Re: HB2020, Oregon Climate Action Plan

Please Exclude Residential Natural Gas from Having to Purchase Carbon Offsets, or incur other HB 2020 Costs

There are health hazards in raising the cost of natural gas for residential space heating.

The health hazard stems from causing an increase in the use of wood stove heating, substituting for natural gas heating. The Washington Department of Ecology lists wood stove burning as a leading source of particulate pollution. It is not unusual for public health agencies to ask the public to not use wood stove heating in periods of stagnate air, because of its particulate pollution. This is a problem especially in urban areas.

Wood Stove space heating competes with natural gas space heating, and currently the cost of wood stove space heating is comparable to that of natural gas space heating.

- ➢ Wood Stove Heating costs between \$600 to \$800 per year (4 cords times \$150 to \$200 a cord).
- > Natural gas space heating costs about \$600 per year at current rates for Northwest Natural (gas).
- > Electric furnace space heating costs sharply more at \$1,800 or so at current PGE rates.

Northwest Natural estimates the Climate Reduction goals of HB2020 will cause it to raise its rates by slightly more than 50% (per Oregonian, February 7).

So, HB2020 could cause natural gas to become 50% more expensive than wood stove heating.

Natural gas accounts for 57% of space heating in urban areas, detached single family homes. Wood stoves account for 9% of space heating in urban areas (per Northwest Energy Efficiency Alliance). Less than one third of this wood heating is in 'efficient' wood pellet stoves.

Wood fuel is very difficult to regulate, as it is a cash person to person business; and consumers can also use wood debris from their own yards/fields or that of neighbors.

Natural Gas home space heating accounts for less than 4% of total state-wide, man-made CO2 emissions, per Oregon Department of Energy from Oregon Global Warming Commission (Report for 2019 Legislature).

Many homes have wood stoves currently, but with only occasional use. I myself can anticipate using more wood stove heating if natural gas becomes significantly more expensive because of HB2020 regulation.

Sincerely, Robert Clark Retired Senior Economist, retired from the Oregon Public Utility Commission Resident of Milwaukie, Oregon

One last objection. The Oregon Global Warming Commission should allow greater CO2 emissions than 20% of 1990 levels, because Oregon has added nearly a million people since 1990 from in-migration (these folks would have had CO2 emissions elsewhere, and so, why not allow for 20% of their otherwise CO2 emissions?).