From:	Phil Carver
To:	SENR Exhibits
Subject:	Conditional support for LC 19
Date:	Saturday, January 18, 2020 12:56:03 PM

To Staff and Senate Natural Resources Committee members

My name is Philip H. Carver. I recieved a Ph. D. in natural resource and utility economics from Johns Hopkins U. in 1978. I worked for the Oregon Department of Energy and the Oregon Public Utility Commission from 1980 to 2017. From 1990 onward I mostly worked on issues related to climate change. My expertise guides the comments below.

My support for LC 19 is conditioned on two changes.

**First,** the treatment of trade impacted industrial customers needs to revert to the structure of HB 2020 where allowances were given based on the amount of product produced not on previous years' emission levels. The structure in LC 19 gives basically zero incentive to reduce emissions. The provisions to encourage audits and energy efficiency investments are an inadequate substitute for a price signal. For example a price signal would encourage appropriate fuel switching from fossil fuels to electricity, but the incentives in LC 19 would not. Electricity will become increasingly less carbon intensive in the coming decades, something very unlikely for natural gas. This fuel switch is critical to meet the goals of the bill.

**Second,** the geographic structure for transportation fuels is unworkable. I would prefer county-specific transportation rebates to households with below median income, as was in a companion bill last session. However, if some areas need to be exempted to get the votes needed, the **only workable geographic unit is counties**. Otherwise there will be movement of filling stations to just outside city limits. With price signals commensurate with the needed reductions, this effect will be strong and seriously weaken the effectiveness of the bill. The GHG reduction goals may be unattainable with the current geographic structure.

Including all counties touched by I-5 and I-84 plus Deschutes County would yield greater levels of emission reductions than LC 19 and be workable. The most eastern part of I-84 (such as east and south of Pendleton) could be excluded, <u>if necessary</u>. If desired, most or all counties touched by US 101 could be included. Similarly, Polk County could be included.

But **in no case** should the bill exclude areas of Oregon if it does not induce an *additional* <u>necessary</u> vote in the Senate.

Thank you for your hard work on this critical legislative issue.

Phil Carver Salem, Oregon 97306 Salem, OR 97306 Addendum to my comment of 12:55 pm today.

A more defensible list of counties to be included for transportation fuels would be the twelve largest counties by population. (Multnomah, Washington, Clackamas, Lane, Marion, Jackson, Deschutes, Linn, Douglas, Yamhill, Benton, Josephine, Polk). This list would include 85 percent of Oregon's population. Adding the 13th most populous county (Umatilla) would bring the total to 87 percent. The largest eleven counties (dropping Polk) would have a total of 83 percent of Oregon's population.

Phil Carver Salem Oregon

On Sat, Jan 18, 2020 at 12:55 PM Phil Carver To Staff and Senate Natural Resources Committee members

My name is Philip H. Carver. I recieved a Ph. D. in natural resource and utility economics from Johns Hopkins U. in 1978. I worked for the Oregon Department of Energy and the Oregon Public Utility Commission from 1980 to 2017. From 1990 onward I mostly worked on issues related to climate change. My expertise guides the comments below.

> wrote:

My support for LC 19 is conditioned on two changes.

**First,** the treatment of trade impacted industrial customers needs to revert to the structure of HB 2020 where allowances were given based on the amount of product produced not on previous years' emission levels. The structure in LC 19 gives basically zero incentive to reduce emissions. The provisions to encourage audits and energy efficiency investments are an inadequate substitute for a price signal. For example a price signal would encourage appropriate fuel switching from fossil fuels to electricity, but the incentives in LC 19 would not. Electricity will become increasingly less carbon intensive in the coming decades, something very unlikely for natural gas. This fuel switch is critical to meet the goals of the bill.

**Second,** the geographic structure for transportation fuels is unworkable. I would prefer county-specific transportation rebates to households with below median income, as was in a companion bill last session. However, if some areas need to be exempted to get the votes needed, the **only workable geographic unit is counties**. Otherwise there will be movement of filling stations to just outside city limits. With price signals commensurate with the needed reductions, this effect will be strong and seriously weaken the effectiveness of the bill. The GHG reduction goals may be unattainable with the current geographic structure.

Including all counties touched by I-5 and I-84 plus Deschutes County would yield greater levels of emission reductions than LC 19 and be workable. The most eastern part of I-84 (such as east and south of Pendleton) could be excluded, <u>if necessary</u>. If desired, most or all counties touched by US 101 could be included. Similarly, Polk County could be included.

But **in no case** should the bill exclude areas of Oregon if it does not induce an *additional* <u>necessary</u> vote in the Senate.

Thank you for your hard work on this critical legislative issue.

Phil Carver Salem, Oregon 97306 Salem, OR 97306