Dear Commissioner.

The Climate Commitment Act embodies the will of Washingtonians to confront the climate emergency head on, rather than wait for others to act first. Indeed, the ambitious scope of the law reflects a deep understanding that our state has a responsibility to lead, not follow, because of the significant human and natural assets that we collectively possess within our borders and which can be brought to bear on this challenge. The commitment we have made with this law means decarbonizing our economy fully and rapidly, now. It means investing in preparedness and adaptation to natural system changes that are inevitable and already underway, and which pose the gravest risks to the most vulnerable among us.

The Act also indicates, in no uncertain terms, a desire to promote the development of carbon dioxide removal (CDR) capabilities in Washington and beyond. The science is now clear and the consensus broad: the worst consequences of climate change can no longer be avoided by the elimination of new emissions alone. The IPCC sixth assessment report (AR6) is clear that we must develop the capability to *remove* excess CO2 emissions from our atmosphere on the order of billions of tons per year.

This is a rather frightening admission in AR6. Our past choices and inaction have saturated the sky with excess carbon dioxide, methane and other heat-trapping gasses, and have pushed us to a dire threshold where catastrophe can only be avoided through the development of new technologies and methods that are only at demonstration stage today, at best. We do not yet know which specific technologies and methods will ultimately help us hit the critical targets for atmospheric CO2 concentrations, and we certainly are not skilled and experienced in the application of these systems. We must encourage the development of these skills and systems.

This same goal has already been expressed in <u>RCW 70A.45.100</u>, which states, in part "...it is the policy of the state to promote the removal of excess carbon from the atmosphere through voluntary and incentive-based sequestration activities in Washington...".

Due to our unique natural resources, innovation expertise, and human capital, Washington State has an important obligation to play a leading role in accelerating global CDR capabilities. In the course of rising to this challenge, Washington also has an opportunity to capture enormous economic benefits as an early mover in this new industry. But we must move quickly and purposefully to realize this potential in time, and we believe that the Climate Commitment Act, in its own language, clearly compels us to embrace this course

The pathways to climate restoration and carbon dioxide removal (CDR) are many, and Washington's has specific resources to position the state as a leader in this emerging industry. Specifically, Washington has:

- A history as a leader in technological innovation, and some of the nation's leading research institutions.
- Ample agricultural and forest resources that can be brought to bear on this problem.

- The largest basalt formation on the continent, which has already been shown to be suitable for CO2 sequestration as indicated by test results from PNNL.
- Near-shore waters, protected ports, and tremendous maritime capabilities to support the development of ocean-based CDR technologies.

We believe it is in Washngton's direct interest to actively promote the development of CDR technologies and capabilities that leverage Washington's assets in order to be a leader in the CDR industry.

The committee has asked for specific comments regarding reference protocols from other states or nations. On that topic, we offer the following specific comments:

- 1. The Carbon Dioxide Removal Leadership Act (CDRLA) has been introduced in the New York State Assembly and may soon be introduced in other states. The Act includes specific protocols and guidelines for the operation of a reverse auction to acquire high quality carbon removal credits at the best value for taxpayer dollars, while also allowing for the consideration of in-state economic benefits and environmental and social justice considerations. We suggest reviewing the draft CDRLA for potential language that could be adopted.
- 2. We believe it is important for covered emissions to include the full lifecycle impact of all fuels used in the covered activity, and not just the number of molecules emitted at a specific time and place. For example, any activity using fossil fuels emits not only the CO2 contained in the fuel itself, but also all of the upstream emissions incurred in the extraction and refining of that fuel. Similarly, while the CO2 contained in "circular fuels" was captured from the air and should not be counted as net new emissions, there is still an upstream emissions footprint from growing crops and/or manufacturing the circular fuel, and these emissions should be accounted for. It is also important that the definition of circular fuel includes scope for technologies for recycling environmental CO2 through any electrochemical or biological means, and not only by growing biofuel crops

The Cascadia Climate Coalition applauds the State of Washington for stepping up to lead on this critical issue, and we thank the committee for embarking on the difficult work of converting the goals and targets of the CCA into tangible and actionable rules and programs. We intend to submit further comments during the upcoming formal comment period, and we look forward to working with Ecology throughout this process in the coming months.

Sincerely,

The Cascadia Climate Coalition

- Jason Grillo, AirMiners
- Terri Pugh, The Foundation for Climate Restoration
- Christopher Neidl, The Open Air Collective
- Mike Robinson, PNW Carbon Removal Interest Group

Authors or 'Parties';

- F4CR/
- OpenAir.
- Individual signatories? Others?

Tone / framing:

- Positive and "can do" flatter the CCA and talk up WA's natural leadership and advantages for CDR.
- Restoration / CDR consistent with WA values and distinct enviro commitments, not alien to it
- Frame as though everything we are proposing is already latent and completely defensible within the context of WA's existing climate laws.

Outline

- I. Intro:
 - A. Complementary opening in praise of CCA and how it positions WA in a leadership role.
 - B. Summary of our group's grassroots makeup.
 - C. Meta argument and thru line: a comprehensive 1.5C aligned policy approach must embed aggressive and enforceable decarbonization and adaptation targets, as the CCA clearly does. But Restoration- which entails the removal of existing emissions from our already GhG oversaturated atmosphere - is now a critical third dimension that enjoys broad consensus in the scientific community (include IPCC quotes) and which can no longer be ignored.
 - D. And here too the CCA creates a clear opening for innovative, impactful policy that is accountable to present and future generations.
- II. Defined removal targets are warranted, and should be explicitly carved out in CCA offset rules. Such targets should favor the highest potential impact solutions that maximize the existing parameters included in the CCA: additional, durable, verifiable and enforceable. This includes many technological solutions that Washington's economy and natural resource base are enviably well-positioned to support and foster within our borders.

Why defined removal targets?

- A. Necessary for 1.5 C.
- B. Climate policy must also be innovation policy, and states like Washington can lead.
 - Accelerating cost reduction of essential CDR solutions can be driven by public sector in targeted, market-based and fiscally responsible mechanisms.

- Catalyzing this longer-term transition should be an explicit policy aim in addition to immediate near-term emissions reductions and offsets. It's an investment in the future rooted in accountability to future generations and an understanding of how public policy can be used to foster innovation in ways that the private sector cannot alone bring about.
- 3. Many promising technological CDR solutions such as DAC have emerged in recent years. These solutions need to get cheaper, fast. Fortunately, recent economic analyses from leading scholars (Lackner and Azarabadi 2021, McQueen et al 2021) suggest that relatively modest levels of deployment in the coming decade can dramatically accelerate price reduction.
- C. The State of Washington can and must play a leadership role in driving up CDR deployment, and driving down cost in process... and the CCA already creates ample room for such a commitment to be defined and implemented.
- D. Seeing movement in other jurisdictions, in U.S and abroad, that WA can build on and improve.
 - 1. Mention NY bill to give clear sense that this is a policy area whose time has come and that Washington should remain at the forefront as a climate forward state).
 - a) NYS policy inspired in large measure by Microsoft.
 - 2. Mention European Union clear separation of reductions and removals as a reference point to be followed.
- E. State well positioned to achieve CDR goals and capture economic opportunity
 - 1. Tech
 - a) Microsoft lead
 - b) WA tech sector already producing impressive crop of carbontech startups that sound climate policy can help foster.
 - 2. Tribal opportunities
 - a) Justice and equity principles, but also
 - b) Clear and unmistakable permanent storage opportunities that are the envy of other states.
 - (1) Basalt reserves
- F. Leadership: potential regional coalition from BC to CA in the future, as state and provincial CDR/restoration policies advance in those places. Washington's leadership can help bring this to organic fruition with important replicable precedents with CCA rule making.
- III. Policy options that align with CCA
 - A. A procurement approach
 - 1. Transparent and accountable, particularly to historically impacted communities.

- 2. Incorporate other co-benefits and social aims related to equity
- 3. Reference microsoft experience again.
- B. A compliance approach
 - 1. Need to work this out a bit more
- C. Enhancing tribal leadership and opportunity.
- D. Gradual scale up from small scale to larger targets, and initial pilot authorization will enable Washington to get going fast, and derive valuable learnings at low cost to taxpayers that can be the basis of an expanded future long-term Restoration program.

IV. Conclusion

A. Thank you and Washington can do this!

Item	Points	
1		
Tribal Considerations in Rule Making		
Protocols for Immediate Adoption		

The Climate Committment Act embodies the will of Washingtonians to confront the climate emergency head on, rather than wait for others to act first. The ambitious scope of the law reflects a deep understanding that our state, indeed, has a responsibility to lead, not follow, because of the significant and enviabe human and natural assets that we collectively possess within our borders that can be brought to bear on this challenge. The commitment we have made with this law means decarbonizing our economy fully and rapidly, now. It means investing in preparedness and adaptation to natural system changes that are inevitable and already underway, and which pose the gravest risks to the most vulnerable among us.

But it also means, in no uncertain terms, that narrowly preventing further harm cannot be the full exent of our collective effort. The science is now clear and the consensus broad: safeguarding shared prosperity for our communities and ecosystems, now and in future generations, requires that we *reverse* the damage already done; that we *restore* our climate. Our past choices and inaction have saturated the sky with global warming pollution, and have pushed us to a threshold where catastrophe can no longer be avoided through the elimination of emissions alone. Our commitment now necessitates that we scale up our capacity to *remove* excess

legacy emissions already in the atmosphere on the order of billions of tons per year by the middle of this century.

The pathways to climate restoration and carbon dioxide removal (CDR) are many, and expanding all the time, from the dynamic power of our forests and soils, to technology-based strategies that leverage new knowledge and innovation. But we must move quickly and purposefully to realize this potential in time. Washington has an important role to play in accelerating this process, and we believe that the Climate Commitment Act, in its own language, clearly compells us to embrace this course