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March 23, 2015

Re: SB 477, Coal to Clean Energy

Members of the Senate Energy & Environment Committee State Senate Salem, OR

Dear Committee Members:

Over the past six months, I have been working as a volunteer with the Sierra Club Coal to Clean Energy campaign. I am looking forward to our Lobby Day at the State Capitol on March 24, and to the hearing before your Senate committee on March 25.

For several reasons, I am a big proponent of moving this beautiful state as rapidly as possible from electricity that is fired by fossil fuels to electricity derived from water, wind, and solar (WWS electricity,) Among those reasons are the following three:

- 1. To avoid ever-escalating damage to our atmosphere caused by global warming, we need to speedily drop the concentration of GHGs in the atmosphere from its current 400 parts per million back down to 350 parts per million.
- 2. We'll have a chance to do this only if we leave subterranean fossil fuel right where it currently is beneath the earth and the sea and replace our fossil fuel sourced energy with energy provided by WWS electricity.
- 3. We can do this. Bruce Z. Jacobson, Professor of Environmental Engineering at Stanford University, has spent much of the last ten years studying how each state in the union has a distinct pathway to using exclusively WWS electricity by 2050. He summarizes his analysis on www.TheSolutionsProject.org. He says that Oregon, by 2050, can use 100% WWS energy, derived from the following mix of sources:
 - a. 05.2% -- Residential roof PV systems
 - b. 02.8% -- Commercial/Governmental Roof PV systems
 - c. 12.1% -- Solar PV plant
 - d. 01.0% -- Wave device
 - e. 05.0% -- CSP plant

- f. 05.0% -- GeoThermal
- g. 32.5% -- Wind onshore
- h. 21.4% -- Hydroelectric
- i. 10.0% -- Wind offshore
- j. 00.5% -- Tidal turbine
- 4. Such a conversion from fossil fuel-fired energy to WWS energy, Jacobson asserts, would result in a growth of 57,000 new permanent jobs in the state of Oregon, and would allow the state's energy use to drop 39.8% below our current usage level.

For all these reasons, I hope you will join me in supporting SB 477.

Mark McLeod

Cc: Senate Majority Leader Diane Rosenbaum Laura Stevens, Organizing Representative, Sierra Club Beyond Coal to Clean