



NW Natural
We grew up here.

July 15, 2022

ATTN: Joshua Grice
Washington State Department of Ecology
Air Quality Program
P.O. Box 47600
Olympia, WA 98504-7600

RE: Proposed Cap-and-Invest Program Rules (Chapter 173-446 WAC)

Puget Sound Energy, Inc., Avista Corporation, Cascade Natural Gas Corporation, and NW Natural (collectively, “Gas Utilities”) submit these comments on the Department of Ecology’s proposed rule (“Proposed Rule”) implementing the Climate Commitment Act (“Act” or “CCA”). In doing so, the Gas Utilities aim to aid Ecology in developing regulations that begin reducing greenhouse gas (“GHG”) emissions as quickly and equitably as possible.

The Gas Utilities generally are supportive of the Proposed Rule, but believe there still is work to do to ensure it functions as the Act dictates and as we understand Ecology intends. Most importantly, as detailed below, Ecology should revise the Proposed Rule to maximize near-term GHG emission reductions by expressly adopting a book-and-claim accounting methodology for renewable natural gas (“RNG”), protect utility customers by adopting measures that simplify and facilitate program implementation, and enable the linking of Washington’s and the Western Climate Initiative’s (“WCI”) market-based climate programs by adjusting various elements of the Proposed Rule.

Puget Sound Energy (“PSE”) is Washington State’s oldest and largest investor-owned energy utility, serving over 1.1 million electric and more than 850,000 natural gas customers with safe and reliable energy services. In January 2021, PSE announced an aspirational goal to be a Beyond Net Zero Carbon company by 2045.¹ In alignment with its Beyond Net Zero aspirations, PSE was proud to support the CCA and is preparing in earnest for the implementation of this multi-sector market approach to reducing carbon emissions.

Avista Corporation (“Avista”) provides electricity to 402,000 customers and natural gas to 368,000 customers across four northwestern states, including Washington.² Since Avista’s founding in 1889, the company has served its customers with an electric generation resource mix that is more than half renewable, allowing Avista to keep its carbon emissions among the lowest in the nation. Avista also aims to serve its customers with a carbon-neutral supply of electricity by the end of 2027 and with 100% clean electricity by 2045.³ On the gas side, Avista offers customers the option of supporting RNG, and the company has set a goal to achieve carbon

¹ Puget Sound Energy, *Pathway to Beyond Net Zero Carbon by 2045*, (Jan. 2021), available for download at <https://www.pse.com/en/press-release/details/pse-sets-beyond-net-zero-carbon-goal>.

² Avista, *Our Commitment*, <https://investor.avistacorp.com/corporate-responsibility/our-commitment>.

³ Avista, *Corporate Sustainability Report 2021*, 6, <https://investor.avistacorp.com/static-files/c8d35daf-8b46-4679-8952-ca40b6bfe27f#page=5>.

neutrality by 2045.⁴ Avista is committed to reducing GHG emissions while providing customers reliable, affordable essential energy services.

Cascade Natural Gas Corporation (“Cascade”) serves nearly 300,000 customers located in smaller, mostly rural communities across Washington and Oregon. The company shares a strong commitment to addressing climate change and supporting the communities it serves. Cascade steadfastly supports energy efficiency innovation efforts and has participated as a founding partner of EPA’s Natural Gas Star Methane Challenge Program since 2016. Since 2008, Cascade’s customers have saved more than 7 million therms, and the company has issued approximately \$35.5 million in rebates.⁵

NW Natural is committed to ensuring energy reliability for more than 770,000 customers across the Pacific Northwest and helping Washington transition to a low-carbon, renewable-energy future. Already, the company is ahead of the target it established in 2016 to meet its 30% carbon savings goal by 2035, based on 2015 emissions associated with its operations and the use of its product by customers.⁶ NW Natural also has established “Destination Zero”, which lays out the company’s pathway to achieve a carbon-neutral future by 2050.⁷

The Gas Utilities recognize Ecology’s diligent efforts to meet the statutory deadline for program implementation while meaningfully soliciting and considering community feedback on the Proposed Rule, and appreciate Ecology’s further consideration of the following comments.

A. Endorse Book-and-Claim Accounting.

In order to maximize every opportunity for gas utilities to contribute to GHG emission reductions, the adopted CCA Rule should ensure utilities that contract for RNG to displace fossil natural gas receive credit for such purchases by reducing their covered emissions by an equivalent amount. Commonly referred to as ‘book-and-claim’ accounting, this is a proven and effective approach to displacing fossil natural gas.

Under ‘book-and-claim’ contracts, RNG, like renewable electricity, is purchased on behalf of customers, but it may not be feasible to track the actual molecules to a specific location upon delivery—just like the actual electrons from renewable electricity cannot be tracked to a specific delivery location. Even so, similar to how Washington’s renewable portfolio standard works for electricity,⁸ the addition of RNG to the interstate pipeline system displaces fossil natural gas, thereby reducing GHG emissions regardless of where individual molecules are delivered. That’s why numerous other climate programs—including Washington’s RNG program,⁹ the Oregon

⁴ *Id.*

⁵ Cascade Natural Gas, *Environmental Priorities*, <https://www.cngc.com/in-the-community/environmental-priorities/>.

⁶ NW Natural Holdings, 2020 Environmental, Social and Governance (ESG) Report, 18 (Aug. 2, 2021), available for download at <https://www.nwnatural.com/about-us/the-company/sustainability>.

⁷ *Id.* at 24.

⁸ See Chapter 19.285 RCW.

⁹ RCW 80.28.385(2).

Climate Protection Program,¹⁰ the Oregon Clean Fuels Program,¹¹ Oregon’s RNG procurement program established under Senate Bill 98,¹² the California Low Carbon Fuel Standard,¹³ California Senate Bill 1440’s Biomethane Procurement Program,¹⁴ and the federal Renewable Fuel Standard¹⁵—accept/endorse ‘book-and-claim’ RNG contracts.¹⁶

A key benefit of ‘book-and-claim’ accounting is that it maximizes near-term emission reductions from already existing sources of RNG and reduces the overall need for new infrastructure. Rather than having to wait until new pipeline infrastructure is built, entities can contract for additional RNG *immediately* to displace conventional natural gas. Reducing the need for additional conventional natural gas will have a particularly powerful impact in mitigating climate change. As EPA observes in relation to the benefits of RNG, “Methane has a global warming potential more than 25 times greater than CO₂ and a relatively short (12-year) atmospheric life, so reducing these emissions can achieve near-term beneficial impacts in mitigating global climate change. For facilities that are not already required to mitigate such emissions, an RNG project can reduce methane emissions significantly.”¹⁷ Thus, it is no surprise the Intergovernmental Panel on Climate Change (“IPCC”) describes “methane capture and recovery from solid-waste management” as a “short-term ‘win-win’ polic[y] that simultaneously improve[s] air quality and limit[s] climate change.”¹⁸ The IPCC has also found that “[s]trong, rapid and sustained reductions in CH₄ emissions” would “limit the warming effect resulting from declining aerosol pollution and would improve air quality.”¹⁹

Notably, the same approach to incentivizing RNG development is also enshrined in California’s cap-and-trade and emissions reporting regulations.²⁰ Adopting a similar approach in the CCA Rule will therefore implement the Washington legislature’s intent to preserve the

¹⁰ Oregon Department of Environmental Quality, *Oregon Environmental Quality Commission Special Meeting: Rulemaking, Action Item A, Greenhouse Gas Emissions Program 2021 Rulemaking, Climate Protection Program*, 313-314 (2021), https://www.oregon.gov/deq/EQCdocs/121621_ItemA.pdf (“The natural gas utility can claim the same volume of biomethane via displacement, also known as book and claim, without tracking the gas to a specific end-user.”).

¹¹ OAR 340-253-0400(7)(b).

¹² OAR 860-150-0050.

¹³ 17 Cal. Code Regs., tit. 17, § 95480 *et seq.*

¹⁴ California Public Utilities Commission, *Decision Implementing Senate Bill 1440 Biomethane Procurement Program*, Decision 22-02-025, 7 (Feb. 24, 2022),

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M454/K335/454335009.PDF>.

¹⁵ 40 C.F.R. § 80.1454(k)(2)(iii).

¹⁶ See also Oregon Public Utility Commission Staff, *In the Matter of Rulemaking Regarding the 2019 Senate Bill 98 Renewable Natural Gas Programs, Docket AR 632, Staff Report*, 7 (Mar. 10, 2020),

[https://edocs.puc.state.or.us/efdocs/HAU/ar632hau151952.pdf](https://edocs.puc.state.or.us/efddocs/HAU/ar632hau151952.pdf).

¹⁷ EPA, *Renewable Natural Gas*, <https://www.epa.gov/lmop/renewable-natural-gas> (last updated Mar. 30, 2022).

¹⁸ Sophie Szopa et al., *Short-Lived Climate Forcers*, in *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, 895 (2021).

¹⁹ Richard P. Allan et al., *Summary for Policymakers*, in *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, 27 (2021).

²⁰ Cal. Code Regs., tit. 17, §§ 95103(j), 95852.1.1; California Air Resources Board, *Biomass-Derived Fuels Guidance for California’s Mandatory GHG Reporting Program*, 10 (Jan. 11, 2019), <https://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/biomass.pdf>.

possibility of future program linkage.²¹ As further discussed in Section C, linkage between WCI and Washington is crucial to making it less costly to reduce even more GHG emissions.

In light of these considerations, the adopted Rule should expressly support all contracts for RNG to displace conventional natural gas, whether or not the particular gas molecules can be traced back into Washington. These emissions reductions from RNG ‘book-and-claim’ contracts are appropriately credited to the Washington gas utilities and their customers, who ultimately bear the cost of these RNG acquisitions. A reduction in GHG emissions somewhere is a climate benefit everywhere. As such, we recommend the Rule include the following provision under WAC 173-446-040:

(5) Accounting for displaced fossil-derived natural gas. A covered entity can subtract one allowance from its compliance obligation for each estimated metric ton of avoided fossil-derived natural gas carbon dioxide equivalent emissions resulting from the covered entity’s purchases of the environmental attributes of renewable fuels of biogenic origin (i.e., biomethane, as defined in WAC 173-441-122(2)(a)). To do so, the covered entity must report these purchases to ecology in the manner stipulated by WAC 173-441-122(4)(b)(xii).

B. Revise No-Cost Allowance Reduction Schedule.

As currently proposed, no-cost allowances, which are set based on customer consumption of natural gas between 2015-2019, decline annually by seven percent for the first eight years starting in the very first year of program.²² Instead of a uniform annual decline for the first eight years, the schedule for reducing no-cost allowances for gas utilities should be adjusted to minimize customer impacts on the front end of the program while still achieving the same emission reduction targets.

Specifically, Ecology should revise WAC 173-446-240(2) so that no-cost allowances provided to gas utilities are reduced less in the first compliance period (2023-2026) and more in the second compliance period (2027-2030). Starting the program with more no-cost allowances for gas utilities would minimize program impacts on gas customers and provide gas utilities the time needed to transition to emissions-reducing options without compromising Washington’s statutory emissions reduction goals. Otherwise, the sharp decline in no-cost allowances during the first year especially, and initial compliance period generally, will exacerbate the program’s initial impact on customers, because it does not provide for transition time to minimize rate shock.²³

Washington’s statutes do not mandate that the no-cost allowances immediately decline as steeply as Ecology currently proposes. CCA Sec. 9(2) only requires that Ecology set annual allowance budgets “to achieve the share of reductions by covered entities necessary to achieve the 2030, 2040, and 2050 statewide emissions limits established in RCW 70A.45.020.” RCW 70A.45.020 sets a 2030 goal for the state to reduce overall GHG emissions to 45% below 1990

²¹ See CCA Statute, Sec. 12(10).

²² WAC 173-446-240(2)(a).

²³ A less steep decline in the first compliance period will also provide regulated entities and Ecology time to work out any unforeseen issues with a brand-new regulatory program that Ecology is being forced to promulgate at a rapid speed.

levels. Ecology could still fulfill this climate goal by simply adjusting the no-cost allowances to become less steep initially and then more stringent in the second compliance period.

Given the time it takes to develop any new energy infrastructure project, whether gas or electric, reducing the decline of no-cost allowances in the first compliance period and increasing it proportionately in the second compliance period would better align with the timeline for new alternative and renewable resources to be brought online. For example,

- **For renewable natural gas**, while some RNG is available for use now, planning, designing, and implementing the construction of new RNG projects is a multi-year process subject to the approval and oversight of the Washington Utilities and Transportation Commission (“WUTC”). For example, Cascade was recently selected to develop and make beneficial use of landfill gas from the Deschutes Landfill near Bend, Oregon. Contracts are expected to be signed this fall. It will take time to design and build the facility, and it is estimated RNG will be produced from the landfill **around mid-2024**. Cascade is also working toward contracts to purchase RNG produced by third-party developers who have been exploring RNG project development for a number of years in the company’s service territory in Washington. Cascade hopes to have contracts signed for one or more of these projects by late summer or early fall 2022, and it will take at least another year after that for RNG to begin flowing into its system.²⁴
- **For hydrogen**, NW Natural predicts that its ongoing process to develop its proposed Hydrogen-Eugene Project, a clean hydrogen production facility, will take approximately two years in total to complete from start to finish. NW Natural is coordinating on the project with the Eugene Water & Electric Board, the Bonneville Environmental Foundation, and the Renewable Hydrogen Alliance. The project is expected to begin construction in 2023 and begin producing hydrogen **in early 2024**. Timelines for these projects vary depending on many factors, but the Gas Utilities expect the number of such projects to increase over time, just as once-emerging wind and solar projects have.
- **Other measures**, like wide-scale electric retrofits and energy efficiency projects, are also multiyear endeavors that will likely be accomplished incrementally. Additionally, new transmission lines needed to deliver electricity from additional renewable energy sources that come online can take, on average, 10 years or more to build.²⁵

The Gas Utilities would welcome the opportunity to meet with Ecology to discuss suggested rates of decline to minimize customer impacts on the front end of the program and accommodate the buildout of emissions-reducing infrastructure projects during the first and second compliance periods in order to meet 2030 emission reduction goals.

²⁴ Cascade has observed it may take in the range of three to five years to permit, plan, engineer and design, construct, and commence operation of RNG production facilities.

²⁵ Transmission Agency of Northern California, *Transmission Q&A*, (2022), <https://www.tanc.us/understanding-transmission/transmission-qanda/#:~:text=Timeline%3A%20On%20average%20it%20can,%2C%20land%20acquisition%2C%20and%20construction..>

C. Enhance Program Compatibility with California.

Ecology should further model price signals after California’s cap-and-trade program to promote future linkage between the programs. The Gas Utilities appreciate Ecology’s setting of the CCA’s ceiling price and price containment reserve trigger prices to reflect California’s cap-and-trade program.²⁶ However, as recommended by the IETA white paper submitted in response to Ecology’s request for comments (*see* Attachment A), Ecology should further promote future linkage by adopting the three ceiling prices in California’s program rather than a single ceiling price.²⁷ This will increase long-term price certainty for regulated entities and protect both programs from adverse competitiveness impacts and emissions leakage.

The Gas Utilities strongly support the steps Ecology has already taken to promote linkage, including by signing an agreement with WCI Inc. to administer the CCA’s online auction platform, the same platform California uses. As noted in the IETA white paper, linkage will allow for a larger number and broader type of entities to trade with one another, leading to improved allowance liquidity and economic efficiency.²⁸ Additionally, the paper observes that “formal linkage can dampen carbon price volatility caused by regional variations, especially if critical factors such as seasonal weather or economic activity are imperfectly correlated across jurisdictions. This is particularly pertinent to California and Washington,” where electric loads peak at opposite times of the year (summer peaking in California and winter peaking in Washington).²⁹

Furthermore, the Ecology-commissioned Vivid Economics modeling study of the CCA predicts that a linked cap-and-invest program would produce an initial emissions allowance price of \$41 per metric ton of CO₂e, whereas an unlinked program could result in initial prices of up to \$68—a 65% price increase.³⁰

For these reasons, it is imperative that the final rule be designed to make linkage between the WCI and Washington programs as seamless as possible.

D. Adjust Covered Emissions.

The Gas Utilities provide the following recommendations to ensure the final rule aligns with the CCA statute and fairly accounts for necessary adjustments to emission caps resulting from covered entities exiting the program:

- **The definition of “covered emissions” appropriately excludes RNG.** The Gas Utilities support the exclusion of emissions from “renewable fuels of biogenic origin” from the definition of “covered emissions.”³¹ While WAC 173-446-040 also excludes emissions from “biomass” and “biofuels,” the Proposed Rule seems to contemplate that these terms

²⁶ WAC 173-446-335; WAC 173-446-370.

²⁷ IETA and Environmental Defense Fund, *A Roadmap for Linkage: Aligning California and Washington’s Carbon Prices*, 11 (July 2022) (“Attachment A”).

²⁸ *Id.* at 4.

²⁹ *Id.* at 4-5.

³⁰ Ecology, *Washington State Climate Commitment Act: Summary of market modeling and analysis of the proposed Cap and Invest Program*, 12 (June 2022).

³¹ WAC 173-446-040(2)(a)(i).

encompass fuels that “are capable of serving as a substitute” for petroleum fuels.³² The CCA’s definition of “biomass-derived fuels”³³ is meant to encompass RNG, but RNG used for non-transportation purposes does not serve as a substitute for *petroleum* fuel. Thus, the inclusion of “renewable fuels of biogenic origin” in WAC 173-446-040(2)(a), which covers RNG for non-transportation purposes, appropriately implements the direction and intent of the Act.

- **Emissions associated with national security facilities must be exempted.** When calculating gas utilities’ covered emissions compliance obligation, Ecology should ensure it is subtracting any emissions associated with natural gas delivery to certain national security facilities. The CCA specifically exempts from program coverage “[e]missions from facilities with North American industry classification system code 92811 (national security).”³⁴
- **Free allowance allocations should be adjusted due to customers that exit the CCA.** Ecology should increase gas utilities’ free allowance allocations if they become responsible for the emissions of customers that are no longer covered under the CCA. WAC 173-446-070 provides a pathway for covered entities that report covered emissions below 25,000 metric tons of CO₂e to exit CCA coverage. However, when this occurs for certain gas utility transport customers, the compliance obligation connected to the customer’s emissions will fall on the gas utility rather than on the transport customer.³⁵ This could substantially increase the emissions attributed to the gas utility, and gas utilities have little control over their customers’ gas demand. To maintain program integrity, gas utilities’ allowance allocations should increase in proportion to the new emissions from customers that drop out of CCA program for which gas utilities would be newly responsible.

E. Improve Allowance Allocation.

In order for the CCA program to efficiently reduce as much GHG emissions as possible, allowance allocation must be implemented in an early and accurate manner. To that end, the Gas Utilities offer the following recommendations:

- **The WUTC should oversee the consignment of allowance revenue.** The Gas Utilities support the WUTC having the primary responsibility for determining how utilities consign allowance revenue for customers’ benefit. The WUTC already oversees how gas utilities make investments to benefit their customers.³⁶ Because the WUTC has knowledge of existing billing tariffs, utility billing infrastructure and capabilities, and low-income customer rate exposure, it is well-equipped to oversee the distribution of customer benefits from the program, including any revenue from the sale of no-cost allowances, consistent

³² WAC 173-446-020.

³³ See CCA, Sec. 2(12).

³⁴ CCA, Sec. 10(1)(f).

³⁵ See CCA, Sec. 10(1).

³⁶ RCW 80.01.040(3) (“The utilities and transportation commission shall . . . [r]egulate in the public interest, as provided by the public service laws, the rates, services, facilities, and practices of all persons engaging within this state in the business of supplying any utility service or commodity to the public for compensation.”).

with CCA objectives.³⁷ Furthermore, the WUTC is in the process of conducting a gas decarbonization study using funding granted by the 2021-23 Omnibus Operating Appropriations Act, which will put this agency in an ideal position to oversee revenue used to help decarbonize the energy sector.³⁸

- **No-cost allowances should be provided earlier.** The Gas Utilities request for Ecology to provide at least a portion of no-cost allowances at the time of the first auction. Under the current Proposed Rule, three or more auctions could potentially occur before Ecology distributes no-cost allowances to these utilities.³⁹ The delay between the first program auctions and the receipt of no-cost allowances will make planning for compliance costs and directly related ratepayer impacts extremely challenging. Providing at least a portion of no-cost allowances concurrent with the first auction will mitigate potential harm to customers from allowance market volatility caused by uncertainty.
- **The adopted Rule should explain when allowances will be removed from the program.** WAC 173-446-250(2) states that Ecology “may remove and retire allowances from the next year’s allowance budget if the analysis of the state’s progress toward the greenhouse gas limits required in RCW 70A.45.020 indicates insufficient progress toward those limits for the proportion of covered emissions in the program relative to total statewide greenhouse gas emissions.” The Proposed Rule should define what constitutes “insufficient progress.” Leaving this definition open creates market uncertainty as to when Ecology will decide to remove allowances from the market, contributing to price instability. Ecology’s ability to remove allowances may also create challenges to linkage with programs in other jurisdictions that do not have such provisions.
- **Provide no-cost allowances for EITEs that have not been allocated allowances.** Like electric utilities, gas utilities should receive no-cost allowances under WAC 173-446-240 for emissions intensive, trade exposed (“EITEs”) customers that “have not been otherwise allocated [allowances] for the [gas]-related emissions for that facility and to the facility.”⁴⁰ The Gas Utilities have numerous EITE customers with emission profiles between 10,000 to 25,000 CO₂e annually and under 10,000 CO₂e annually, and the Gas Utilities should receive no-cost allowances to defray program impacts on these customers. CCA Sec. 13(1) states that “[f]acilities owned or operated by a covered entity must receive an allocation of allowances for the covered emissions at those facilities under this subsection if the operations of the facility are classified as emissions-intensive and trade-exposed. . . .” Ecology can better effectuate the legislature’s intent behind this provision to mitigate any adverse impacts the CCA may otherwise have on small EITEs by ensuring that the operations of EITEs that rely on gas service can continue to conduct their business and operations in Washington. Accordingly, Ecology should provide gas utilities no-cost

³⁷ See, e.g., CCA, Sec. 14(4).

³⁸ See Washington Utilities and Transportation Commission, *Examination of energy decarbonization impacts and pathways for electric and gas utilities to meet state emissions targets*, Docket No. 210553, <https://www.utc.wa.gov/casedocket/2021/210553/docsets> (last visited July 13, 2022).

³⁹ See Department of Ecology, *Proposed Dates for Required Actions to Implement the Climate Commitment Act*, <https://ecology.wa.gov/DOE/files/5b/5bbe1aa1-f9a6-4c3f-9614-43e51323db7c.pdf>.

⁴⁰ See WAC 173-446-230(f)(3).

allowances for all EITE customers not already allocated allowances, including those who emit between 10,000 to 25,000 CO₂e annually and under 10,000 CO₂e annually.

- **Provide auction training and other compliance-centric support.** The Gas Utilities respectfully request that Ecology hold an early practice auction to help familiarize program participants with the auction process and create some level of price predictability, but we realize this may be infeasible, given the Rule's rapid implementation timeline mandated by statute. In recognition that this is a new and novel program and of the administrative resources it will take for covered entities to comply with the Rule, the Gas Utilities hope to work closely and collaboratively with Ecology to achieve compliance with the adopted Rule. To this end, we encourage Ecology to initiate auction trainings for covered entities and provide detailed guidance as necessary throughout the Rule implementation process.

F. Remove Price Ceiling Units Discretion.

Ecology should remove language in WAC 173-446-385(6) that implies the issuance of price ceiling units is discretionary. Price ceiling units are an essential price containment mechanism in situations where no allowances remain in the allowance price containment reserve and covered or opt-in entities lack adequate compliance instruments for compliance. As such, the Gas Utilities recommend the following revision:

~~If ecology agrees to sell price ceiling units,~~ In the event that no allowances remain in the allowance price containment reserve, and if the covered entity or opt-in entity shows in its request for a price ceiling unit sale under subsection (4) of this section that it has insufficient compliance instruments to meet its compliance obligations for the immediately upcoming compliance deadline, ecology must issue the number of price ceiling units for sale to the covered or opt-in entity to provide sufficient cost protection for such entities. Ecology shall instruct the financial services administrator to begin to accept cash payment for purchases from price ceiling sales no earlier than 10 business days after the previous allowance price containment reserve auction and to cease accepting payments no later than seven business days thereafter.

The CCA does not grant Ecology discretion over whether to sell price ceiling units that may be necessary to protect consumers from price impacts. Implying there exists discretion over whether price ceiling units will be issued could lead to uncertainty and create issues with both market integrity and the ability to link to other programs, such as California's cap-and-trade program.

G. Include Confidential Business Information Provisions.

The Gas Utilities support WAC 173-446-150(3), which anonymizes the information Ecology posts about the contents of each holding account. Additionally, we appreciate the addition of the confidentiality provisions in WAC 173-446-390. These additions to the Proposed Rule will help protect the integrity of the allowance market.

H. Requests for Clarification.

The Gas Utilities provide the following suggestions and/or requests for clarifications to improve the Proposed Rule's clarity:

- **WAC 173-446-315(1)(c)** should permit regulated utilities to submit a letter of commitment or attestation in relation to their bid guarantees. Currently, this subsection requires bid guarantees for all covered entities to be in the form of either a wire transfer, an irrevocable letter of credit, or a bond. This adds unnecessary costs for regulated utilities and could subject ratepayers to increased costs as well. Because utilities are already heavily regulated by the WUTC and aim to minimize ratepayer costs, Ecology should alter this provision to allow utilities to submit a letter of commitment or attestation for their bid guarantees.
- **WAC 173-446-030(1)(e)(ii)** defines a covered source as “a party who is not a natural gas company and has a tariff with a natural gas company to deliver to an end-use customer.” However, it is the natural gas company that has a tariff under which another party is taking service from the natural gas company. The tariff service of the natural gas company is with the end-use customer. Thus, the Proposed Rule's language, while paralleling the statute, should be revised to reflect the intent of the law in a manner that reflects practice. Ecology should revise this rule language to read, “a party who is not a natural gas utility but is an end-use customer who takes service under a tariff of a natural gas utility.”
- **WAC 173-446-030(1)(e)(iii)** defines a covered source as “a party that is not a natural gas company and has the natural gas delivered through an interstate pipeline to a distribution system owned by the purchaser” that exceeds the 25,000 tpy threshold. The Gas Utilities ask Ecology to clarify the type of end-user this is supposed to cover, since local distribution companies are already covered in a separate provision.
- **WAC 173-446-110(1)** requires registered entities to disclose all direct and indirect corporate associations with other entities registered under the CCA program or in another external GHG emissions trading system (“ETS”) to which Washington has linked. Subdivision (2) of this section requires that registered entities must disclose all direct corporate associations with other parties not registered with the CCA program or with another external GHG ETS to which Washington has linked, if those parties have the degree of ownership interest in or control over the registered entity to meet the requirements of having a direct corporate association. The Gas Utilities interpret this to mean that only corporate associations with the relationship specified in WAC 173-446-105(1) must be reported pursuant to this subdivision. We agree that Ecology should require disclosures of direct corporate associations of registered entities which may have the potential to impact auction participation. However, to reduce the reporting burden for disclosures that would not have an impact on auction participation, the Gas Utilities ask Ecology to limit direct disclosures in WAC 173-446-110(2) to only those entities physically doing business in the state of Washington.
- The Gas Utilities ask Ecology to remove the “percent of common owners, directors, or officers of the other party” from the criteria to determine when a corporate association exists under **WAC 173-446-105(1)**. For companies, like Cascade, that are owned by a

parent company with multiple unrelated businesses, this could create an enormous and unwarranted administrative burden (for companies and Ecology) with no corresponding benefit. As proposed, the Proposed Rule risks inadvertently encompassing a broad swath of entities that have no emissions reduction obligations under the CCA and therefore would be of little to no use for Ecology to receive disclosures about.

- **WAC 173-446-120(1)(j)** provides that companies must provide “any further information requested by ecology concerning the corporate association.” It is unclear what type of additional information Ecology would be requesting under this provision, especially in light of all of the other information regarding corporate association the Proposed Rule allows Ecology to request. The Gas Utilities recommend either deleting this language or providing additional clarity in the Proposed Rule regarding what type of information Ecology may request concerning corporate association.

The Gas Utilities appreciate the opportunity to engage with Ecology on these important issues. If you would like to further discuss our comments or have any questions, please reach out to Lorna Luebbe (lorna.luebbe@pse.com), Bruce Howard (bruce.howard@avistacorp.com), Abbie Krebsbach (abbie.krebsbach@mdu.com), and Mary Moerlins (mary.moerlins@nwnatural.com).

Sincerely,

/s/ Mary Moerlins

Mary Moerlins
Director of Environmental Policy &
Corporate Responsibility
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Lorna Luebbe
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/s/ Bruce Howard

Bruce Howard
Senior Director of Environmental Affairs
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/s/ Abbie Krebsbach

Abbie Krebsbach
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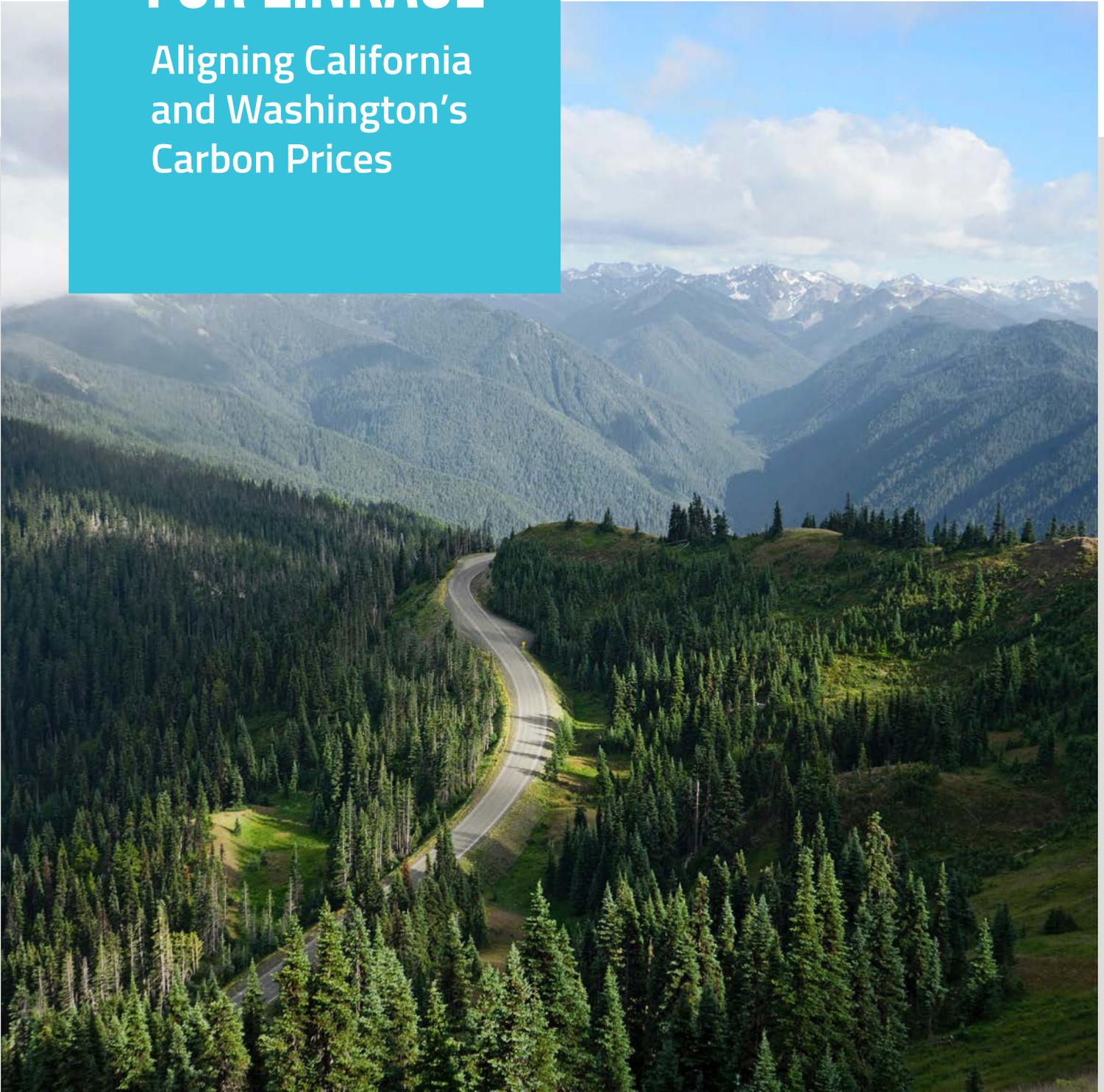
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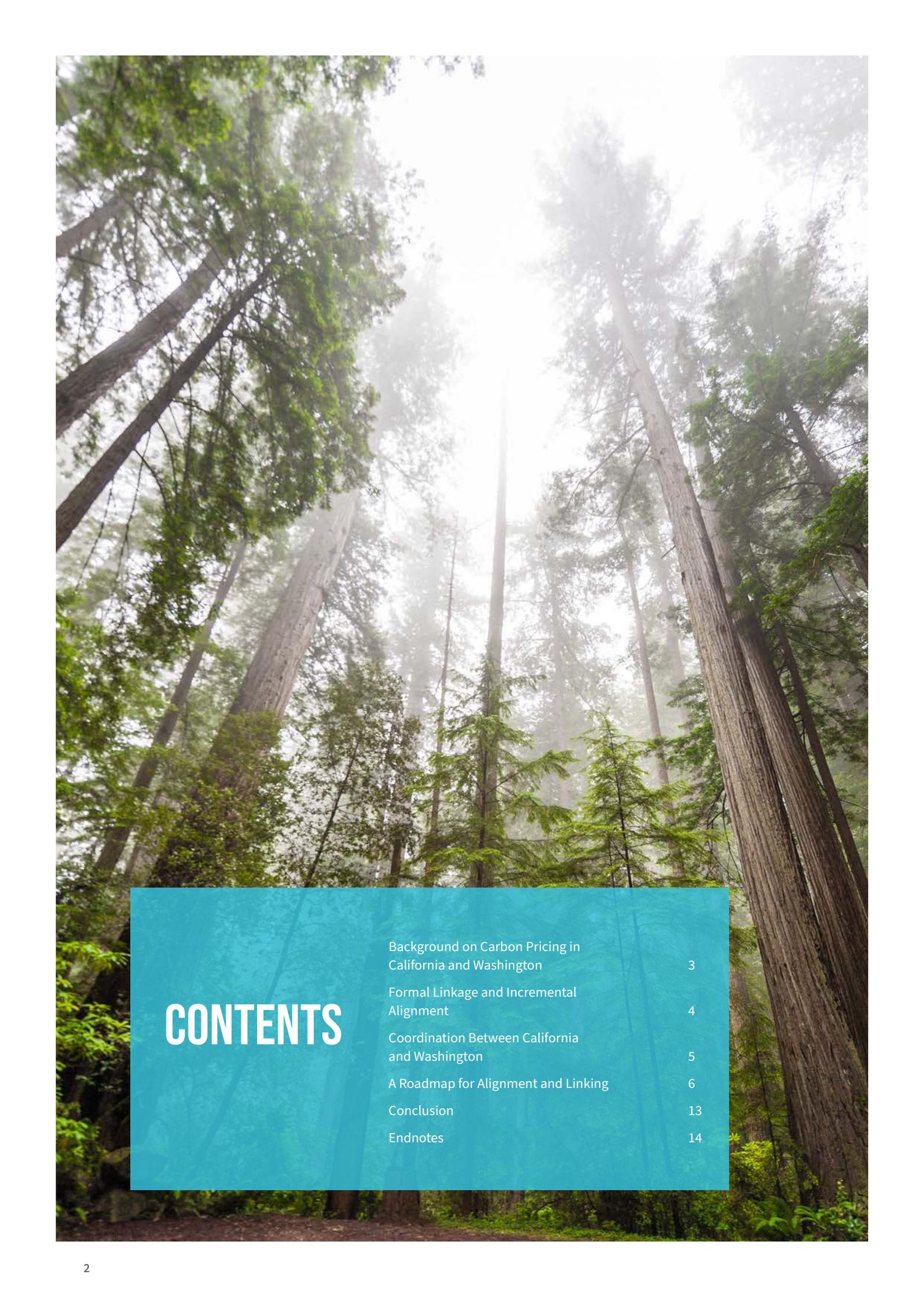
IETA and Environmental Defense Fund,
A Roadmap for Linkage: Aligning California and Washington's Carbon Prices, (July 2022).

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A ROADMAP FOR LINKAGE

Aligning California
and Washington's
Carbon Prices





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BACKGROUND

Carbon Pricing in California and Washington

“MORE THAN 65 CARBON PRICES REGULATE NEARLY 22 PERCENT OF GLOBAL EMISSIONS”

Carbon pricing is an effective approach for reducing greenhouse gas (GHG) emissions that fuel climate change. Carbon prices are usually implemented through a carbon trading or carbon taxation program. Regulators around the world are increasingly deploying carbon pricing to complement their existing policy approaches.¹ Currently, more than 65 carbon prices regulate nearly 22 percent of global emissions, a steep increase from previous years.² These programs collectively raised over 48 billion USD worth of revenue in 2019,³ much of which is reinvested into communities that bear a disproportionate pollution burden and the brunt of the adverse impacts caused by our changing climate. Moreover, recent studies provide evidence that these programs also substantially reduce GHG emissions, even when carbon price levels are relatively low.⁴

California and Washington are among the jurisdictions that have chosen to place a price carbon. California’s cap-and-trade program started in 2013 and is one of the largest carbon markets in the world with a cap of 200 million metric tons of GHG emissions in 2020. The program covers the electricity, transportation, and industrial sectors. The program has raised over 13 billion USD for the State,⁵ 57 percent of which has been reinvested into disadvantaged and low-income communities.⁶

The California program has taken on a gradually more prominent role in the state’s climate policy mix. In its initial iteration, regulators designed the



program to achieve roughly 10 percent of the state’s 2020 climate target.⁷ In this context, the role of the program was primarily to serve as a backstop, dynamically ramping up abatement if any of California’s numerous other climate emission reduction policies, which were slated to do the heavy lifting, failed to achieve their intended reduction targets.⁸ The initial program iteration served this role admirably, contributing to the achievement of California’s 2020 statewide climate target in 2016, four years ahead of schedule.⁹

In the 2017 Scoping Plan, regulators carved out a more vital role for the program by designing it to achieve roughly 40 percent of the state’s more stringent 2030 climate target.¹⁰ Compliance entities are now responding by ramping up demand, resulting in recent carbon prices just over 30 USD per ton. Under these new circumstances,

California’s Legislative Analyst’s Office predicts that the program could raise up to three billion USD during the 2022 fiscal year.¹¹

Washington’s nascent cap-and-invest program originates from the passage of the Climate Commitment Act (CCA) in April 2021, resulting from collaboration between local regulated businesses, environmental nonprofit organizations, tribes, and racial equity organizations. The legislation resembles California’s cap-and-trade program but also includes novel features and approaches to price management, carbon offsetting, and environmental justice. The state regulator (the Department of Ecology, hereafter referred to as “Ecology”) must expeditiously promulgate the program by January 2023. As such, Ecology is in the process of completing several rulemakings to flesh out the details of the program.

\$48.0
BILLION USD

**COLLECTIVE REVENUE GENERATED FROM
CARBON PRICING PROGRAMS IN 2019**

FORMAL LINKAGE AND INCREMENTAL ALIGNMENT

As California's program continues its evolution to address new state carbon neutrality goals and Washington's program takes its first steps, it is critical that these jurisdictions explore ways to learn from one another and expand their collaboration. One approach is to formally link carbon pricing programs by allowing companies in each jurisdiction to buy and retire allowances from the other jurisdiction to satisfy compliance requirements.¹² This is the approach originally conceived of by the Western Climate Initiative—to which California and Washington are both members—and it is the approach California chose to take with Quebec when they formally linked their programs in 2014.

Economists have carefully studied the benefits of formal linkage. Fundamentally, formal linkage leads to a single allowance price across all linked jurisdictions, thereby reducing total costs to final consumers without sacrificing environmental benefits.¹³ In turn, these cost reductions make it easier for regulators to achieve ambitious climate targets and lower overall cap levels.¹⁴

One study shows that if cost savings from a formally linked international carbon price were reinvested into enhanced ambition, then countries could double their emissions reductions by 2030.¹⁵ In addition, formal linkage sends a strong political signal of cooperation on climate change which, in and of itself, facilitates enhanced climate ambition. Formal linkage also eliminates competitiveness impacts across jurisdictions, thereby reducing concerns over emissions leakage between linked jurisdictions.

Aside from environmental benefits, formal linkage offers greater market certainty through two pathways. First, the larger number and broader type of entities that can trade with one another leads to improved liquidity and economic efficiency. This contributes to program performance by ensuring that the carbon price accurately reflects underlying abatement costs for a wide group of entities. Second, formal linkage can dampen carbon price volatility caused by regional variations, especially if critical factors such as seasonal weather or economic activity are

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imperfectly correlated across jurisdictions.¹⁶ This is particularly pertinent to California and Washington, where electric loads peak at separate times.

While the value of formal linkage is quite significant, there are at least two challenges with formal linkage. First, carbon prices that are not formally linked from the beginning will inevitably be designed differently. Some of these design differences need to be addressed before a formal link occurs to ensure smooth joint functioning of the linked program. The ensuing negotiations can be thought of as a prerequisite to entering a formal linkage.¹⁷ Second, formal linkage can change incentives in subtle ways that could threaten the environmental integrity of the overall cap, such as incentivizing jurisdictions to artificially inflate their caps. These incentives can be dulled or reversed with smart policy design, with several authors noting that formal linkage can enhance overall ambition by incentivizing more aggressive caps.¹⁸ These smart policy designs are discussed in detail in subsequent sections of this report. It is important to acknowledge and account for these incentives early on to ensure the desired emission outcomes resulting from formal linkage. For these reasons, regulators may find formal linkage a slower process than typically anticipated, despite the apparent benefits. The motivation for this paper is to consider formal linkage that results in more ambitious climate targets by highlighting smart policy designs.

A complementary approach is to pursue “linkage by degrees,” which celebrates the incremental alignment of policy designs and implementation strategies between carbon pricing programs.¹⁹ Further harmonizing carbon price designs across jurisdictions allows regulators to capture a substantial portion of the economic and environmental benefits typically associated with formal linkage, without executing a formal linkage. For example, two programs might align the level of their price floors, thereby increasing certainty for compliance entities and their consumers. In addition, aligned price floors would mitigate, to some extent, concerns over competitiveness impacts and emissions leakage across jurisdictions that formal linkage would completely remedy. As another example, a program seeking to link with another program might align its approach to ensuring that carbon offsets are of high quality with that of the other program, thereby supporting environmental integrity and bolstering emissions reductions. These types of incremental alignments of policy design, facilitated by the sharing of best practices and earned expertise over time, strengthen the implementation of each carbon pricing program. In addition, such “informal” linkage also smooths the path for formal linkage because program designs become more alike with progressive incremental alignment.

COORDINATION BETWEEN CALIFORNIA AND WASHINGTON

California and Washington each have rigorous processes to determine whether to accept another jurisdiction's program as a formally linked partner. In California, the board of the climate regulator (the California Air Resources Board, hereafter referred to as "CARB") approves linkage after a finding from the Governor that (among other factors) the program under consideration for linkage is at least as stringent as California's program. Thereafter, CARB must initiate a full rulemaking process to amend the carbon pricing program to accommodate the new link. By way of example, in 2013, Governor Jerry Brown directed CARB to undertake a number of additional steps prior to California's linkage with Québec, including a linkage readiness report, and CARB undertook a lengthy rulemaking process that resulted in a number of changes to the program rules.²⁰ In Washington, the CCA contains two sets of requirements. The first requires a formal linkage agreement that addresses a broad range of carbon pricing design features and does not adversely impact Washington's ability to achieve its climate targets. The second relates to environmental justice, essentially requiring that any linkage agreement entered into by Ecology protect against adverse effects on overburdened communities in both linked jurisdictions.

These processes mean formal linkage comes with hurdles in the short-term. Consistent with these short-term challenges, a representative from Ecology recently stated that "we're not going to be [formally linking with California] at the beginning [and] we don't know for sure when or if we will ever be linked".²¹ However, both programs indicate interest in formal linkage, and have already started laying the groundwork to be able to do so. The programs are already practicing informal linkage by sharing best practices and earned expertise. Ecology has already amended parts of their proposed regulation to mimic CARB's approach to "support [the] regulatory program and potential linkage"²² and has noticed its explicit intent to "mirror rules from [CARB] for their offset program as soon as possible".²³ In addition, Washington recently signed an agreement for WCI Inc. to administer its online auctioning platform, the same as is done in California.²⁴ This move allows for easy combining of auctions if a formal linkage were to be executed.

A ROADMAP FOR ALIGNMENT AND LINKING

A coordinated approach between California and Washington’s carbon pricing programs must move beyond the binary question of whether to formally link today. It is impractical to expect two programs that started at different times (under unique circumstances and with varying designs to reflect each states’ individual priorities) to be ready to link at the outset. A pragmatic roadmap would place formal linkage in its proper role, a longer-term objective that is best achieved through short-term alignments of program designs. This can equally be viewed as both a “no regrets” approach (since aligning program designs offers its own benefit) and as a measured strategy for maximizing the probability of a successful formal linkage. Speaking to the latter conceptualization, Burtraw et al. (2013) argue that incremental alignment helps ensure the long-term stability of a formal linkage because it “reduces the prospect of unanticipated difficulties” in the shared program.²⁵

Table 1 evaluates alignment between Washington’s developing and California’s established carbon pricing programs, adapting an approach taken by Burtraw et al. (2013). Overall, the table reveals that to date the Washington and California programs seem to have aligned some of the major design elements but others need to be addressed in more depth or reevaluated in light of linkage considerations. Also, a significant number of design elements receive a designation of “to be determined”, given that Washington’s rulemaking is ongoing. The most

important misalignments (which are highlighted) fall into five categories: noncompliance penalties; price ceilings; cap setting; allowance allocation to emissions-intensive and trade-exposed industries (EITE); and carbon offsets.

The analysis underlying Table 1 turns on five considerations represented as columns and elaborated on in the bullets below. Taken together, the table allows an assessment of whether California and Washington are ready to execute a formal linkage. If a design element is not important—based on columns two and three—or if that design element is already aligned, then we conclude that the programs are ready to formally link based on that design element. However, if a design element is important but not already aligned between these programs, then we recommend that Washington regulators prioritize these areas for alignment.

- **Design Element:** the first column decomposes a carbon price into ten design elements that represent the central choices each jurisdictions’ regulators make when creating a program. These elements cover the following topics: technical issues; emissions reduction goal; allocation of allowances; cost management; and enforcement and contingencies.
- **Environmental Integrity:** the second column analyzes whether aligning the design element is important for ensuring that the environmental integrity of both programs remains constant or further improves under formal

linkage.

- **Policy Implementation:** the third column analyzes whether aligning the design element is important for reasons unrelated to environmental integrity such as distributional, equity, or political issues.
- **Degree of Alignment:** the fourth column analyzes whether the design element is already aligned across programs.
- **Readiness for Linkage:** the fifth column analyzes whether programs are ready for formal linkage based on the design element in question.

The remainder of this paper focuses on three opportunities (listed below) to prioritize incremental alignment. For each of these design considerations, we outline differing approaches taken by California and Washington, why those differences are important, and options for aligning design. Where appropriate, we offer a recommendation on which form of alignment is preferable and outline associated benefits. By discussing these issues in detail, our aim is to capture short-term benefits through incremental alignment while simultaneously facilitating formal linkage as an outcome. This is intended to be an initial review that is not comprehensive in nature and there are therefore issues that we do not discuss that are also likely to be important to formal linkage. The remainder of this paper is focused on:

- a) Noncompliance Penalties
- b) Price Ceilings
- c) Cap Setting

Table 1

Evaluating Alignment Across Washington and California Carbon Pricing Programs

Design Element	Important for Environmental Integrity?	Important for Policy Implementation?	Already Aligned?	Ready to Link?
Technical Issues				
1. Measurement, Reporting and Verification				
a. Measurement methods	Yes	Yes	Yes	Yes
b. Reporting of process emissions	Yes	Yes	Yes	Yes
c. Reporting of fugitive emissions	Yes	Yes	TBD	TBD
d. Reporting of emissions from imported power	Yes	Yes	Yes	Yes
2. Allowance Tracking System				
a. Registries (e.g., serial number systems)	Yes	Yes	Yes	Yes
b. Data collection on transactions	No	Maybe	Yes	Yes
c. Public access to data	Maybe	Yes	TBD	TBD
Emissions Reduction Goal				
3. Emissions Cap				
a. Are caps defined in terms of total tons?	Yes	Yes	Yes	Yes
b. Are cap stringencies coordinated?	Yes	Maybe	TBD	TBD
c. Are programs binding?	Yes	Yes	Yes	Yes
d. Are other policies accounted for in cap setting?	Maybe	Maybe	No	No
4. Emissions Coverage				
a. Covered sectors	No	Maybe	Yes	Yes
b. Point of regulation	No	Maybe	Yes	Yes
c. Compliance thresholds	No	Maybe	Yes	Yes
d. Coverage of imported, fugitive, process emissions	Yes	Yes	TBD	TBD
e. Compliance periods	No	No	No	Yes
f. Compliance obligations (e.g., interim retirement)	Maybe	Maybe	Maybe	Maybe
Allocation of Allowances				
5. Allocation				
a. Method of allocation to industry EITE	Yes	Yes	No	No
b. Treatment of entrants and exits	No	Maybe	TBD	TBD
c. Use of revenue from auctions	No	Maybe	TBD	TBD
d. Measures to address leakage	Yes	Yes	TBD	TBD

Design Element	Important for Environmental Integrity?	Important for Policy Implementation?	Already Aligned?	Ready to Link?
6. Auction Coordination				
a. Third-party participation	Maybe	Maybe	Yes	Yes
b. Purchase limit	No	Maybe	Yes	Yes
c. Auction format	No	No	Yes	Yes
d. Frequency and timing	No	No	TBD	TBD
e. Common auction platform	No	No	Yes	Yes
Cost Management				
7. Temporal Considerations				
a. Banking provisions	Maybe	Yes	Yes	Yes
b. Quantitative restrictions (e.g., holding limit)	No	Maybe	Yes	Yes
c. Qualitative restrictions (e.g., value across periods)	Maybe	Maybe	TBD	TBD
8. Carbon Offsets				
a. Qualitative limits	Maybe	Yes	No	No
b. Quantitative limits	Maybe	Yes	No	No
c. Certification protocols	Maybe	Yes	TBD	TBD
d. Invalidation rules	Maybe	Yes	Yes	Yes
e. Liability rules	No	Yes	TBD	TBD
9. Price Collars				
a. Price floor and rate of change	Yes	Yes	Yes	Yes
b. Emissions containment reserve	Yes	Yes	Maybe	Maybe
c. Cost containment reserve	Yes	Yes	Maybe	Maybe
d. Price ceiling and rate of change	Yes	Yes	Maybe	Maybe
e. Use of unsold allowances	Yes	No	No	No
Enforcement and Contingencies				
10. Legal Provisions				
a. Penalties for noncompliance	Yes	Yes	No	No
b. Market oversight	Yes	Yes	Yes	Yes
c. Provisions for delinking	Maybe	Maybe	TBD	TBD
d. Process for regulatory updates	Maybe	Yes	TBD	TBD



a. Noncompliance Penalties

Certainty regarding noncompliance outcomes and strict enforcement is a key advantage of carbon pricing programs over more traditional forms of regulation, which often rely on legal proceedings and regulatory negotiations. In fact, many carbon pricing programs enjoy perfect compliance rates, although there are notable exceptions including, for example, regional carbon pricing programs in China.²⁶ In the context of formal linkage, noncompliance penalties do not have to be replicated word for word, but there needs to be mutual trust between programs that enforcement is equally consistent, certain, and strict.

California's program requires a regulated entity to surrender a quantity of allowances that is four times that entity's excess emissions—calculated as the difference between the compliance obligation and any surrendered allowances or offsets by the deadline—due within five days of the auction following that deadline. Given the timing of compliance deadlines and quarterly auctions, this gives regulated entities about one month, at most, to rectify their noncompliance. If the excess emissions are not rectified under this timeframe, then additional violations and fines begin accruing. The regulation specifies that at least three-fourths of an entity's compliance shortfall must be satisfied using allowances from California or allowances from a linked partner.²⁷

Washington's program imposes a similar requirement that a regulated entity must surrender a quantity of allowances that is four times that entity's excess emissions.

The legislation gives regulated entities six months to rectify its noncompliance. If a regulated entity fails to do so, then Ecology must issue an order (involving a plan and schedule for coming into compliance), a penalty of up to 10,000 USD per day, or both. In addition, Ecology may impose additional financial penalties. During the first compliance period (lasting from 2023 through 2026), Ecology "may reduce the amount of penalty by adjusting the monetary amount or the number of [excess emissions]."²⁸

The difference in designs between California and Washington's approach to enforcement may be significant enough to threaten a formal linkage. Specifically, Washington gives regulated entities more time and more "outs", while granting Ecology substantial discretion to lower the strength of enforcement in the early years of the program. Strengthening these provisions would help to preserve cap integrity.

To that end, we make the following recommendations to bolster the strength of enforcement as Ecology drafts regulations:

- In the event of failure to rectify noncompliance after six months, Ecology should commit to issuing both an order and a fine to the offending regulated entity by stating this plainly in regulation. This will bolster the strength of enforcement, thereby improving the overall effectiveness and environmental impact of Washington's program.
- During the first compliance period, Ecology should commit to not

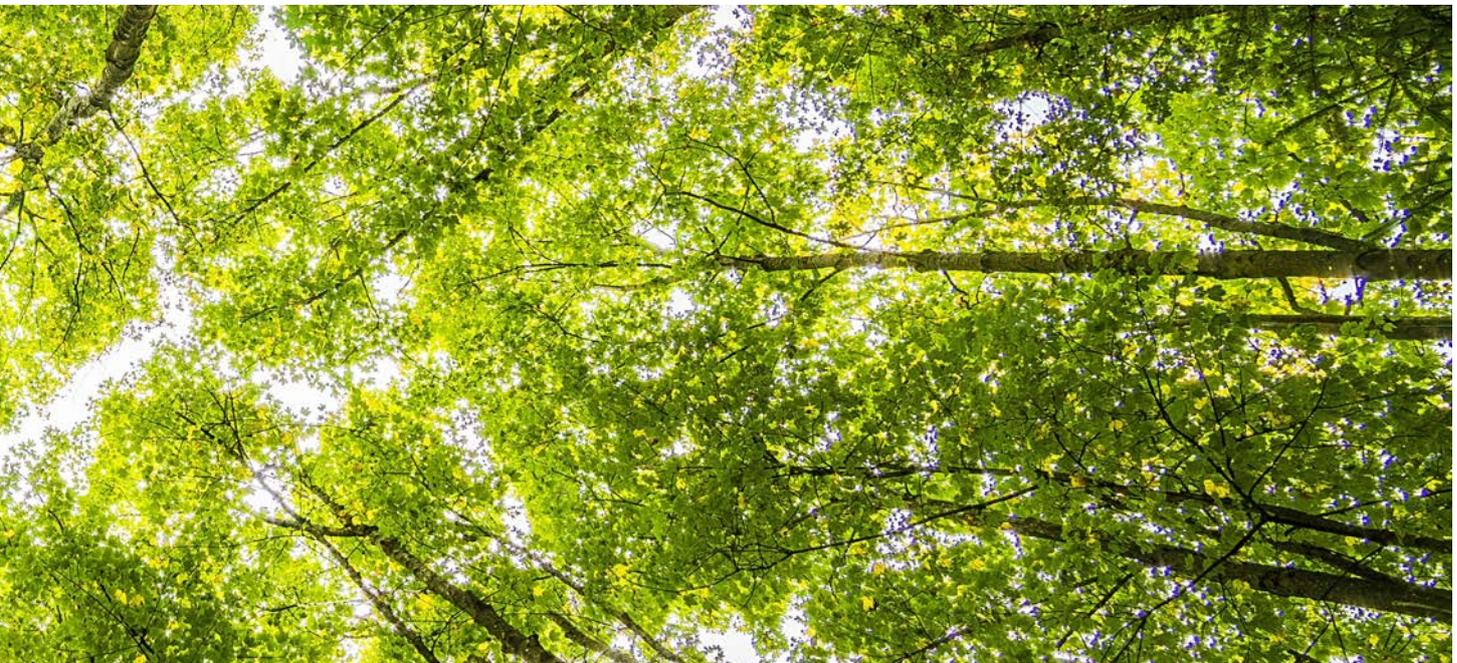
using its discretion to lower fines or the quantity of excess allowances owed. Use of discretion muddies the waters for regulators and regulated entities, in addition to diminishing smooth program functioning.

b. Price Ceilings

Regulators often design carbon prices with maximum values to protect consumers against overly high costs and to limit overall volatility. The two most common tools that serve this function are "soft" and "hard" price ceilings. Soft price ceilings provide a limited volume of additional allowances, referred to as a "reserve", at a predetermined price maximum, while hard price ceilings print an unlimited volume of additional allowances at that predetermined price maximum. Economic research suggests that a small reserve held in a soft price ceiling is an ideal way to balance costs and emissions.²⁹

Historically, carbon prices have typically been relatively low and therefore have not reached the level of the ceiling.³⁰ However, recently, a carbon pricing program in the Northeast United States, the Regional Greenhouse Gas Initiative, triggered its soft price ceiling. In addition, as programs mature and take on a more prominent role in state's climate policy mixes, we are seeing carbon prices rise substantially, with California being a prime example of this new trend. Therefore, the consideration of a price ceiling is particularly timely, as more triggers will likely occur in the near future.

California's approach to price ceilings



is to have three reserves, each with a trigger price. The first two are “soft” (starting with triggers at 41.40 USD and 53.20 USD in 2021) and the last one is “hard,” starting with a trigger at 65.00 USD in 2021. Each price increases by 5 percent plus inflation as determined by the Consumer Price Index. The hard price ceiling introduces the possibility of increased emissions because an unlimited quantity of new allowances would be printed to keep prices at the 65.00 USD trigger price. Therefore, CARB is required to use revenues from the price ceilings to purchase reductions on at least a ton-for-ton basis, thereby maintaining the environmental integrity of the cap.

The CCA directs Ecology to establish a price ceiling with a trigger that increases gradually. The trigger must be equal to “the level established in jurisdictions with which [Ecology] has entered into a linkage agreement”.³¹ The CCA states that Ecology must seed the reserve with no less than 2 percent of the total quantity of allowances available from the overall budget for the corresponding compliance period. If the allowance price containment reserve runs out of allowances, then Ecology will turn to printing new allowances while using the corresponding revenues to invest in abatement on at least a ton-for-ton basis, an approach clearly adopted from California’s design.³²

It is apparent that Washington positioned its legislation to replicate many of California’s designs for a price ceiling. In this way, the programs are

already incrementally aligning their design, regardless of whether they eventually formally link. Simply stating the intent to equate trigger prices with a linked jurisdiction is meaningful. That Washington has mimicked California’s approach in the event of a formal link shows substantial coordination and significant forethought.

Regardless of formal linkage, Washington should build upon the positive momentum from their incremental alignment with California. One strategy for doing so would be for Washington to align its trigger price with California’s levels when formal linkage occurs, as the current draft rule envisions. This would increase certainty for regulated entities, and it would protect against adverse competitiveness impacts as well as emissions leakage.

A final point concerns the finer details of auctions from the price containment reserve. Comments from Ecology in a recent workshop³³ introduce the possibility of discretionary auctions from the price containment reserve for regulated entities that are behind on their compliance efforts. This introduces uncertainty in the market and could complicate linkage efforts. Therefore, this is another area where Washington may look to align with California design. In addition, certain details around auction format differ from the designs in California, which could also prove problematic. For example, the timing and operation of auctions, particularly in the first year of the market, are uncertain in Washington.

Based on the foregoing, we recommend that:

- Washington maintain its proposed approach, which include two allowance price containment reserve tiers alongside a hard price ceiling. This approach would align with California’s approach to avoid unintended fluctuations in the carbon price resulting from differing approaches to price ceilings in the two jurisdictions.
- Washington should not adopt the concept of discretionary auctions of allowances from the price containment reserve for regulated entities that are behind on their compliance efforts. This not only introduces uncertainty but also runs the risk of incentivizing greater levels of noncompliance and overreliance on this measure.

c. Cap Setting

Cap setting is important because it is a primary determinant of the carbon price and the program feature that, when well-designed, ensures emissions decline at the pace and scale required to achieve climate targets. In turn, the difference in carbon prices between programs will be an important consideration if formal linkage negotiations begin in earnest. Because California and Washington make their own decisions about cap setting on their own timelines, there is a potential that formal linkage (or the discussion thereof) could lead both programs to strategically adopt a cap that economically benefits their respective

states. In short, the program that expects to export allowances may have an incentive to adopt a less stringent cap to create surplus allowances and an importer may have an incentive to adopt a less stringent cap to reduce spending on imports.^{34 35}

This incentive can be overcome in several ways, any combination of which may prove effective. Indeed, many argue that formal linkage leads to enhanced ambition by facilitating more aggressive caps.³⁶ The first way is through endowing a sense of responsibility towards enhanced ambition.³⁷ In other words, insofar as the intent of the formal linkage is to reduce overall emissions more quickly, then this shared vision can inherently protect against strategically permissive caps. Successful coordination between leadership in Washington and California can play a role in creating such a shared vision.

Another way is to incrementally align cap setting processes and timing. For example, California has a cap formula that lists each year's allowance budget from 2021 to 2030. Washington should strive to do the same as it promulgates its regulations. Separately, California undergoes its periodic Scoping Plan processes, after which cap levels are potentially modified. Washington has a program review for its cap-and-invest program that occurs every four years and focuses on analyzing its carbon reductions from economic, environmental, and justice perspectives. It would be beneficial for both states to include detailed information on complementary policies. It may also be useful to sync the timing of reviews across jurisdictions. This would allow for the jurisdictions to make cap setting decisions simultaneously with shared information.

A related concern is that if a program is nonbinding (that is, a carbon price of zero or a carbon price resting on the minimum "floor" price), then exports of allowances from that program to another program erodes the environmental integrity of the overall cap. In other words, in this example, the exported allowances, unlike allowances from the

local jurisdiction, do not represent an opportunity cost to regulated entities of emitting one ton of emissions.³⁸ This is not a concern in California at the moment because the carbon price is high above its floor and is therefore clearly binding. Moreover, allowance price projections expect that prices will stay well above the floor for into the future. Every allowance in the program consequently represents one ton of emissions. Modeling conducted by Vivid Economics for the Washington's Department of Ecology projects that prices will be well above the program's proposed floor price,³⁹ which suggests that this is unlikely to be a concern in Washington. However, Washington's cap-and-invest program has not started and there is therefore no price data for a direct comparison to California.

Nonetheless, to further track potential nonbinding caps, we recommend that California and Washington track the role of complementary policies in their respective programs because they are a key input to the demand for allowances. The information collected by regulators in their respective jurisdictions should be shared with all current and potential formal linkage partners. California collects and publishes this information via its periodic Scoping Plan processes. While Washington does not have to replicate the Scoping Plan process, emulating enough of the elements such that the jurisdictions' climate policy mixes are comparable and transparent would smooth the way for formal linkage.

Another point concerns the frequency and timing of auctions. As indicated in Table 1, this design element is usually unimportant for the environmental integrity or policy implementation of a formal linkage. While Ecology has specified that it will hold four auctions per year, the timing of those auctions remains uncertain. In the event of a formal linkage, Washington should adopt the same auction schedule as California in advance of formal linkage. This would be beneficial for Ecology to clarify that the timing of auctions will mirror the timing of California's auctions, providing predictability and consistency to auction

participants. That said, comments from Ecology in a recent workshop⁴⁰ make it unclear whether the quantity of auctions is fixed or not. Insofar as infrequent auctions change the total number of allowances—thereby changing the overall cap levels—then they will become important to formal linkage discussions.

A final point concerns the treatment of carbon offsets in relation to cap setting. In California, the retirement of credits substitutes for compliance with allowances, meaning carbon offset use does not impact the overall allowance cap. In Washington, the retirement of credits reduces the number of allowances allocated to an individual entity, meaning carbon offset use does impact the overall allowance cap. Depending on the extent of carbon offset credit usage in the respective jurisdictions, this may be an important consideration for formal linkage.

CONCLUSION

Washington is already incrementally aligning the design of its carbon pricing program to that of California. This coordination is not only beneficial in the short-term, but it also facilitates a long-term possibility for formal linkage and thereby large attendant benefits. This paper outlines three areas (noncompliance penalties, price ceilings, and cap setting) that must be addressed before formal linkage occurs and where California and Washington can further incrementally align their program designs. Overcoming these obstacles through consistent dialogue as well as exchange of best practices and earned expertise will be essential to successfully approaching a formal linkage.



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A ROADMAP FOR LINKAGE: Aligning California and Washington's Carbon Prices

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