Senate Committee on the Environment and Natural Resources Chair Senator Michael Dembrow Co-Chair Senator Alan Olsen Oregon State Capitol Building Salem, OR

Re: SB1530 "Relating to Greenhouse Gas Emissions"

February 11, 2020

Dear Senators,

I'm writing to express my opposition to SB1530 and in the hope that this letter will help you, as decision makers, to better understand what it is that you're asking from Oregonians.

I hold an MBA from Willamette and I am all but dissertation in my Doctor of Business Administration from George Fox University, which included multiple courses on teaching. With a business-oriented mindset, I'm trained to look at policy from a cost-benefit analysis and managerial perspective but also how to convey information in ways that is useable to decision makers.

Does SB1530 make sense? From a business standpoint or from a cost-benefit standpoint, the short answer is no to both.

Business Lens

SB1530 essentially chooses winners and losers by deciding fossil fuels are bad and the others aren't. Any energy source has pros and cons: fossil fuels pollute more than others but are more efficient and powerful; nuclear power is the most powerful of all but has tremendous wastestorage problems; and "green energy" solar and wind need tremendous amounts of rare earth, which are mined in China and leave behind massive acid lakes from their harvesting.

But there is a fundamental problem with government subsidizing winners and taxing losers: doing so bypasses normal market forces.

For any business to create a profit, they must overcome all the usual hurdles to bring a product to market—research and development, prototypes and testing, marketing and advertising. This can cost companies thousands or even millions of dollars. But it's a normal and necessary part of "growing up." Companies learn better, more efficient ways to create products;

they improve technologies; they find ways to lower costs—all of which drives efficiency, which in turn allows a company to earn a profit.

But when the government steps in and hands millions or billions in taxpayer dollars to a favored industry, doing so circumvents those normal market forces. Who needs market testing or product development or even better marketing when customers are given massive government-funded incentives to buy a product? Or, worse, disallowed from purchasing a product? Who needs to worry about efficiency or lower costs of production or research and development if government subsidies become a company's profit?

But at the heart of that normal market process—learning to do things faster, better, and at lower costs—lies innovation. As companies learn to be efficient, new innovations naturally spring from that learning. New uses for existing products, new inventions, and so on. A prime example is hemp. Now that it is no longer banned, tremendous numbers of new innovations are springing up, from auto parts to clothing to military uses to bandages to still hundreds more innovations still over the horizon. None of that was possible as long as government decided hemp was a loser.

Choosing winners is just as damaging, if not more so. When government hands out subsidies to favored businesses and industries, it relieves the pressure of those businesses to get to profitability. You don't need profits if the taxpayers are paying for your lack of innovation. You don't have to improve your product; you just have to improve your lobbying efforts.

I cannot begin to express in such a short letter how horribly damaging this is to the natural functions of business growth and development. But it is precisely why innovation happens in free-market societies far more than in government-controlled societies. In free-market countries, you're rewarded for being successful; for being innovative, for being profitable *because* of your success and innovation—rather than being rewarded because of who your political friends are.

It's the natural way for companies to seek new and improved means to produce, and when it comes to energy and the environment, that includes developing features that customers and society wants: less pollution while increasing energy. As counterintuitive as it may sound, had government not interfered with coal decades ago, it's entirely possible that normal market forces could have discovered a means to produce coal energy at near zero emissions. But because government chose to punish coal, no one bothered to look.

Because SB1530 seeks to reward one industry at the expense of another, the Oregon legislature is directly interfering with the normal market forces that would stimulate innovation leading to a cleaner environment.

Cost-Benefit Lens

When it comes to making decisions on benefits of a project versus the cost of doing so, it's important look past the interpretations of advisers who may have their own reasons and benefits to support a position and instead look squarely at the indisputable facts. And by that I mean the actual data and <u>not</u> the interpretation of the data.

For example, your committee has almost certainly heard that it is "indisputable" that CO² is driving global warming and that mankind is responsible for it. That statement is neither data nor "indisputable," clearly, as there are a great number of scientists who do dispute the interpretation that mankind is causing global warming. And science is, of course, never settled; to say otherwise is a mischaracterization of science itself.

So let's look at some facts. Since carbon dioxide and carbon are the focus of SB1530, I'm sure you have heard that current CO² levels are at approximately 400 parts per million (PPM). This is a fact that is not in dispute. But there are relevant facts on that 400 PPM figure that get overlooked:

- While 400 PPM may sound high, it is actually on the low side of CO² over the Earth's history, which has been as high a 7,000 PPM millions of years ago. That's 1,650% more than today's levels.
- It has been warmer in the past that today's current temperatures. The fact is, based on ice cores, 9,000 of the last 10,000 years have been warmer than it is today.

Neither of the above facts are in dispute. Unless one is taking the "scientific" position that Neanderthals drove SUVs or dinosaurs had massive coal-fired power plants, clearly nothing mankind is doing today is *causing* climate change. CO² has been more abundant than it is today and even if it is directly tied to warming (again, a disputed interpretation), it's irrelevant since the vast majority of Earth's history has been far warmer—which obviously has nothing to do with modern man's activities.

To further analyze SB1530's stated benefits vs. costs, along with its potential impact compared to its goals, consider the following (using slightly rounded numbers for illustrative purposes):

• Using the 400 PPM level, if the entire atmosphere was made up of only 85,000 molecules, then CO2 would be 34 of those 85,000. (400 ÷ 1,000,000 = 0.04%; 85,000 × 0.04% = 34). But that's total CO². Mankind's output of CO² would be 1 of those 34. In other words, the CO² that humanity is responsible for is 1 in 85,000 or 0.0012% of atmospheric gasses. That is roughly 1/1,000th of a percent.

- To understand how small that truly is, consider that there are 100 pennies in a dollar, each being one percent. If you put 99 pennies on one side of a balance scale, you would need to chop the remaining penny into 1,000 tiny pieces and put 999 of those pieces on the same side with the 99 whole pennies against the remaining 1/1,000th of a penny on the other side of the scale.
 - Note: Proponents of CO² who concede the tiny percentage of mankind's CO² in the atmosphere, point to poisons that are deadly in even smaller percentages than CO² concentrations—in nano-amount dosages. That's true. But it's also irrelevant. They're neurotoxins not inert gasses. And poison is in the dosage; in the right dosage levels even water is poisonous.
- Oregon's portion of manmade CO² emissions is 0.008 PPM (0.008 ÷ 1,000,000 = 0.000000008 or 0.0000008%). Rounding up to 0.000001%, that means Oregon's CO² output is 1 millionth of a percent of all atmospheric gasses. Even if we eliminated our CO² entirely, that amount is so small, it is unmeasurable by current scientific instruments.
- Estimates of the impact of SB 1539 is that it will take \$1 billion out of Oregon's economy. \$1 billion for 1 millionth of a percent fails any normal cost-benefit analysis.

The next time you step out of the Capitol, I hope you take the opportunity to look up to the very top of the Golden Man's head. Imagine a stack of pennies as high as his head. Is taking one penny off that stack worth \$1 billion of Oregonians' money?

Except a stack of pennies that tall is not quite accurate. Instead, you need to imagine 30 Capitol buildings with 30 Golden Men stretching up into the sky — plus another half of a building. That's how tall a stack of 1 million pennies is: 4,988 feet. One penny in that stack of 1 million pennies is Oregon's contribution to CO².

Is removing one penny from that stack of 30½ Capitols and Golden Men worth taking \$1 billion from Oregonians?

Of course it isn't.

I recognize that SB1530 may have good intentions and admirable goals. Who doesn't want cleaner air or a cleaner environment?

We all want that.

But SB 1530 is bad policy nonetheless and will not have the benefits that its goals strive for. It is certainly not worth the direct cost to Oregonians in additional gas and utility prices nor is it worth the unquantifiable damage it could do to Oregonians' businesses, innovation, and in our national competitiveness. Voting for it would be a bad decision that will over the long-term harm Oregonians and Oregon businesses.

There are better ways toward a cleaner and better environment. I would be happy to discuss other solutions with you that would help our businesses rather than hinder them.

Thank you for your time.

Respectfully,

Dr. Mark Anderson, DBA (ABD), MBA

Independence, Oregon