Good reasons to be concerned for future

I am a concerned father, grandfather and community member. Why am I concerned?

- 2 degrees Almost every government in the world has agreed that any warming above a 2°C (3.6°F) rise would be unsafe. We have already raised the temperature .8°C, and that has caused far more damage than most scientists expected. A third of summer sea ice in the Arctic is gone, the oceans are 30 percent more acidic, and since warm air holds more water vapor than cold, the climate dice are loaded for both devastating floods and drought.
- 565 gigatons Scientists estimate that humans can pour roughly 565 more gigatons of carbon dioxide into the atmosphere and still have some reasonable hope of staying below two degrees. Computer models calculate that even if we stopped increasing CO₂ levels now, the temperature would still rise another 0.8 degrees above the 0.8 we've already warmed, which means that we're already 4/5 of the way to the 2 degree target.
- 2,795 gigatons The Carbon Tracker Initiative, a team of London financial analysts, estimates that proven coal, oil, and gas reserves of the fossil-fuel companies, and the countries (think Venezuela or Kuwait) that act like fossil-fuel companies, equals about 2,795 gigatons of CO₂, or five times the amount we can release to maintain 2 degrees of warming. 80% of these reserves need to stay underground.

There are different approaches to this problem. Bill McKibben, http://350.org/, says that, "If it is wrong to wreck the climate, then it is wrong to profit from that wreckage." He says this is a moral imperative to vote for divesting. He urges educational and religious institutions, city and state governments, and foundations that serve the public good to divest from fossil fuels.

McKibben wants institutions to immediately freeze any new investment in fossil fuel companies, and divest from direct ownership and any commingled funds that include fossil fuel public equities and corporate bonds within 5 years.

200 publicly-traded companies hold the vast majority of the world's proven coal, oil and gas reserves. They are asking you to divest from those companies.

James Hansen, http://www.columbia.edu/~jeh1/

former NASA climatologist, and a founding member of 'Citizens Climate Lobby' (CCL) <u>http://citizensclimatelobby.org/</u> agrees with McKibben. Hansen and CCL, however, promote a market-based approach of a revenue-neutral carbon tax to combat global warming. The tax would be assessed according to a fuel's carbon dioxide equivalent, and the money collected would be redistributed on a per-capita basis. The idea is to use market mechanisms rather than regulatory measures to discourage fossil fuel use and reward efficiency without boosting government revenue.

I hope that Governor Kate Brown and the legislature will support a revenue neutral carbon fee; one that would, I hope, rebate the money directly to the people, not to the government.

Bill Gates, on the other hand, has other ideas. If you Google 'Bill Gates on the World's Energy Crisis' or click on these active links ihttp://www.ted.com/talks/bill_gates.html or

http://www.wired.com/magazine/2011/06/mf_gagates/all/

you will hear him say that "There's certainly lots of room for increasing efficiency. But can we, by increasing efficiency, deal with our climate problem? The answer is basically no. The climate problem requires more than a 90 percent reduction in CO₂ emitted, and no amount of efficiency improvement is going to address that.... You're never going to get the amount of CO₂ emitted to go down unless you deal with the one magic metric, which is CO₂ per kilowatt-hour." He then goes on to say that "fourth generation nuclear power is safer than all other energy options, and rich countries aren't spending enough on R&D. What happened in Japan is terrible...the environmental and human damage is clearly very negative, but if you compare that to the number of people that coal or natural gas have killed per kilowatt-hour generated, it's way, way less. ...coal and natural gas have much lower capital costs, and they tend to kill only a few at a time, which is highly preferred by politicians."

Some of Gates statements in his article challenge some of my actions taken so far, but I am glad that he is investing in ways to generate energy and therefore reduce CO_2 by 90% - one of the biggest challenges of this century.

Thank you for reading about these three different approaches to climate change. Will you join with me in working on divesting from fossil fuel companies, and promoting a fossil fuel revenue-neutral carbon tax bill?