



Jessica Spiegel

Vice President, Northwest Region

June 26, 2026

Sent via email to: CCA_carboncapture@ecy.wa.gov

Marissa Tousley
Carbon Capture Lead
Washington State Department of Ecology
P.O. Box 47696
Olympia, WA 98504-7696

Re: WSPA Comments on Cap-and-Invest Carbon Capture, Removal, Utilization, and Storage Meetings May 2026.

Dear Ms. Tousley:

The Western States Petroleum Association (WSPA) appreciates the opportunity to provide the Washington State Department of Ecology (Ecology) input regarding the discussions on Cap-and-Invest Carbon Capture, Removal, Utilization, and Storage. We support continued evaluation of CCS and other carbon management technologies. WSPA is a non-profit trade association that represents companies that safely explore for, produce, refine, transport and market petroleum, petroleum products, natural gas, and other energy supplies in California, Washington, Oregon, Nevada, and Arizona.

We do have feedback we'd like to share but want to make it clear up front that we believe these technologies can play an important role in reducing emissions from sectors that are energy-intensive and trade-exposed facilities; we want CCS to be a usable compliance pathway for the Climate Commitment Act .

Overall, the presentation left an impression that CCS is a readily available compliance pathway for Washington industry. The discussion itself highlighted a number of significant barriers that remain unresolved. These issues directly affect whether facilities can realistically invest in and deploy CCS projects in Washington. Without addressing these barriers, there is a risk that policymakers will overestimate adoption rates and underestimate the resources and policy changes necessary to make these projects viable.

The 1,000-Year Permanence Requirement Creates a Standard That May Be Impossible to Meet

The most significant concern we have from the presentation is the suggested requirement that captured carbon dioxide be demonstrated to remain sequestered for at least 1,000 years before emissions can be exempted from CCA compliance obligations.

At a practical level, this requirement may be impossible to satisfy. No company can demonstrate with certainty how a project site will be managed, monitored, owned, regulated, or maintained over

a period of one thousand years. Companies merge, dissolve, and change ownership. Governments change. Regulatory programs evolve. Monitoring technologies change. Even where geology may support very long-term storage, demonstrating performance over a millennium is fundamentally different from demonstrating performance over the operating life of a facility. EPA, for example, requires CO₂ plume and fluid movements cease or until a fixed duration (50-years) or alternative timeframe until non-endangerment is demonstrated.

More importantly, the requirement appears inconsistent with the way American legal and economic institution's function. The United States itself has existed for approximately 250 years. Washington has been a state for less than 140 years. Yet Ecology is proposing a standard that effectively requires project developers to prove performance over a period several times longer than our country has existed. American law has historically been skeptical of efforts to impose obligations or restrictions that bind future generations indefinitely. While Ecology is not creating a property interest, the practical effect is similar. Project developers are being asked to make commitments and provide assurances over timeframes that exceed the lifespan of every institution involved in the project.

The permanence requirement also raises significant competitive concerns. Facilities in Washington compete against facilities in other states and other countries. If Washington adopts a standard that is substantially more difficult to satisfy than comparable programs elsewhere, investment will naturally flow toward jurisdictions where CCS projects can actually be permitted and credited. A compliance pathway that exists in theory but cannot realistically be used in practice provides little value to regulated entities and risks placing Washington facilities at a competitive disadvantage.

For these reasons we recommend that Ecology develop timelines more consistently with other jurisdictions and similar activities. And, as this policy is developed into rulemaking, we recommend Ecology have pre-approved or clear and demonstrable criteria that facilities can use to demonstrate compliance.

Transportation May Be a Larger Barrier Than Storage

Much of the presentation focused on Washington's potential geologic storage capacity, particularly within Columbia River Basalt formations. Far less attention was given to the challenge of transporting captured carbon dioxide from industrial facilities to storage locations.

Even if suitable storage formations exist, captured carbon dioxide must first be collected, compressed, transported, and delivered to those locations. That infrastructure does not currently exist at scale in Washington. Carbon dioxide pipelines would need to be located, permitted financed and will take a period of time to construct.

Transportation alternatives present their own challenges. Truck and rail transportation may be technically possible for some projects, but the volumes involved are enormous. Capturing meaningful quantities of industrial emissions would require continuous movement of carbon dioxide over long distances.

The transportation question becomes even more important if sequestration occurs outside Washington. The presentation included discussion regarding interstate storage and alignment with other jurisdictions, but many of the legal, regulatory, and practical questions associated with cross-

border transport remain unresolved. It will become especially important that CO₂ not be classified as waste to facilitate cross-border transport.

Before CCS can be considered a practical compliance pathway, we recommend Ecology evaluate the transportation infrastructure necessary to support deployment and the costs associated with building and operating that system.

Capturing CO₂ at petroleum refineries has feasibility limitations

Petroleum refineries consist of dozens of units including heaters, boilers, hydrogen plants and other process technologies that can produce CO₂ while generating heat and energy or producing products. The concentration of CO₂ in an exhaust stream will vary based on the unit. For example, a steam-methane reformer hydrogen plant produces CO₂ in high concentrations due to the process involved in making hydrogen and therefore should be categorized as a more effective CO₂ to capture than a process unit with a low CO₂ concentration such as a heater, boiler or other process technology. Examples of CO₂ being captured at facilities today are limited, but isolated to processes that produce a high purity CO₂ stream, such as a steam-methane reformer, or ethanol and ammonia production plants.

Notwithstanding permitting, cost and other specific issues, WSPA recommends Ecology take a bright line approach in evaluating which CO₂ streams at refineries may feasibly capture CO₂, rather than a blanket assumption most or all stationary source combustion can be captured, collected and distributed for underground injection CO₂.

Current CCA Treatment May Undermine CCS Investment

The presentation confirmed that captured carbon dioxide is not removed from a facility's compliance obligation under the CCA. To qualify for exemption, captured emissions must not only satisfy permanence requirements but must also exceed reductions already anticipated within the declining cap. Requiring the CCS be above and beyond anticipated reductions essential preempts CCS as a pathway to reductions for those entities and facilities that are the hardest to decarbonize which are, arguably, exactly where CCS should be leveraged.

While we understand this is the current law, this approach significantly affects project economics. CCS projects require large upfront investments, substantial operating costs, and long payback periods. If facilities are unable to receive full compliance recognition for captured emissions, the economic incentive to invest becomes substantially weaker.

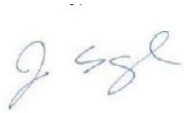
This issue is particularly important for energy-intensive and trade-exposed facilities. These facilities compete in regional, national, and international markets and generally cannot recover compliance costs through pricing to the same extent as other sectors. If Washington expects CCS to play a meaningful role in achieving emission reduction goals, the program should ensure that facilities receive clear and predictable compliance benefits for captured emissions.

Without those benefits, CCS may be viewed as a promising technology but not a practical investment. As a result, adoption rates may fall well below the expectations presented to policymakers.

Broadly, we recommend that Ecology look at this policy and it's implementation through the lens of facilitating it's application in the CCA, and help lift the significant regulatory hurdles and other challenges that may hinder the buildout of CCS.

On behalf of WSPA and its member companies, I would like to express our thanks for considering our input on this important work. If you have any questions regarding our comments, please do not hesitate to contact me directly at (360) 918-2178 or via email at jspiegel@wspa.org.

Sincerely,



Jessica Spiegel
Vice President, Northwest Region

