Dear Mr. Grice,

Thank you for the opportunity to comment on WAC-173-446, Climate Commitment Act (CCA) Program Rule. I appreciate the hard work the Department of Ecology has been doing to implement the CCA.

In addition to my verbal testimony and joint statement with colleagues, I have additional concerns related the offset program and accountability for how CCA funds will be spent.

With regard to the forest offset program; there are concerns that any forest program must have strong rules that account for the increasing risk of fires and decline in forests ability to act as a carbon sink as global climate change takes hold. For example parts of the mighty Amazon are acting as a carbon source rather than a carbon sink¹. There is a need to incentivize the long term preservation of natural old growth ecosystems to ensure the long term carbon storage capacity of forests. Offsets for industrialized forest land must increase harvest rotation cycle times and other ecosystem benefits such as buffer zone around streams. Finally offsets must allow for aggregation of forest assets to enable participation by smaller land owners.

To achieve these goals Washington should not adopt the California offset program and rather developed its own programs based on data the Washington Department of Natural Resources (DNR) is starting to report on². The DNR report enables a greater understanding of how carbon cycles through forest systems. The rising risk of wild fires³ must be taken into consideration for forest offsets as this will decrease the capacity of forests to act a carbon sinks. If the capacity for Washington forests to act as a carbon sink decreases due to increased forest fires and disease, over harvesting, then forest offsets must only be used for projects which help restore forests ability to store carbon and/or preserve intact forest ecosystems.

Another aspect of forest offsets is the miss match between the long term effects of CO2 once released into the atmosphere, hundreds of years, vs short rotation period of industrial forests 20-40 years. This issue is outlined in the analysis here. A forest offset is more of a short term storage unit for carbon rather than a way to permanently remove carbon from the atmosphere. This is an inherent weakness of forest offsets and offsets would be more meaningful if they were for activities that permanently reduce the amount of GHG going into the atmosphere. In the case of forests, this would be expanding forest conservation.

Overall forestry offset programs are complex, hard to monitor and understand benefits and short comings. Due to this and issues with implementing the California program, Washington should adopt its own program that is focused on expansion of forest conservation for non-commercial forests and increase in crop rotation and ecosystem support for commercial forests. Key factors such as the life cycle of C02 in the atmosphere must be balanced with the cycling of C02 in forest systems when evaluating net benefits of forestry offset programs. The changing dynamics of C02

cycling caused by the increased risks of forest fires and disease due to climate change must also be taken into consideration.

It would help the offset program to have more categories of offsets especially for projects that have direct and measurable impacts on GHG and Environmental Equity.

Offset programs could be written which encourage recycling of materials needed for electrification of our transportation system, heating and cooling our homes and greater use of clean energy on our electric grid.

For example in the transportation sector, EV technology requires electronics and batteries which contain lithium, cobalt and other materials which are mined and located outside the US. It will be greatly advantageous to the US including Washingtonians to have a robust recycling industry for these materials. Offsets could be used to encourage entrepreneurship in this area. A recycling offset could be based on GHG avoided and environmental destruction avoided from not having to mine for a raw material. Recent studies show that the US is behind in developing its recycling industry as an integral part of the transition to electrification of transportation and heating and cooling our homes. If the US continues to lag in the recycling of materials essential to the clean energy transition, we will be at a strategic disadvantage.

Other types of recycling operations such as in the pulp and paper industry could be considered for offsets.

In the area of grid flexibility utilities or other entities could be granted offsets for investing in technologies that enable greater grid flexibility to use more clean energy. Success would be measured by how much more power a grid operator can accommodate from intermittent sources of energy such as wind and solar.

Having offset programs which incentivize and benefit the clean energy transition to Washingtonians will help ensure the success of the CCA program.

2) A new section of rules are needed for establishing standards for how CCA funds are spent.

The rules written thus far do not address the key topic of how CCA funds are spent. The people of Washington need assurance that CCA funds are spend as indicated in the statute. Rules are needed which will operationalize the goals of the statute in that CCA funds can only be used for projects that will help Washington meet its 2030, 2040 and 2050 climate goals and improve environmental equity. It is essential that input from the Environmental Justice Council be considered in all spending decisions for CCA funds as per the statute RCW 70A.65.040(1)

From the statute we have the definition "Climate commitment" which means the process and mechanisms to ensure **a coordinated and strategic approach** to advancing climate resilience and environmental justice and achieving an equitable and inclusive transition to a carbon neutral economy.

A **coordinated and strategic approach** can come from agreed upon standards for how CCA money can be spent. Criteria for projects that use CCA money must show a benefit to over-burdened communities and a direct and measurable reduction in GHG and criteria pollutants.

For example criteria can be developed such as how much GHG reduction will result per dollar invested in a particular project (weatherization, heat pump installation, solar hot water, solar panels, improved energy storage grid utilization of clean power. Another example could be how many people trained for new clean energy jobs per dollar invested, how many square feet of housing retrofitted to meet strict energy performance standards in low income neighborhoods, how many EV fast chargers installed in low income residential areas, how many more people are reached by transit services, how many more miles of pedestrian sidewalks and bike lanes are built among other criteria. Legislators and Washingtonians need to have transparency into the rational for CCA expenditure. This information needs to be reported regularly so everyone can see that a **coordinated and strategic approach** to spending is occurring.

Sincerely,

Arvia E. Morris PhD

Seattle, Washington

- 1 World Meteorological Organization publication June 20th, 2021
- 2 Summary of Natural and Working Lands Carbon Inventories and Incentive Programs in Washington Report to the Washington State Legislature In response to ESHB 1109 Sec 308(24) passed in 2019 Washington Department of Natural Resources December 1, 2020
- 3 New York Time Feb 23rd, 2022 updated Feb. 28th 2022
- 4 Sightline Institute NORTHWEST CARBON MARKETS CAN'T SUPPORT LONGER TIMBER HARVEST ROTATIONS That would take a New Zealand-style, all-forests capand-trade system July 11th 2022
- 5 Energy Mix June 26th 2022