Comments to SB 1070 Angus Duncan President, Bonneville Environmental Foundation Chair, Oregon Global Warming Commission) October 26, 2017

Introductory Comments

Oregon has been at the forefront of American jurisdictions and private parties in recognizing the challenge of climate change and acting to reduce the greenhouse gas (GHG) emissions for which its citizens are responsible.

In 1991 the State committed to holding emissions at or below 1990 levels; without, lamentably, including implementation measures.

In 2003 Governor Kulongoski joined his peers in California and Washington to organize the Governors' West Coast Climate Change Initiative, pledging the three states to collaborate in setting and meeting emissions reduction goals. To implement this commitment in Oregon, our Governor empaneled a Governor's Advisory Group on Global Warming, which handed him back a thick report of recommended measures and proposed State reduction goals. The Governor adopted most of these recommendations, including the goal. Lamentably, again, implementation measures were absent.

In 2007 the Legislature adopted the Advisory Group's recommended emissions reduction goals, but aspirationally and again without measures to directly reduce emissions. However, the Legislature did act indirectly by adopting a Renewable Portfolio Standard (RPS) for Oregon utilities of a certain size: that by 2025 at least 25% of their loads would be served by *new*¹ renewable generating resources. In 2009 Oregon adopted a Clean Fuel Standard (CFS) for vehicle fuels that required a 10% reduction in overall greenhouse gas emissions from vehicles by 2020. Negotiated agreements in 2010 and 2016 are leading to significant reductions in coal-generated power servicing Oregon electric loads. Oregon's enduring commitment to energy efficiency investments, led by the work of the Energy Trust, of many consumer-owned

¹ The new resources would be added to Oregon's existing base of renewable hydroelectricity, resulting in net renewable generation levels significantly higher than 25%.

utilities, and of local government transportation and land use policies, all are among the contributions that have consistently reduced overall Oregon emissions from 1999 to 2015².

All this said, Oregon is not on track to meet its GHG emissions reduction goals: not in 2020, 2035 or 2050. Not even close. Additional enforceable measures – investments, incentives and regulatory instruments – along with leveraging favorable global technology trends, will be needed to have any chance of achieving what we set out to do. Above all there needs to be an Oregon-economy wide signal of our resolve, one that acts to complement the needed programmatic measures like an RPS and a CFS, and one that incents and collects reductions from more than just a few large emissions sources. This was recognized in the original 2004 Governor's Advisory Group Report, which called for "a special interim task force to examine the feasibility of, and develop a design for, a load-based (GHG) allowance standard."³

A follow-on Governor's task force did execute this task and delivered its favorable report, but in the teeth of the 2008 recession and at the accession of Barack Obama to the Presidency. Both of these events discouraged further state-level action on a carbon cap in Oregon at the time. Obama and a hostile Congress failed to agree upon a durable national strategy for curbing GHG emissions. Now, under President Trump, Oregon – and the country – are paying for our failure to act locally, despite over a decade of consideration and multiple well considered determinations that an economy wide cap was necessary to reach our carbon goals, and would benefit Oregon's economy.

SB 1070 gives Oregon the opportunity to remedy that failure of the last fifteen years to adopt an enforceable economy-wide carbon cap.

Comments on SB 1070 Draft

My comments⁴ fall into two categories: (1) how can the carbon cap tool be most effective at reducing atmospheric carbon; and, (2) for what purposes should revenues be allocated, and how must those purposes be prioritized?

²... when, due to lower gasoline prices and resulting increases in vehicle size and miles traveled, transportation emissions began to rise and pull overall emissions up as well.

³ See "GEN-2, attached.

⁴ Note: my affiliations notwithstanding, these comments are individual, do not represent the views of either BEF or the OGWC, and have not been viewed or approved by either entity.

For simplification, when I use "carbon" it should be understood to refer to carbon dioxide and to other generally listed greenhouse gases (including substances, such as black carbon, that may be subsequently included).

The most important two observations I can make are: (1) the measure must result in an effective, fair, flexible, durable, transparent and predictable carbon reduction tool capable of capturing the necessary carbon reductions; and, (2) that revenues generated in the process of complying with the carbon cap are used to further drive carbon emissions down, and to cushion the near-term costs of transitioning to a lowcarbon economy and energy system. Where both these latter outcomes can be served with the same allocation of revenues (e.g., investing in energy efficiency), those uses should have the highest priority. **Having considered multiple examples** of carbon laws and regulations, it is my view that SB 1070 contains the necessary components to achieve these important objectives.

I. Carbon Cap Effectiveness

A. <u>Allowance Allocation</u>

SB 1070 sets reasonable parameters for regulatory decision-making about allowance allocation. These comments are meant to anticipate issues that should inform and condition implementation of the legislation, and to assure sufficient flexibility to support an efficient working carbon cap process.

As a general statement, the allocation of allowances: (a) should progressively reduce allowable carbon; (b) should be (and perceived to be) fair, flexible, durable, transparent and predictable; (c) may be used to cushion program impacts when needed to ease transitions; and (d) should complement and reinforce existing, targeted carbon reduction programs.

In practice these principles have some natural tension with each other. A "predictable" allocation may not also be a "flexible" one, so allocations outside the auction should generally be fixed for a period of years, then adjusted at specified intervals based on pre-agreed criteria. Such a process needs to reserve short-term flexibility to account for our regional wet and dry hydroelectric seasons. Predictability is achieved by specifying the adjustment mechanisms, the allowable amounts, and the circumstances within which they apply, in advance.

In addition to the hydro year adjustment, the allocation to electric utilities should track and reinforce the emissions reductions already anticipated under SB 1547 to ensure additionality and avoid an allowance windfall. The normal variability in electric utility dispatch from different resources with different carbon profiles must be accommodated in the short term (perhaps with a rolling average requirement), while taking precautions against utility gaming of such variability (e.g., redispatch from coal units to non-Oregon loads rather than actual carbon profile reductions).

A shift in load from one sector to another (e.g., Electric Vehicles (EV's) displacing internal combustion vehicles, moving this load from gasoline to electricity) could be supported by a proportional shift in the allocation of allowances to the electric utilities. Other such anticipatory adjustment mechanisms can be imagined, and provided for in advance to improve predictability. The five year review of utility allowance allocations called for in Section 10 (2) should serve for any such fine tuning needed over time.

1. <u>Auction of Allowances; Adjustment Mechanisms</u>: Agree that allocation by auction is a fair and equitable method that will avoid the need for many direct allocation adjustments, subject to recognition that varying ability of different entities and populations to carry auction costs may still require direct adjustment intervention. Thus SB 1070 appropriately makes provision for free allowances to energy-intensive, trade-exposed businesses, and consignment allocation to regulated utilities. The State and its administering agencies will need to be prepared for a process of defining, identifying and allocating to these parties in a transparent and equitable process.

 <u>Consignment Allocation to Utilities</u>: Agree with the consignment mechanism, which has been pioneered with success in California's AB 32 cap.
See below for prioritizing use of revenues.

3. <u>Emissions-based Allocation; Baseline:</u> Allowable emissions under the cap can be allocated most fairly, in Oregon, against an emissions-based baseline. Shifting loads can be accommodated by shifting the emissions allowances associated with those loads.

Electric utilities in Oregon have dramatically different resource bases, as well as in-year variability of resource mixes. These are partly a matter of history and partly of past resource choices made. In neither case should present or future customers of the utilities be unduly rewarded or penalized in consequence of those histories, as would be the case if allowance allocation (allowed emissions) were based on loads. For example, it's unlikely customers of either Portland General Electric (PGE) or PacifiCorp (PAC) chose their homes or businesses based on which utility would serve them, and still less of what the utility's resource portfolio then consisted. A load-based-only allowance system would unfairly favor PGE customers over PAC customers.

An emissions-based allowance system with a base year of 2005 would give to PAC more allowances than it would to PGE, since PAC then had a more carbon-intensive resource portfolio. At the same time, a proportional annual emissions reduction calculation requires more annual absolute reductions from PAC and its customers if overall State emissions reduction goals are to be reached. Allocation can be proportional to the carbon intensity of each portfolio at the base year (or an average of multiple years around the base year, to avoid individual year distorting effects). Both utilities should be expected to arrive at a comparable carbon intensity in 2050. Utilities substantially or wholly served with zero-carbon hydroelectricity would, at least initially, get few free allowances, unless for the purpose of adding load for electrification, since their obligations to reduce carbon content would be negligible or non-existent. Such an arrangement would be both equitable and effective.

B. Interaction with other State carbon regulation and programs: The carbon cap should not be expected by itself to result in sufficient emissions reductions across all emitters to achieve State reduction targets, as California's experience has demonstrated. A cap is likely to be most effective when the regulated entity can see clearly the cost of emitting, that cost is at a meaningful and not trivial level, and the entity is positioned to respond to that signal (e.g., manufacturing, utilities, fleets and other large point sources of GHG's). Even in these instances, emissions reduction options may involve longer-term or lumpy choices that may not easily respond to real-time price signals. Regulated entities may more readily respond to other, more targeted and visible signals. Thus, moving electric utilities out of fossil-based resources and into renewables may be more efficiently accomplished with a Renewable Portfolio Standard, and Integrated Resource Planning that takes into account forward compliance with the carbon cap.

Many small non-point emissions sources (e.g., homes, small businesses,

personal and most commercial vehicles) will not be directly regulated. For many of these the pass-through carbon cap price signal is severely attenuated – a carbon price of \$10/ton translated roughly to a 1¢/gallon signal at the pump – and will require different, more direct incentives and rules if greater carbon efficiencies are desired and needed (e.g., choosing an electric vehicle over a less carbon-efficient internal combustion vehicle).

For purposes of compliance with the carbon cap, emitters will realize the avoided costs of purchasing allowances whether the reductions are directly in response to the cap or are the outcomes of other public or private decision drivers. The cap is ancillary to other, targeted programmatic measures, ensuring that emissions reductions not captured by other programmatic measures are nonetheless captured.

C. <u>Point of Regulation</u>: Generally agree with DEQ's analysis for point of regulation as far upstream as is practicable, with the caveat that the more distant the point of regulation is from the ultimate decisionmaker (e.g., deciding between an EV and an ICE vehicle), and the more attenuated the price signal, the more important are the ancillary incentives and rules described in "B" above.

D. <u>Cost containment/flexibility, allowance price stability/predictability:</u> SB 1070 includes many of the tools identified elsewhere for cost management and compliance flexibility (reserves, multi-year compliance periods, banking, free allowances to energy-intensive, trade-exposed industries). I would also emphasize the importance of market liquidity in cost management, and the consequent importance of linkage with California or other capped carbon markets to increase such liquidity. Oregon is a small state with a limited number of entities likely to be directly subject to the cap. If Oregon acted in isolation from other states it would likely experience limited liquidity, more difficult price discovery and higher clearing prices. Linkage is the most direct way to address and neutralize this market effect.

E. Energy-Intensive <u>Trade-Exposed Industries</u>: Agree with extending free allowances to such entities, strictly defined and subject to regular reconsideration as broader US and global economic circumstances evolve. Such reconsideration might take place with the scheduled broader periodic review of allowance policies (e.g., every five years), or Oregon might opt for a rolling (five year) allocation to avoid cliff effects.

F. <u>Compliance Periods</u>: SB 1070 proposes annual emissions allowances but three-year compliance periods. Legislators should consider longer periods during which allowances may be banked if these result from Covered Entities taking actions that front-load emissions reductions. Otherwise, some "lumpy" actions that might bring earlier emissions reductions could be disadvantaged or penalized by their scale and schedule, and so discouraged. A Covered Entity should have the flexibility to either not buy (or sell) unneeded allowances, or acquire and retain them to strategically manage compliance costs.

G. <u>Market Integrity</u>: SB 1070 intends to allow other market participants than just Covered Entities. Especially if linkage does not take place, or is delayed, having additional participants (e.g., non-covered entities) will improve market liquidity. Allowing non-Covered Entities to participate may also raise the risks of market irregularities, underscoring the need for full transparency in auction events and for the State to preserve the capability to step in with reserved allowances and other tools to offset and penalize any bad behavior.

H. <u>Scope</u>: Generally agree with the definition of Covered Entity/Source, and with the proposition that initially a Covered Entity is any Source that is responsible for emitting \geq 25,000 tons of CO2e annually.

I. <u>Woodlot Offsets and Forest Carbon</u>: SB 1070 properly limits the allowed share of compliance that can be met with offsets, and properly constrains potential offset projects to those that can establish their additionality and other customary requirements (S10(3)(b). Forest carbon acquisition is frequently proposed for offset treatment, and we would generally support this inclusion for small woodlot owners, reemphasizing the importance of the *additionality* of carbon acquisition above and beyond a contemporaneous base period for these owners. We would further encourage the State to enable aggregation of such woodlot properties for offset purposes, recognizing that different woodlots will be at different stages of maturity, different woodlot owners will have different financial and cash flow circumstances, and owners should have the flexibility to harvest in sequence so long as the aggregated forest holdings are acquiring the specified net carbon (with appropriate reserves to

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account for unanticipated losses, e.g., from fire).

II. Use of Revenues

The two priority uses of revenues generated from the carbon cap should be:

- a. <u>applied to or invested in activities that further reduce carbon emissions or</u> <u>increase carbon capture and sequestration; and</u>
- redressing the disproportionate adverse effects of higher energy and other costs on needy or vulnerable participants where these are attributable to the carbon cap.

Where both these outcomes can be served with the same allocation of revenues (e.g., investing in energy efficiency), those uses should have the highest priority.

For example, investments in higher carbon efficient transit to extend service to low-income neighborhoods might be in this highest category. Incentives to acquire more carbon-efficient vehicles, appliances, industrial equipment and other carbon-reducing outcomes might also. Incentives to extend small woodlot forest harvest rotation periods might as well, depending on the economic circumstances of the owners.

Without this overriding purpose, the carbon cap will appear to some, and be mis-characterized by others, as a backdoor revenue measure dressed up in carbon clothes.

My comments on revenues will leave to others the secondary criteria for their allocation and for the organization of stakeholder groups that may be established to advise on criteria and distribution channels. So long as the primary screen for these is carbon reduction and cushioning those who need and merit a cushion during the decarbonizing process, the secondary stages are more important for integrity of process than for targeting funding.