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Senate Committee on Energy and Natural Resources Oregon State Capitol 900 Court St., NE Salem Oregon 97301

#### Senators:

I write on behalf of the 1500 rural Oregonians who are Southern Oregon Climate Action Now to offer comments on the current SB1530 draft.

# The Rural Perspective:

Southern Oregon Climate Action Now is an organization of 1500 rural Oregonians living near the California border who are acutely aware of how the climate change consequences of global warming are affecting our lives. We are aware that some rural Oregonians have been scammed by the opponents of climate action into thinking that proposals to reduce emissions are an effort by urban Oregonians to undermine their lives and livelihood. Some rural Oregonians choose to overlook what they can actually see happening and, instead, accept the lies and disinformation promoted by the opponents of climate action who sometimes claim to accept the science, but actually behave as though they deny it. This is a constant source of amazement to those of us who have eyes and minds open to the evidence.

We know that the temperature trend is one of substantial increase over the last century. We know that snowpack is declining and that precipitation is falling at lower elevations as rain rather than higher elevations as snow. We further know that these trends will likely continue absent efforts to reduce emissions globally as winter rainfall increases, summer rainfall declines and Spring and Fall trends hold steady. Living u=I rural Southern Oregon, we are well aware that we occupy a Mediterranean winter wet / summer dry climate. This climate induces substantial annual drying of soils and vegetation during late summer inevitably generating fire risk. Furthermore, we understand that the handful of locations around the globe where such a clime exists consequently support vegetation that is fire prone, fire adapted and fire dependent. As a result, we have to accept that fire is an inevitable component of our natural systems, and thus, our lives. Unfortunately, the natural phenomenon of summer/fall fire has

been exacerbated by a combination of factors over which humans have great control. The first problem is fire suppression that has allowed our dry forests to become invaded by an historically atypical density of smaller trees leading to a high fuel load in the forests. The second problem is global warming and the consequent climate change it is inducing. This has resulted in even drier summer conditions enhancing the fire risk already with us. The pattern of increasing megafire risk is more likely a result of this combination of human factors. If we wish to protect our forests, whether to serve the timber industry or simply to preserve the biodiversity and beauty of our region, we need to address both problems. While we certainly need to learn to live with fire, we also can reduce the risk by undertaking steps to make our forests more resilient to changing climatic conditions. But that will never be quite enough. We also must address the global warming problem. bringing us ever greater destruction and we absolutely must be part of the global solution by reducing our greenhouse gas emissions. Those who argue against climate action in Oregon are arguing for continued and ever more severe wildfires threatening our way of life and very existence in rural Oregon. If we are to keep global warming down to a manageable level, such that our forests might survive, it is imperative that we reduce our emissions and urge other states and nations to do likewise.

It is for these reasons that we in rural Southern Oregon urge the state legislature establish a strong greenhouse gas reduction program. While we have reservations about the rigor contained within SB1530-27, we feel that this is a critical first step. We know full well that globally we must commit to a greenhouse gas emissions reduction trajectory that reaches net zero emissions by 2050. Rather than passing the buck, and demanding that the rest of the nation and world take care of us, we have a moral obligation to address our emissions. Only then can we credibly urge others to do likewise. And the trajectory we demand of ourselves must involve a substantial reduction in emissions.

Within the context of appreciating those representatives who have worked tirelessly on developing a plan, and supporting SB1530-27, we wish to offer that following concerns and recommendations.

## **Program Goals:**

As I have previously argued, if we consult the best available science, we find that our goal should be net zero emissions by 2050 meaning our activities emit annually as much greenhouse gas as natural and other (carbon reduction technology, for example) sequestration activities capture. While such a target may seem rather optimistic at this stage, we know that we absolutely must put our state on a pathway of very steep emissions reductions such that, over time, we can revisit and reconsider our goals, policies, and programs and decide if any adjustments are necessary.

# **General Principles:**

Two essential general principles should be embedded in any program designed to address regulated greenhouse gas emissions reductions: (1) geographically, the program should be

statewide and (2) economically, it should address all sectors responsible for regulated emissions. There should not be any geographic region that contributes more or less than others to the effort, nor should any economic sector be expected to contribute more or less than any other to the effort. To the extent that there are benefits, these should be broadly enjoyed, while to the extent that there are costs, these should be equally broadly experienced.

## The Transportation Question:

The mechanism for targeting initially only fuels sold in the metropolitan Portland area, then incorporating counties with larger populations, and finally adding rural counties only if the County elects to opt in represents a serious breach of the General Principle of statewide adoption enunciated above.

We challenge the compromise in the transportation sector because it makes the assumption that gasoline prices will rise as a consequence of the program. This, however, will not necessarily be the outcome. When transportation was incorporated into the California cap and trade program in January 2015, the impact on gasoline prices weas variable. https://ww2.energy.ca.gov/almanac/transportation\_data/gasoline/retail\_gasoline\_prices2\_cms.html. Although initially gas prices rose, subsequently they dropped such that they were lower a year after the transportation sector was incorporated into the program than they were before. Indeed, the average price remains today lower than it was in summer 2008 (note, prices are not adjusted for inflation, meaning the current prices are substantially lower than 2008 in adjusted dollars). This does not imply that the program was the cause of the price fluctuation, merely that many factors influence gasoline prices, mainly supply and demand. Thus, rather than exempt areas from inclusion into the program, a more just approach would be to offer recourse, potentially through rebates or tax credits, to those who suffer unduly from any price rise that the program imposes. This would require, also, that fuel importers demonstrate conclusively to the OGGR that the program has induced a price rise before such aspects of the program are activated.

Section 17 eliminates both aviation and watercraft fuel sold in the state. We recognize that to impose a cost on these fuels would compromise the sellers of such fuels in the state viz a viz sellers in other states, but since the program is largely an 'in-boundary' program, maybe a mechanism could be developed whereby the fuel combustion within the state is covered. This would apply to combustion of fuels as aircraft leave the state, and commercial shipping as it travels out of state waters. It would also apply to the combustion of fuel by recreational aircraft and watercraft users inside the state.

### The EITE Question:

While we recognize that a greenhouse gas emissions reduction program has the potential to affect adversely and unequally those industries that are emissions intensive and trade exposed, it is critical that efforts to account for such not compromise the ability of the overall program to achieve its goals. The benefits for providing consideration to such industries clearly, and

importantly, benefits workers employed in those industries as well as the profits of industrial owners and shareholders. However, it is also important that accommodating this concern not undermine the principle that the program should be economy-wide.

The number of allowances distributed free to EITE industries seems sufficient that it will likely undercut both the generation of revenue, and-more importantly- the capacity for the program to meets its identified emissions reduction goals. If the goals are to be met, this allocation of allowances places the burden on other sectors to make up the difference, yet transportation and utilities sectors are also receiving huge breaks on their need to comply with the reductions trajectory in a timely manner. It also compromises the principle that 'the polluter pays." This, of course, will compromise the principle implicit in the program that it should encourage the transition from fossil fuel to renewable energy. This component of Sb1530-27 will likely assure that the social justice groups opposing HB2020 will oppose this proposal.

What is likely to happen with this proposal is that residents of Metro Portland will drive to rural zip codes to buy cheap gas, thus increasing emissions. And as other cities or counties are engulfed in the program, the same will likely happen. Meanwhile, there is no incentive for rural counties ever to vote to opt into the program. Additionally, we can expect that gas station owners in Metro areas will be filing for EITE status since their businesses will be seriously compromised.

Just as with gasoline prices, the assumption that utility (electricity) rates will rise is denied by the track record of the Regional Greenhouse Gas Initiative. Thus, rather than develop a program with the expectation that such rises will occur, the program should make allowances for such a rise dependent on the demonstration by these sectors that the program causes price rises - rather than any price increases being a result of other factors.

It is difficult to generate excessive sympathy for the trials of the industrial sector as they are forced to incorporate greenhouse gas accounting into their operations. This is because the failure of the voluntary greenhouse gas emissions reduction program of 2007 is largely a function of the failure of economic sectors to take seriously the goals established in that program and make appropriate adjustments.

## The Natural Gas Conundrum:

An element in the proposal that remains of great concern is that it seems to encourage fossil (natural) gas. This is unfortunate. While it is true that the combustion of natural gas results in lower emissions per unit of energy generated than is the case for coal or oil, this fails to account accurately for the full life cycle damage imposed by the gas. The current reality is that a majority of the gas combusted is fracked gas. Even if we forget for the moment the array of environmental problems generated by the hydraulic fracturing technology - which should be enough to negate any program that promotes natural gas - when we consider the full life cycle assessment of this fuel, we find that substantial emissions of methane result from its extraction, processing and transmission. In fact, because methane is 86 times worse than

carbon dioxide on a 20-year basis, and 34 times worse on a 100-year basis, not much has to leak to negate the combustion benefits. Indeed, from a greenhouse gas emissions perspective, fossil gas may well be as bad or worse as a fuel for generating electricity than coal.

If it were possible to assure that all compressed gas vehicles were powered by so-called renewable natural gas that is manufactured in anaerobic leak-free digesters that are themselves powered by renewable energy, or is manufactured by hydrogenating carbon dioxide again powered by renewable sources, we could potentially ignore the fugitive emissions and focus only on the combustion benefits of natural gas (methane) compared to coal and oil. .

Given that renewable natural gas is unlikely to be sufficiently abundant to power all compressed natural gas vehicles, encouraging CNG will likely just promote fracking and the plethora of environmentally negative consequences of that extraction process. We therefore encourage a review and reconsideration of those aspects of the proposal that serve to encourage natural gas or CNG. Contrary to the claims of the American Gas Association, natural gas is not a bridge to the future, it is a bridge to nowhere.

#### Social Justice:

An aspect of previous climate legislation that has been critical for the climate concerned movement in Oregon has been an acknowledgement in any proposal of the need to address social injustice issues with meaningful policy and investments.

SB1530-27 offers a sound definition of impacted communities in Section 103, and the commitment to actually assisting those communities has certainly been strengthened through amendments. This is noteworthy in the revisions to Section 39 that require a majority of the Climate Investment Funds be used to serve impacted communities.

Meanwhile, Section 39 dealing with investment allocations assigns 25% of investments from the Climate Investment Fund to OWEB for natural and working lands, and 25% for wildfire mitigation, presumably both investments thus targeting rural Oregon.

Additionally, Section 30 asks for an evaluation of the co-benefits for impacted communities in the report, suggesting that some benefits to such communities are anticipated.

Addressing a separate but related concern, this in relation to offsets, I note that proposal fails to protect impacted communities living in areas challenged by poor air quality from offset efforts by polluters> The problem is that heavy polluters may continue polluting in the non-attainment area and buy offsets to compensate. I suggest adding a component in Section 25 or 26 dealing with Offsets, as appropriate, to the following effect:

"The Oregon Greenhouse Gas Reduction Board [or DEQ as appropriate] may by rule adopt additional restrictions on the number of offset credits that may be surrendered by a covered entity or opt-in entity that is a permitted air contamination source and that is geographically located in an impacted community if:

"(A) The geographic area within which the permitted air contamination source is located is also a nonattainment area and the permitted air contamination source substantially contributes to or causes the nonattainment of air quality standards; or

"(B) The permitted air contamination source is in violation of the terms or conditions of any permit required or authorized under ORS 468.065 or ORS chapter 468A and issued by the Department of Environmental Quality or a regional air quality control authority formed under ORS 468A.105."

This would allow the OGGRB to protect such communities from unscrupulous polluters.

### Other Comments:

Section 21 (2) (b) What happens if the OGGR and a given EITE don't agree on best available technology emissions. There seems no resolution.

Section 22. I don't understand what this is doing. Why amend an earlier section of the proposal by a later section instead of just changing that earlier section?

Section 26 (3) This should include regenerative agriculture (returning carbon to the soil) as an offset option.

Section 28 (9) (a) This seemingly means that the entire program is rendered moot if the hard price ceiling is met and all allowances on the reducing emissions trajectory are exhausted.

Section 39 There is no provision for allocation of funds for a Just Transition Fund to serve dislocated workers. This seems unjust and will seriously and reasonably compromise union and labor support.

Section 25 - 27. While very much improved from LC19, there remains no protection for impacted communities living near air pollution sources that would allow OGGR to preclude offsets for entities operating in and contributing to air quality non-attainment.

Section 48 (2) (c)(D) and (E) seem to encourage the use of natural gas in transportation. This is a grave mistake since (as noted above) methane leaks during natural gas extraction, processing, and transmission and methane is 86 times (20-year basis) or 34 times worse (100-year basis) than carbon dioxide as a warming agent. The leakage furthermore, probably negates any benefits from reduced carbon dioxide emissions during combustion.

Section 51 Language seems to confuse carbon emissions with greenhouse gas emissions as measured in terms of  $CO_2e$ . If the goal of Sb1530-27 is to address global warming, greenhouse gas emissions should be the target. Just reducing carbon emissions would have some impact on global warming, but this is insufficient.

Section 54 (10) (a) and (b) identify the year 2001. Is this correct?

Section 56 encourages compressed natural gas - even though natural gas is potentially worse than coal because of fugitive methane emissions. It is strange - to state the least - that a proposal designed to reduce greenhouse gas emissions should encourage any natural gas use. However, the caveat that such must likely reduce transportation sector greenhouse gas emissions over time negates the use of compressed natural gas since this does NOT limit emissions to combustion emissions.

Section 57 (2)(c) limits fossil fuel responsibility to fossil fuel emitting greenhouse gases when combusted. This seems to be based on the profound misconception that the problem with fossil fuels is the combustion product of carbon dioxide. Since the overall proposal clearly acknowledges the need to address greenhouse gases measured in terms of their carbon dioxide equivalent Global Warming Potential, this seems to be a direct conflict.

Section 86 imposes limits on lamp efficiency which seems a trivial (almost worthless) gesture compared to the statewide goal of reducing GHG emissions by some 50 million metric tons over 30 years.

Section 89 (1) Ditto to § 56 ref promotion of compressed natural gas.

#### **Overall Goals:**

Is there available anywhere a study that explores whether the program as proposed has the capacity to induce the (still inadequate) trajectory of emissions reductions that are embedded in the bill?

#### Conclusion

While we have several serious reservations about components of this proposal, our understanding of the urgent need for all jurisdictions to establish steep greenhouse gas emissions reduction trajectories leads us to support SB1530 recognizing the need to return in the near future to re-examine how effective the program is at reducing emissions, and evaluate its goals in terms of the best available science of the day. Fortunately, the Oregon Greenhouse Gas Initiative proposed here incorporates mechanisms that will allow such assessments and reevaluations

Respectfully submitted

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