

Submitter: Gordon Fulks
On Behalf Of: CO2 Coalition
Committee: Senate Committee On Education
Measure, Appointment or Topic: HB3365

I am a PhD astrophysicist and one of the Directors of the CO2 Coalition, a non-profit organization of top scientists, headquartered near Washington, DC. Another Director is Nobel Laureate in Physics John Clauser. Another is Princeton University Professor of Physics Will Happer.

I have written a series of short stories on climate topics to help educate young people on the very complex science that they need to understand, if they are interested in science and more specifically the topic of "climate change." This subject should never be reduced to a political topic: carbon dioxide is pollution and destroying the planet. THAT IS SOO WRONG. It is a horrible misstatement of fact. Students need to learn how we think about science, not what to think on a heavily political topic. Science is all logic and evidence. Politics has no bearing on good science. Even the worst dictators of the 20th century realized this and left their top scientists alone.

CARBON DIOXIDE is the 'Gas of Life' from which we and every other living thing on planet Earth are constructed. Basic biology informs us that plants combine water and carbon dioxide in the presence of sunlight to make a simple sugar, glucose, from which all life is built. No carbon dioxide means no life. PERIOD. The atmosphere presently contains 0.04% CO2 by volume. That is 400 ppmv, which is near the MINIMUM for life to survive here. The optimum for plant growth is 1500 ppmv. And life thrived when the level was 2,500 ppmv 140 million years ago.

Carbon dioxide is a climate active gas of secondary importance to water vapor. WATER VAPOR is the primary greenhouse gas, but also vastly important for transporting heat around the blanketing effect of greenhouse gases and reflecting sunlight, both as clouds and snow. Water in all its forms is clearly the climate gas, liquid, and solid.

Adding more CO2 to the atmosphere has little climate effect, because the infrared absorption bands are nearly saturated already and feedbacks are strongly negative, meaning that a slight heating from CO2 is counteracted by responses from the hydrological cycle and cloud effects. More clouds cool the Earth. John Clauser has shown recently that clouds are 100 times more powerful than carbon dioxide in controlling climate. And snow can keep us in the grip of an Ice Age for 100,000 years, by reflecting sunlight back to space.

Students must be taught competent science not political science, if you want to raise scientifically literate children. Please scrap this bill and all others dedicated to an

ignorant population.

Oregon deserves better than HB 3365.