we are currently following comprises Representative Concentration Pathway 8.5 - often described as the 'Worst Case Scenario' or the 'Business as Usual' scenario simply because that is the trajectory we are following as collectively we undertake few serious efforts to address the problem.

Notice that the USGS data are in Fahrenheit (1°C = 1.8°F). Thus, the historical trend in Oregon (to 2020) is entirely consistent with global values reported from NOAA and NASA.

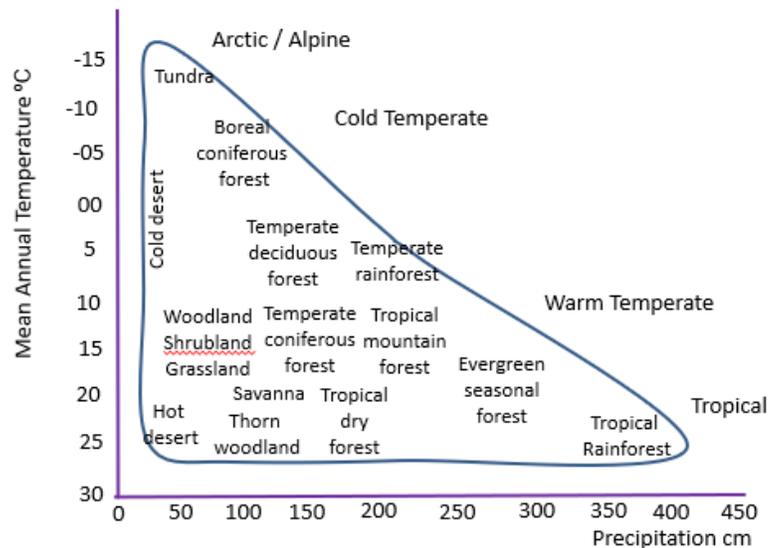


(http://regclim.coas.oregonstate.edu/nccv2/maca2/maca2_counties.html).

That this trajectory will be disastrous if we follow it can be seen from the chart below depicting how climatic conditions determine the global distribution of natural ecosystems (as modified from R.H. Whittaker, 1975)

The point is that climate determines the suitability of any location for the kind of floral and faunal associations existing. A shift in local climatic conditions of the dimensions depicted in the USGS trajectory for Oregon, which is typical of future trends throughout the world, will disrupt these systems to the

Natural Ecosystems and Climate



point of threatening their future existence. Regrettably, these communities cannot simply adjust their range to wherever climate is suitable, they are limited in their capacity to adjust by the ability of propagules (seeds) to disperse. Unfortunately, the current rate of climate change exceeds both the capacity of species to evolve to accommodate climatic changes or disperse to track climatic changes geographically. Indeed, 'climate envelopes' developed by Rehfedlt and his team at the Rocky Mountain Research Station in Idaho and maintained by Crookston (2021) (<http://charcoal.cnre.vt.edu/climate/species/>) use the recent distribution of western tree species in relation to climatic conditions and project these conditions into the future. These

assessments reveal that absent our reversing the trend in atmospheric greenhouse gas concentrations we may render the state inhospitable to several species (Sitka spruce, Engelmann spruce, Lodgepole pine, Subalpine fir, and Western juniper) while compromising the viability of others throughout much of their current range (Douglas fir, Ponderosa pine, White fir, Pacific madrone, Western hemlock, Western larch, and Western redcedar). Meanwhile, sub-optimal conditions for California black oak and Oregon white oak will likely prevail. In short, absent action to address the climate crisis, the forests and other natural ecosystems of the state, upon which many Oregonians rely for their recreation, spiritual retreat, and commerce, will likely be severely compromised.

Oregonians who are not concerned about these systems should be aware not only that these ecosystems provide our drinking water but that exactly the same variables influence our fisheries and agricultural activities. Thus, in addition to threatening our natural systems, the climate crisis threatens food supply. While it is critical always to compare the cost of action to the cost of inaction, placing a cost on the destruction of our food supplies is problematic at best.

It is the potential impact of rapid climate change on our natural systems that raises alarm about the climate crisis among many ecologists. It demands that we urge upon governments immediate action to reverse the cause of the crisis.

It is this urgency that has persuaded many of us to engage in statewide and federal efforts that persuade legislators to establish programs producing meaningful atmospheric greenhouse gas concentration reductions whether through emissions reductions or sequestration. It has also persuaded us to engage with the Oregon state agencies to ensure that Governor Kate Brown's Executive Order 20-04 results in a meaningful Oregon Climate Action Plan.

Over the years, we have been substantially disappointed that some state and federal legislators have failed to heed the urgency and have seemed more committed to thwarting meaningful action and leading the state, nation, and planet onwards toward the climate precipice than to addressing the crisis. As we have engaged in agency efforts to develop a meaningful Climate Action Plan, in this case a Climate Protection Program, it is equally disappointing to see so many members of the Rulemaking Advisory Committee **voicing** sympathy for climate action but **negating that voiced concern** either by arguing that the program should not require their industry to reduce emissions or by promoting bogus solutions. Those of us who are concerned about the future of life on the planet, especially as the future will confront our children and grand-children, should cease our ongoing effort to undermine the Climate Protection Program and recognize that we must embrace the goals of the Executive Order enthusiastically.

In the same vein, we urge the Department of Environmental Quality to resist the pressure imposed on them to develop a program riven with exclusions and exemptions to the point that mathematically there is no possibility that the program being developed can achieve even the minimal goals established in the Executive Order. Since the current science tells us clearly that

we must achieve net zero greenhouse gas emissions by 2050, and accompany this by substantial reductions in the concentration of greenhouse gases already in the atmosphere, it is critical that Oregon's Climate Action Plan should achieve at least the EO goals.

Frankly, over the months of RAC meetings, it seems to me that we have been focusing our attention more on re-arranging the deckchairs on this Titanic than on taking hold of the wheel and steering the ship away from the looming iceberg.

It is with this backdrop in mind, that I offer the following comments on RAC 6.

As I have remarked previously, when DEQ embarked on the process of developing a Cap and Reduce now Climate Protection Program, I was very excited by the energy and enthusiasm that was brought by DEQ staff to the initial workshops and townhalls. I realize that developing a program as complex as this Climate Protection Program is difficult, but since the RAC was established and its meetings unfolded, this initial enthusiasm has gradually been crushed. Problems started with the proposed structure of the RAC, which lacked any science expertise and was clearly loaded to serve the very industries that are the reason we need a program, the very industries that failed to follow the trajectory of emissions reductions proposed in the voluntary 2007 program established by HB3543. The same industries contributed to undermining every legislative proposal that has been developed. Little surprise, then, that the program that is being developed suffers from an excess of exemptions and exclusions designed to protect those same industries.

RAC 6 Discussion:

Before addressing the items as discussed, I would like to start by expressing appreciation for the recognition by DEQ of the need to include carbon sequestration among the projects accepted under the Community Climate Investment program.

I confess that given the frequency with which this subject has been raised (by me and many others), I was surprised to see the following draft wording:

340-271-0950

Community Climate Investment Projects

DEQ may approve community climate investment projects that are eligible to be funded with CCI funds. (1) To be eligible for DEQ approval, projects must:

(a) Be located in Oregon; and

(b) Reduce greenhouse gas emissions.

The draft language is unmistakable in that it clearly would preclude atmospheric GHG sequestration projects. As was discussed during RAC 6, this is unfortunate since Section 12, p 13 of the EO specifically charges OGWC to coordinate development of a proposal for promoting "carbon sequestration and storage by Oregon's natural and working lands, based on best

available science.” This will likely require investment funds from the CCI. I suggest the simplest solution is to add an item as follows:

“(c) Sequester greenhouse gases from the atmosphere.”

Although the EO states ‘sequester and store,’ in my opinion the term ‘store’ is redundant since, in this context, ‘sequester’ conventionally means ‘capture and store.’ However, for those needing both terms, it may be appropriate to include them as.

“(c) Sequester and store greenhouse gases from the atmosphere.”

We appreciate DEQ recognizing this error and committing to correct it.

Draft Rules - Statutory/Other Authority: Statutes/Other Implemented:

I have no comments on p 1 through p 4.

Statutory/Other Authority:

Statutes/Other Implemented:

340-271-0110

Covered Entity and Covered Emissions Applicability

340-271-0110 Covered Entity and Covered Emissions Applicability

p. 5 (1) For a person required to register and report in OAR chapter 340, division 215, DEQ may base applicability determinations on emissions data and information in emissions data reports required according to OAR chapter 340, division 215, which may be subject to verification according to OAR chapter 340 division 272.

(2) A covered entity is subject to the requirements of this division for its covered emissions described in this rule. A person remains a covered entity until cessation is met according to OAR 340-271-0130.

(3) A person is a covered fuel supplier if the person is described below in subsection (a) and has annual covered emissions described in subsection (b) that equal or exceed 200,000 MTCO_{2e} in 2018 or any subsequent calendar year, unless the person has met the cessation requirements according to OAR 340-271-0130. All persons that are related entities must aggregate their emissions together to determine applicability.

The threshold for inclusion in the program of 200,000 MT is entirely too high since it exempts a substantial percentage of emissions. As I noted in a previous submission, according to 2019 emissions data, this exemption, combined with the electricity sector exclusion, means the program has already exceeded the emissions goal designated in the EO.

If fuel suppliers respond by reducing their emissions, they will all drop below 200,000 MMT and thus achieve exemption. As a result, fossil fuels in Oregon - the largest source of registered emissions - will no longer be covered by the program. This seems perverse.

If DEQ insists on starting with a 200,000 threshold, I suggest that this be lowered as the program unfolds at some rate that reflects the overall cap trajectory. This would have the added advantage of encouraging fuel suppliers below the threshold to lower their emissions, a behavior not stimulated if the cap remains at 200,000 MT throughout the duration of the program.

p. 6. (A) *Covered emissions include emissions of anthropogenic greenhouse gases in metric tons of CO₂e that would result from the complete combustion or oxidation of the annual quantity of propane and liquid fuels (including for example and without limitation, gasoline and petroleum products) imported, sold, or distributed for use in this state.*

As I have stated in previous RAC comments, restricting covered emissions to those resulting from the complete combustion of fuels represents an arbitrary and inappropriate gift to the fuel industry. This not only excludes the fugitive emissions that are the inevitable consequence of fossil fuel extraction, processing, and transmission / transport, but also the emissions resulting from the manufacture of fuels (biofuels, RNG) that are themselves exempt at combustion. Finally, this excludes coverage of accidental emissions resulting from such events as the 2015 Aliso Canyon / Porter Ranch leak of methane that resulted in hundreds of thousands of metric tons of methane escaping. The decision to focus only on combustion emissions means that DEQ has immediately compromised the program in the service of energy corporations who are contributing substantially to the problem. It may be easier to limit the program to these emissions, but the EO does not charge DEQ to ‘do what is easy;’ it charges the agency to reduce emissions to achieve a specified goal.

p. 6. (B) (i) *Covered emissions do not include:*

(i) Emissions that are from the combustion of biomass-derived fuels including biomethane;

(ii) Emissions that are fugitive emissions;

(iii) Emissions from natural gas delivered to an air contamination source that has an applicable code of 221112 in the 2017 North American Industry Classification System.

It is naïve to develop a program that focuses only on combustion emissions and excludes biomass-derived fuels including methane (i.e. RNG) since this also excludes the full lifecycle emissions resulting from the production of these non-fossil fuels. When such emissions are included, it becomes very clear that biomass and RNG are not the zero-emissions fuels proponents tout them to be. Indeed, there is abundant evidence suggesting that when full lifecycle emissions are accounted fossil gas becomes as bad as coal in terms of its greenhouse gas impact (<https://socan.eco/fossil-gas/>). DEQ should not develop a program that endorses the falsehood that biofuels and RNG are zero-emissions fuels. A program that focuses only on combustion emissions, ignoring all the rest, will inevitably fail to achieve meaningful emissions reduction targets.

Finally, and as has consistently been argued, the commitment by DEQ to exempt the electricity sector completely (code 221112) from the program casts such a shadow over the entire effort as to compromise that effort substantially. As I have argued previously, using 2019 data, this simple exemption leaves at least 10.8 MMT of emissions outside the program due to generation of electricity in-state from fossil gas power plants. Of course, the fossil gas industry, which continues the campaign of distortion it has waged for years with claims that its product is 'the clean fossil fuel,' will gleefully accept this rulemaking feature.

It is even more unreasonable to perpetuate the distortion that the gas industry now offers with its proposed remedy of RNG. Conveniently for them, this has been mistakenly defined as a net zero emissions fuel but only because the emissions from its manufacture are ignored. This distortion is compounded by the claim that fossil gas will be replaced in the pipelines by RNG to an extent that the Department of Energy has clearly argued is impossible. Even if we were to accept the false claim that RNG is a net zero emissions energy source, the reality seems to be that there is insufficient capacity of this product to replace fossil gas to the extent the gas industry claims. Rather, that limited supply should be reserved for specialized needs.

The 2021 legislative proposal HB 2021 may serve to remedy the electricity exemption error, but a program developed by the agencies should not assume passage of such a bill when climate legislation has been thwarted by a legislator walk-out so many times in the recent past. What DEQ should do is simply include electricity generation plants in the program as the stationary sources they are. Then, if HB 2021 becomes law, DEQ could restore the exclusion it has proposed.

RAC 6 Agenda Sequence:

The Draft Rules - Community Climate Investments

See discussion of **340-271-0950** above

340-271-0810

Covered Fuel Supplier Application for Community Climate Investment Credits

p.28 (1) A covered fuel supplier may apply to receive CCI credits by submitting an application to DEQ, on a form approved by DEQ, that includes the information in section (2). A covered fuel supplier may not submit an application to request CCI credits on behalf of another person. (2) The application to request CCI credits from DEQ must include:

There seems to be no requirements imposed on the fuel supplier before applying that would make the entity eligible. One would expect, for example, that eligibility to participate in the CCI would require demonstration of achieving some emissions reductions.

340-271-0820

Generation and Distribution of Community Climate Investment Credits

p.29 (1) DEQ will review an application submitted according to OAR 340-271-0810 to ensure that it meets the requirements of that rule. DEQ will inform the applicant either that the submitted application is complete or that additional specific information is required to make the application complete. If DEQ determines that the application is incomplete, DEQ will not consider the application further until the applicant provides the additional information requested by DEQ. (2) DEQ will approve an application for CCI credits submitted by a covered fuel supplier if DEQ has determined that the application is accurate and complete.

The form described and the DEQ response seem to require no justification for why an entity might seek Alternative Compliance Instruments, nor any prerequisite. The implication that seems to follow from this is that any covered entity is eligible to apply for CCI credits without having to demonstrate either that it has made a good faith effort to reduce GHG emissions first, or that it needs such credits and carbon sequestration projects in order to achieve the allowable capped emissions designated by its compliance obligation. Thus, any covered entity seems perfectly able to purchase the maximum number of credits available and bank these to cover future cycles when reducing emissions may be more difficult. This clearly compromises the entire point of the program which is to reduce emissions. While Community Compliance Investments can serve a wide array of valuable services both in the realm of promoting emissions reduction and carbon sequestration projects and promoting community ventures that serve equity and social justice goals, such investments should be secondary to the primary goal of reducing covered entity emissions. Thus, before being granted eligibility to participate in the CCI program, covered entities should be required to demonstrate maximum emissions reduction effort and the need for such credits.

p. 30. (B) In a compliance period, DEQ will not generate nor distribute more CCI credits to a covered fuel supplier than half the number of compliance instruments DEQ has distributed to the covered fuel supplier in that same compliance period according to OAR 340-271-0420; and

p. 23. (3) To demonstrate compliance, a covered fuel supplier must submit the following to DEQ:(a) For each metric ton of a compliance obligation, submit either a compliance instrument or a CCI credit, provided that the covered fuel supplier may not submit more CCI credits than twenty percent of the compliance obligation;

As stated, a polluter can buy CCIs up to 50% of their compliance obligation but use no more than 20% in any given year. This clearly encourages up-front purchase and hoarding of CCI credits. Thus, polluters can use CCIs purchased early to circumvent emissions reductions later. This compromises the program. I suggest reducing the maximum purchase allowance to a number equal to or closer to the submission allowance and making any credits banked diminish in value over time.

340-271-0830

Holding Community Climate Investment Credits

p. 30. *When DEQ distributes a credit to a covered fuel supplier according to OAR 340-271-0820, the covered fuel supplier may continue to hold the credit until either of the following apply:*

(1) The covered fuel supplier uses the credit toward demonstrating compliance with a compliance obligation according to OAR 340-271-0510; or...

This specific rule encourages early application for CCI credits and hoarding. To discourage hoarding of cheap early credits, which will compromise the program's ability to achieve reductions during later years, I suggest that these credits either have a defined life and/or diminishing value.

340-271-0910

Application for DEQ Approval as a Community Climate Investment Entity

p. 31 *(1) To be eligible for DEQ approval as a community climate investment entity, a nonprofit organization must:*

(a) Be an organization exempt from federal taxation according to Section 501(c)(3) of the U.S. Internal Revenue Code, 26 U.S.C. § 501(c)(3); and

(b) Complete annual independent financial audits.

This entire section is confusing. I initially inferred that the Community Compliance Investment Entity is the entity engaged in the project but now interpret this to be the entity that accepts funds from covered entities and disburses them to project managers. In checking the definitions, I see:

"Community climate investment entity" or "CCI entity" means a nonprofit organization that has been approved by DEQ according to OAR 340-271-0920 to implement projects using community climate investment funds."

This adds no clarity since it could refer either to the project manager who undertakes (implements) a project, or the entity providing funds to (thus implementing) the project manager.

I understand that the entire BETC event has probably caused DEQ to adopt a cautious approach here. However, since there are already commercial entities engaged in promoting carbon sequestration (e.g. NORI), it would seem illogical to reject that expertise. The requirement that the CCI entity be a 501(C)(3) seems unreasonably confining. Indeed, it seemingly places a requirement on the program that discourages expertise and encourages novice entities with no expertise to try to establish themselves as CCI entities. This could generate a scandal that dwarfs the BETC debacle. I suggest that this section be reworked to focus on requiring CCI entities to be able to demonstrate appropriate expertise and exhibit a track record that suggest they are capable.

p 32. (c) *A description of each of the types of projects that the nonprofit organization will implement and how those projects meet the requirements of OAR 340-271-0950. The description must identify the communities that would benefit from the project(s), including description of the potential locations of communities in which projects may be implemented. The description must also describe any ways the project(s) would benefit communities that are disproportionately burdened by climate change, air contamination, energy costs, or any combination of these;*

This adds to the confusion regarding what a CCI entity is. I suggest that the term ‘implement’ as it is here used should be ‘fund.’ In my judgment, it is the project manager who implements a project while the CCI entity merely ‘funds’ it.

340-271-0920

DEQ Review and Approval of Community Climate Investment Entities

This section seems not to require that a CCI entity applicant demonstrates any expertise in the arena of promoting appropriate projects.

340-271-0930

Requirements for Community Climate Investment Entities

p. 35. (4) (a) *A description of each known DEQ-approved project or project type with anticipated activities that will occur in that year including but not limited to plans for initiation, implementation, and completion, and the anticipated date of project completion whether it is anticipated for that calendar year or a future calendar year;*

This section uses the word ‘implementation’ in the sense that it should be used, i.e. it’s the project manager who is implementing, the CCI entity is merely ‘funding.’ Maybe the Community Climate Investment entity should be renamed ‘the Community Climate Investment Coordinator or Manager.’

I am looking for a statement about who actually monitors the projects to ensure that projects meet criteria that ensure they are not a sham and do not generate social injustice outcomes. Is there any guarantee that the CCI entity personnel have the skills and capacity to undertake this assessment?

340-271-0950

Community Climate Investment Projects

The omission of carbon sequestration projects was discussed above

This section contains no identification of the requirements listed for such projects. It is critical that such projects and those applying to invest in them, meet certain requirements:

- 1) To be eligible for these investments, polluting entities should not be permitted to apply for Community Climate Investment credits:

- a. unless they have already installed the best available technology (BAER) for reducing emissions or have solid plans for undertaking such installation,
- b. that allow them to continue releasing co-pollutants that undermine the air quality and health of neighboring communities whether or not such emissions compromise the air quality attainment status of such communities.

Meanwhile, acceptable sequestration projects must:

- a. be third-party certified as achieving carbon sequestration that is real, measurable, additional, long-lived, monitored and verifiable. The concept of 'permanent' is difficult in the case of carbon sequestration on our natural and working lands since the carbon in forests and farms is in constant though slow flux through the system. Rather than demanding that the carbon should be permanently locked, as in a vault, we should expect that the overall carbon content of a system increases as individual carbon atoms flow through them much more slowly than previously.
- b. not allow leakage of the sequestered carbon in other projects. For example, forest carbon sequestration projects cannot be compensated by activities elsewhere under the ownership of the project manager that result in an increase in emissions similar to or greater than the carbon sequestered.
- c. not generate conditions that compromise equity and social justice.

340-271-0960

Equity Advisory Committee

While it is entirely reasonable to appoint such a committee to evaluate the social justice components of potential projects, there seems no mechanism for assessing the greenhouse gas reduction components of potential projects. These should require Third Party assessment by a credible source.

340-271-1000

Program Review

p. 39. (1) *DEQ will report to the EQC on implementation of the Climate Protection Program. DEQ will submit the first report within five years of the date of the adoption of this division and will submit a subsequent report at least once every five years.*

Since the proposed compliance cycle is three years, it seems illogical to propose a five-year review cycle for the Climate Protection Program itself. This should be reduced to be consistent with the three-year compliance period. The proposed cycle defines the review as occurring between compliance deadlines, thus would necessarily contain inadequate data. To allow complete data acquisition, it might be reasonable to schedule this as starting and repeating every three years but one year after each three-year compliance period ends.

The Modeling policy scenarios results review and discussion -

It is notable that the 2010 GHG emissions of 64.9 MMT represent an increase of over 11% from the 1990 emissions of 58.1 MMT depicted in Reference Case Slide 7. Meanwhile, the average 2017-2019 emissions of 64.34 MMT reported in the excel data sheet represent an 11% increase over 1990. The claim offered by Nicole Singh that the 2017-2019 average is not much different from 1990 is questionable at best. It remains curious to me that the data legend reports GHG emissions from electricity consumption when, in fact, consumption of electricity results in zero emissions; it's the generation of the electricity that produces emissions. This error, however, is consistent with the equally unfortunate error of designating biofuel and RNG as zero emissions energy sources when emissions clearly result from their manufacture.

Probably the most troubling issue raised by the modeling is what it reveals about the developing Climate Protection Program. In particular, I note from the excel sheets that the Reference Case Regulated emissions for 2025 are 64.8 MMT whereas the graphed Regulated emissions for Policy scenarios 1 and 2 are 31.7 MMT, while for Policy scenario 3 the total is 30.7. These reported data respectively leave 33.4 (Scenario 1), 32.4 (Scenario 2) and 33.7 (Scenario 3) emissions, in all cases a majority of emissions, unregulated. Then, by 2050, Scenario 1 results in 22 MMT of emissions from the regulated emitters with the total emissions contribution standing at 35.9 MMT. Compared to 1990, this results in emissions reductions of 38.2%. Meanwhile, for Scenario 2, the equivalent values for 2050 are again 22 MMT of emissions from regulated emitters with total emissions of 34.5 and an overall reduction of 40.6%. Finally, for Scenario 3, the values are 21 MMT of regulated sector emissions, in a total of 35.8 MMT for a reduction of 38.3%. Notice also that in all three scenarios, emissions from industrial processes climb from 2.2 to 3.3 MMT. Not only do none of the scenarios approach the target of 'at least 80% below 1990 by 2050' stipulated in the Executive Order, but emissions from industry are projected to rise. Meanwhile, emissions from the electricity sector drop around 2030 presumably as a result of the coal to clean program imposed by SB1547 in 2016.

In addition, discussions of the model assumptions have underlined that the focus is solely on combustion emissions and underlined the failure of the developing program to assess full lifecycle emissions. This flaw creates an unreasonably favorable impression of fossil gas and allows biofuels and Renewable Natural Gas to pass through the filter untarnished. Additionally, biofuels and Renewable Natural Gas are accorded a free pass leaving emissions which occur in their production unaccounted.

It remains unclear why the models allow RNG to play a role in the future energy economy. This is because the Department of Energy 2018 study (<https://www.oregon.gov/energy/Data-and-Reports/Documents/2018-RNG-Inventory-Report.pdf>) of RNG capacity in Oregon indicates the assertion that RNG can replace a substantial proportion of fossil gas is completely unrealistic. This alone raises substantial questions about the legitimacy of model assumptions and the credibility of conclusions.

It is disappointing that DEQ staff seem to have paid little attention to what the models show about the failure of the proposed program scenarios to achieve the EO goal.

The Draft Rules - Stationary Sources

Statutory/Other Authority: Statutes/Other Implemented: 340-271-0110 Covered Entity and Covered Emissions Applicability

p. 7. (B) Covered emissions do not include:

- (i) Emissions that are from the combustion of biomass-derived fuels including, for example and without limitation, biomethane and woody biomass;*
- (ii) Biogenic CO₂ emissions from solid fuels including, for example and without limitation, tires and municipal solid waste;*
- (iii) Emissions that are from the combustion of liquid fuels or propane;*
- (iv) Emissions accounted for through the regulation of a covered fuel supplier described in section (4);*
- (v) Emissions that are fugitive emissions;*
- (vi) Emissions described in 40 CFR part 98 subpart HH – Municipal Solid Waste Landfills;*
- (vii) Emissions described in 40 CFR part 98 subpart TT – Industrial Waste Landfills;*
- (viii) Emissions from an air contamination source that is owned or operated by an interstate pipeline; and*
- (ix) Emissions from an air contamination source that has an applicable code of 221112 in the 2017 North American Industry Classification System.*

Again, we see that DEQ proposes an exclusion for fuels derived from biomass as though these are benign when we know that many biofuels contribute more to the problem than fossil fuels. Additionally, ignoring the substantial emissions resulting from their manufacture unreasonably loads the scale in their favor. By affording such fuels an exemption, and eliminating consideration of full lifecycle (i.e. upstream) emissions, DEQ seems to undermine its own program in the service of corporate profits.

The fugitive emissions exclusion suffers the same problems discussed above since it allows inevitable and accidental leaks to go unaccounted and unpenalized.

As has been argued time and again, DEQ has presented no justification for excluding stationary sources generating electricity. Indeed, in an early RAC meeting (RAC 2 Slide 11), the justification was provided as:

- Most fossil fuel electricity emissions are generated out of state
- Lack authority to regulate out of state emissions
- Regulating just in-state generation creates significant leakage risk.

But, as we can see from DEQ permit data, fully 10.8 MMT of emissions resulted from fossil gas generation in 2019. No data are provided on out-of-state emissions so it's impossible to judge the first bullet. While DEQ may lack authority to regulate out-of-state emissions, there has been presented no evidence to justify the claim that regulating these stationary sources would

comprise a leakage risk. The main problem caused by the fossil gas electricity generating facilities is that they are responsible for a huge volume of fugitive emissions of methane upstream. This is true whether they are in-state or out-of-state. DEQ should develop a program that reduces and totally eliminates fossil gas use rapidly and wherever possible. This means all in-state facilities using fossil gas should be included in the program.

It may be that HB2021 will solve this problem, but DEQ should not develop a program based on the assumption that legislation will pass. Rather, these entities should be included in the program. Then, if HB 2021 becomes law - which we will know before the end of June - they can be removed.

340-271-0310

Best Available Emissions Reduction Assessments for Covered Stationary Sources

p. 12. *(1) Requirement to conduct a BAER assessment.*

(a) When notified in writing by DEQ, the owner or operator of a covered stationary source described in OAR 340-271-0110(5)(a)(A) must conduct a BAER assessment according to this rule. The covered stationary source must submit a complete BAER assessment to DEQ not later than one year following the date of DEQ's notice, unless DEQ has identified a later deadline in its notice or DEQ approves an extension according to section (6).

(b) The owner or operator of a covered stationary source described in OAR 340-271-0110 (5)(a)(B) must submit a BAER assessment completed according to this rule with its application submitted under OAR chapter 340, division 216, or its notice of construction submitted under OAR chapter 340, division 210.

(2) BAER assessment requirements. BAER assessments submitted to DEQ must include all components identified in this section.

p. 14. *(4) Five-year review reports.*

(a) Not later than five years following the date that DEQ issued a BAER determination, a covered stationary source must submit to DEQ a five-year review report that includes the information described in subsections (2)(a) through (d).

(b) If a source identifies one or more new strategies in the five-year review report required under subsection (c) that it has not previously evaluated in a BAER assessment, DEQ may notify the source and require that it conduct a complete BAER assessment according to section (2) and submit it to DEQ. Such complete BAER assessment must also include:

As I have argued previously, this entire component presents problems:

- 1) It relies on the polluting stationary sources to self-report without any checks to assure honest and accurate reporting. Given the history of polluting entities in failing to meet the requirements of HB3543 (2007), a reality that has resulted in the state lagging far behind those reduction goals, the assumption that these polluters will approach this activity in good faith seems naïve. It would be better if DEQ were to require approved

third party assessment of these stationary sources and their incorporation of the Best Available Emissions Reduction options.

- 2) It compromises an essential element of efforts to promote GHG reductions in a free market system. Neither the GHG emissions tax nor the GHG emissions cap and (trade) reduce programs place the burden of determining how an entity reduces emissions on the agency. Rather, in the case of the tax approach, the government merely imposes the tax and leaves the entity to decide whether or how to reduce emissions. Meanwhile, the cap-and-trade approach places a limit on emissions, and again leaves decision-making on how to reduce emissions to the polluter.
- 3) This proposal requires that the DEQ become technically expert in what constitutes the BAER options for each entity, an expectation that will be challenged by the time and resources available to DEQ to achieve this expertise and undertake this assessment. Although (5) (p. 16) allows DEQ to seek advice from Third Party organizations, this is optional; it should be required at the expense of the polluter. The result of the proposed approach will undoubtedly be litigation where entities claim that DEQ is imposing overly rigorous expectations.
- 4) The five-year cycle for reporting means that once a stationary source has established that it has met the BAER requirement, it will have five years without any emissions reduction requirement. This compromises the purpose of the program as reducing emissions.

The solution to these problems is to keep stationary sources under the cap and reduce program but require that they demonstrate BAER before they are eligible to participate in the Community Climate Investment program and purchase CCI credits.

Review base cap and emissions reduction trajectory

It seems entirely reasonable to use the 2017-2019 average as the basis for computing the initial cap. However, the number of compliance instrument for 2022 must be below this value to induce covered entities to embark immediately on emissions reductions. Incorporating the 2035 interim target along with the 2080 goal is also critical. However, it is worth noting that, consistent with much of this discussion, the initial emissions value for 2022 is graphed and labeled as 28.1 MMT. As stated above, this leaves the majority of emissions, amounting to over 60 MMT, uncovered. Thus, suggesting that the program will reduce emissions to 80% or 90% of the 1990 emissions is absurd. We now even suspect that DEQ has pulled another shell game switch in adjusting the baseline from 2010 to 2022 even though emissions for the 2017-2019 period are some 11% above those for 1990.

The Draft Rules - Compliance Instrument Distribution

340-271-0420

Distribution of Compliance Instruments to Covered Fuel Suppliers

p. 19. (1) DEQ will distribute compliance instruments according to this rule.

(2) DEQ will establish a compliance instrument reserve according to subsection (3)(a) to hold a subset of compliance instruments from the caps identified in Table 1 in OAR 340-271-1300. Once a compliance instrument is placed in the reserve, it remains in the reserve until it is distributed according to section (4).

(3) Annual distribution of compliance instruments. DEQ will annually distribute compliance instruments as follows:

(A) DEQ will use the following formula to calculate the number of compliance instruments to distribute to each covered fuel supplier:

*Number of Compliance Instruments = Total compliance instruments to distribute * (Covered fuel supplier emissions / Total emissions)*

The equation used to compute the number of instruments distributed to a fuel supplier seems to offer perverse incentive to that entity to avoid reducing emissions where possible, since this will increase the number of instruments received the following year. While this might encourage an entity to purchase CCI credits to cover emissions, thus promoting projects that are beneficial, it would be better to establish a downward trajectory for instruments that continues regardless of the emissions produced. This would eliminate the incentive to reduce emissions as little as possible.

340-271-0430

Holding Compliance Instruments

p 21-22: (3) *The person has ceased being a covered fuel supplier according to OAR 340-271-0130.*

When this occurs, DEQ may:

(a) Retire the compliance instrument;

(b) Hold the compliance instrument in the compliance instrument reserve described in OAR 340-271-0420; or

(c) Redistribute the compliance instrument to a covered fuel supplier as described in paragraphs (A) and (B).

Since the purpose of this program is to reduce emissions, the only consistent option seems to be (a). Unfortunately, this would have the effect of encouraging, even more than otherwise, an entity to trade the unused allowance on the market before ceasing operations.

Enforcement:

To date, DEQ has offered no hint of how the cap reduction program would be enforced. This requires a discussion of penalties for a breach of the emissions compliance obligations. Without a sturdy and rigorous penalty, the entire Climate Protection Program becomes no more meaningful than the voluntary program imposed by HB3543 in 2007 which has been a conspicuous failure. The penalty should be imposed for every ton of CO₂e GHG emissions over the compliance obligation total submitted by a polluter. Furthermore, the penalty must be

substantially more than the price of Community Compliance Investment credits and sufficient to serve as a deterrent to a covered entity exceeding the cap. A penalty of 5 times the price of a CCI credit per ton seems like a reasonable starting point for consideration.

Program Review:

Since the mathematical evidence suggests that the Climate Protection Program as designed is unlikely to achieve greenhouse gas reductions consistent with the EO, DEQ should make it very clear that the program will be reviewed each cycle and may be adjusted such that it better establishes a trajectory likely to achieve the goals of the EO. As indicated above, I suggest a three year cycle repeating one year after each compliance period ends.

Impact of the exemptions and exclusions:

As the draft program has been developing, we have seen DEQ offer 'leanings' earlier, and now language that have increasingly added program exemptions and exclusions. This has occurred to such an extent that the program as drafted seems unlikely to achieve the goals established in the Executive Order. Rather than reiterating many previous comments, I refer the reader to the SOCAN website where SOCAN comments from RACs 1 - 6 are linked: <https://socan.eco/ocap/>.

In summary, the exclusion and exemption problems are:

Omitting the entire electricity sector generates an exclusion that alone could almost completely undermine the ability of the program to achieve EO goals.

Omitting fuel suppliers responsible for fewer than 200,000 MT of emissions especially combined with the above exclusion, further compromises EO goal achievement. Data from 2019 suggest these exclusions combined result in well over the 11.62 MMT annually defined as the 2050 goal by the EO. DEQ provides no reason to think these uncovered electricity and fossil fuel supplier emissions will reduce spontaneously.

Fugitive emissions provide an exclusion that serves the delusions that fossil gas is a clean fuel, and prevents the Climate Protection Program from assessing and targeting methane emissions that render fossil gas an unacceptable option.

Full lifecycle emissions assessments, a *de facto* exclusion that allows biofuels and so-called Renewable Natural Gas to appear a low emissions or emissions free option when substantial emissions may result from their manufacture, processing, and transmission.

Ignoring the ten percent emissions increase between 1990 and 2010 (it is not inconsequential). By using 2010 (or is it now 2017-2019?) as the baseline rather than 1990 and failing to correct the necessary target reductions from 'at least 80% of 1990 emissions' as stated in the EO to 'at least 82.42% of 2010 emissions' adjusts the program targets above those stated in the EO.

Graphs presented during RAC 6 illustrate the problem: Slide 38 from the session PowerPoint Scenario 4 projection depicts greenhouse gas emissions starting in 2022 as a little over 30

MMT; meanwhile, slide 7 from the 'Modeling Study All Results' pdf set clearly indicates that total GHG emissions in 2022 for the Reference Case are over 65 MMT. The question this begs is: what happens to the remaining 30+ MMT of emissions not even considered in the modeled scenarios? Ignoring some 50% of emissions in the proposed Climate Protection Program is completely inadequate if DEQ is to develop a program that approaches the charge in the Executive Order - very clearly stated - as "(1) at least 45% below 1990 levels by 2035; and (2) at least 80% below 1990 levels by 2050."

Conclusion - The Consequence of these Concerns:

I recognize that developing a program that will establish meaningful reductions in the emissions of greenhouse gases from the state, and encourage meaningful carbon sequestration in our natural and working lands, is difficult, but it seems that the program that has been developed here, with its exemptions and exclusions, serves more to protect the polluters that it serves to reduce emissions and promote sequestration.

When nations across the planet, and states across the nation are targeting the necessary net zero emissions goal by 2050, by comparison this effort by Oregon will appear totally inadequate and out-of-step with reality. It will be very difficult to generate support and endorsement for this proposal among the many Oregonians who understand the problem and seek an Oregon remedy consistent with the dimensions of the crisis and what we know is needed.

This concern is especially acute since Nicole Singh introduced the RAC session by remarking that the Draft Rulemaking is essentially complete. If that is the case, and substantial revision is not an option, support and/or endorsement from those of us understanding the problem are at great risk.

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Respectfully submitted

A handwritten signature in black ink that reads "Alan Journet". The signature is written in a cursive style with a large initial "A" and a long, sweeping underline.

Alan Journet Ph.D.

cc Richard Whitman, Director DEQ

Colin McConnaha, Manager, DEQ Office of Greenhouse Gas Programs