17 April 2021

Before the Oregon Senate Committee on Energy and Environment

Senator Lee Beyer and Members of the Committee

Regarding Senate Concurrent Resolution 17: An Environmental Justice Framework

Among the clear statements of the compelling need for environmental justice in the subject Framework, there is no acknowledgment of the injustice we see from inaction dealing with public health and other economic and social issues confronting Oregonians due to ongoing climate instability.

Without significant decarbonization Oregon emissions add to the threats and injuries accounted in the Senate Concurrent Resolution as introduced. Best science calls for 50% reduction in carbon emissions by 2030. This means that continuing injustice under business as usual can be predicted if inadequate or ineffective policies continue or emerge.

In California, for example, the combined benefit from 18 years of carbon market trading to limit carbon emissions has averaged 2.3 mmt CO2e in emission reduction per year. This amounts to 0.5% per year. In 10 more years, this well-designed market will accomplish a 5% reduction in emissions whereas 50% is called for. In adequate or ineffective climate solutions will add to the injustices the SCR17 statements are intended to mitigate.

Unless the Framework acknowledges and includes decarbonization waypoints identified by best science, justice will be become needlessly elusive, particularly with the likely emergence of proposed solutions that will not and cannot succeed on time. These false solutions can be expected from dominant business interests that since the late ‘70s have acted to deceive the public in ways that threaten public health and a stable economy reliant on robust natural resources.

To deal with the open-ended language in the Framework Resolution as introduced, please consider the addition of quantified commitments by a date certain.

> Resolved that the need for environmental justice from a stable climate can and must be attained by reducing Oregon greenhouse gas emissions 50% from 2020 by 2030, and that failure to do so perpetuates the injustices already evident from inaction due to currently insufficient policy.

Prepared and respectfully submitted by Tracy Farwell, Sustainability Desk, Better Energy LLC

Attachment: Assessment of California emissions reduction

APPENDIX

By how much have California emissions been reduced by their Clean Fuels Program carbon offset trading and other emission reduction efforts ?

Compute historical emissions reductions in California since 2000

Ref: California Greenhouse Gas Emissions for 2000 to 2018, 2020 Edition
https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2018/ghg_inventory_trends_00-18.pdf

A historical record is given in Figure 1.

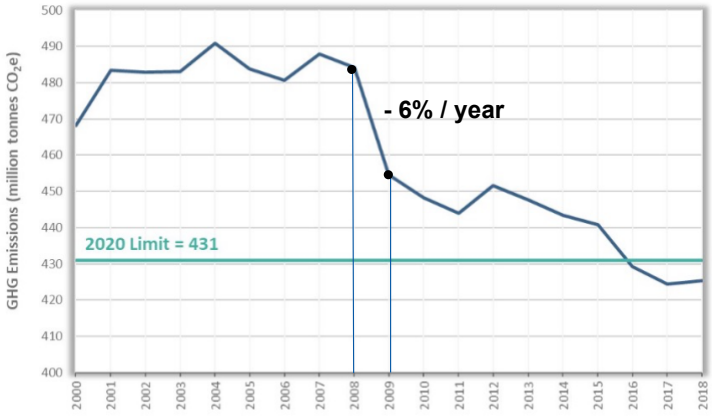

Figure 1. California's GHG emissions, 2000-2018. This graph shows California's annual GHG emissions from 2000 to 2018 in relation to the 2020 GHG Limit required by the California Global Warming Solutions Act (Assembly Bill 32). In 2016, California's GHG emissions dropped below the 2020 GHG Limit and have remained below the 2020 GHG Limit since that time.

Best emissions reduction apparently followed the Bush / Greenspan sub-prime mortgage crisis in 2009, with carbon emissions cut by 6% that year.

GHG Emissions in 2000:	468 mmt CO2e
GHG Emissions in 2018:	426 mmt CO2e
Decline in 18 years:	42 mmt CO2e

Annual emissions reduction per year = 42 / 18 = 2.3 mmt CO2e

Expressed as a % we get 42 / 468 = 0.09 = 9% over 18 years

California GHG emissions reduction programs average 0.5% per year.

The Transport sector in CA is responsible for 40% of CO2e emissions – see Figure 4 in the referenced report.

Emissions from the Transport sector are targeted by the Clean Fuels Program* depicted in Figure 3.
*Also termed the Low Carbon Fuel Standard

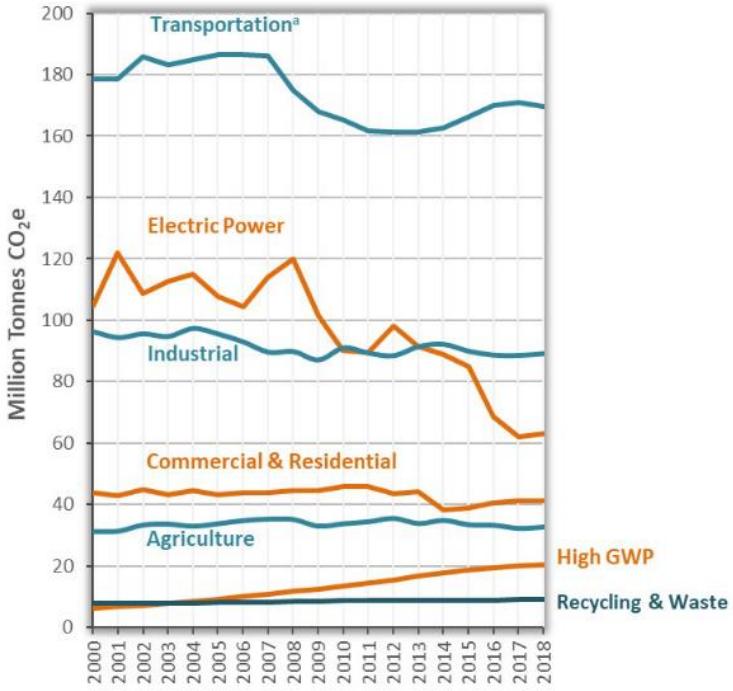

Figure 3. Trends in California GHG Emissions. This figure shows changes in emissions by Scoping Plan sector between 2000 and 2018. Emissions are organized by the categories in the AB 32 Scoping Plan.

Transport Emissions 2000: 179 mmt CO2e ("Tonnes" = shortened notation for metric tones, mt)
Transport Emissions 2018: 170 mmt CO2e
Decline in 18 years: 9 mmt CO2e

Expressed as a % we get 9 / 179 = 0.05 = 5% over 18 years
Annually this is 5 / 18 = 0.3 %.

In California, all emission reduction programs cut transport emissions 0.3% per year. This means emission reduction from the Clean Fuels Program is less than 0.3% per year in CA.

What would 0.3% of Oregon transport emissions amount to ?

0.03 x 23 mmt CO2 = 0.7 mmt CO2 per year

Given this history, is the C2ES prospectus on the California Cap and Trade Program a credible strategy for the next 9 years to 2030 when emissions must be reduced 50% (50/9 = 5.5% per year) ?

https://www.c2es.org/content/california-cap-and-trade/