

Fran Sant Rulemaking Lead gap-rule@ecy.wa.gov

RE: Comments on Greenhouse Gas Assessment for Projects Rule

Dear Ms. Sant:

On behalf of the BlueGreen Alliance, thank you for the opportunity to provide input on the Department of Ecology's Greenhouse Gas Assessment for Projects (GAP) rule.

This rule comes at a critical time. Rapid transformation of the global industrial sector is necessary to limit global warming to 1.5°C. Some industrial activity will have to decline for the world to reach netzero emissions by mid-century.¹ However, many other industries—including many of the most difficult to decarbonize industries—are essential to meeting our climate goals. They produce the materials and components necessary for renewable energy development, transportation electrification, and low-carbon infrastructure.

This tension makes it challenging to identify clearly and efficiently what industrial projects are commensurate with globally agreed climate limits.

Done right, the GAP rule will enable Washington to navigate this challenge and build an industrial economy that both meets the needs of a low-carbon transition and is in line with the state's climate commitments. It will enable Washington to build more of the right projects and to build them faster by providing agencies with the methods necessary to assess accurately and consistently the climate impacts of proposed projects and by promoting transparency.

At the same time, the GAP Rule carries a high risk of unintended consequences. Done wrong, it could accelerate the race to the bottom in global environmental standards and promote geographic carbon leakage—simply displacing pollution onto communities outside of Washington instead of reducing it.

¹ Intergovernmental Panel on Climate Change. 2018. Special Report: Global Warming of 1.5 °C. Available online at: <u>https://www.ipcc.ch/sr15/</u>.

This is problematic not only from a climate perspective and an environmental justice perspective but also an economic perspective. Manufacturing jobs are typically good, union jobs that are difficult to replace.

Geographic carbon leakage is linked to a structural problem in how we define climate goals: many entities, including Washington, focus on territorial emissions—what is emitted within their boundaries. They do not consider emissions driven by their consumption, which may occur outside the state or country.²

Washington does not have a consumption-based inventory, but Oregon has taken this additional step. It provides a glimpse at Washington would likely learn from a similar exercise. First, it suggests that Washington's contribution to climate change is likely substantially larger than indicated by existing inboundary accounting. Second, many of those emissions come from out of state. Over half of Oregon's consumption-based emissions occur in other states or nations; those emissions are not included in the state's in-boundary inventory.³

The out of state consumption-based emissions that are not captured in a traditional in-boundary inventory form what researchers have termed the "carbon loophole": greenhouse gas emissions associated with the manufacturing of goods that are traded across states or countries. Energy-intensive products such as steel, aluminum, and cement are often manufactured in countries with lax emissions requirements. They are then shipped to countries that have much more stringent controls. However, those controls only apply to territorial emissions. As a result, no one is accountable for reducing the emissions associated with the manufacturing of those goods. It is estimated that nearly a quarter of global greenhouse gas emissions pass through the carbon loophole.⁴ For that reason, it is a major barrier in meeting global climate targets.

It is not only pollution leaking across borders—it is also jobs. The resultant decline in local and domestic manufacturing has eroded the middle class and contributed to soaring income inequality. Washington has been hit especially hard by trade-related job loss—and it is accelerating. Recent analysis from the Washington Fair Trade Coalition Education Fund shows that trade-related job loss increased 133% from 2017-2019 relative to 2014-2016.⁵

Trade-related job loss and the decline in manufacturing not only results in direct job loss; it impacts entire communities. For example, last spring, Alcoa curtailed its Intalco Works facility in Ferndale, Washington—the only remaining operating smelter on the West Coast. The closure eliminated 700

https://tradejusticeedfundorg.files.wordpress.com/2020/08/washingtonjoblossreport_080720.pdf.

 ² The recently released 2021 state energy strategy acknowledged this structural challenge and called for expanding policies to consider consumption-based emissions, including a consumption-based emissions inventory.
³ Erickson, P., M. Lazarus, E.A. Stanton, and F. Ackerman (2011). Consumption-based Greenhouse Gas Emissions Inventory for Oregon. Report commissioned by the Oregon Department of Environmental Quality.

⁴ Moran, D. and Hasabeigi, Ali (2018). The Carbon-loophole in Climate Policy: Quantifying the Embodied Carbon in Trade Products. Available online at: <u>https://buyclean.org/media/2016/12/The-Carbon-Loophole-in-Climate-Policy-Final.pdf</u>.

⁵ Washington Fair Trade Coalition Education Fund. 2020. Washington's Trade-Related Job Losses on the Rise in Recent Years. Available online at

jobs—stable, family-wage jobs that are difficult to replace. As one of the largest employers in Whatcom County, the Intalco plant also supported many indirect jobs.

Mitigating the risk of leakage does not mean lowering our environmental standards to match the lowest common denominator. That only further accelerates the global race to the bottom. Instead, the goal is to create a level playing for manufacturers that invest in efficiency and pollution controls and to drive innovation in industrial decarbonization. The GAP rule alone cannot achieve this end; it will take a suite of policies, including consumption-based emissions reduction strategies and procurement policies that grow demand for low-carbon goods. However, as the foundation for how Washington assesses the greenhouse gas impacts of industrial projects, the GAP rule can be an important step. Integrating consideration of carbon intensity will be key.

It is with this in mind that the BlueGreen Alliance makes two broad recommendations to Ecology: 1) differentiate between energy products and non-energy products, particularly in energy-intensive tradeexposed industries and 2) integrate product-level accounting (i.e., carbon intensity) into the greenhouse gas emissions analysis for non-energy products. This is an important supplement to facility-level emissions if the GAP rule is to provide agencies with the data necessary to evaluate the climate impact of a proposed non-energy product project.

Our more detailed feedback focuses specifically on non-energy products, unless otherwise specified:

1. Purpose

The first step in ensuring that the GAP rule supports meaningful emissions reductions, not carbon leakage, is to adopt a holistic approach: the goal is net zero *global* emissions by 2050, not net zero Washington emissions. Washington's greenhouse gas limits are a useful but insufficient benchmark.

This is consistent with the Governor's directive, which begins by acknowledging the globally agreed limit of 1.5 degrees Celsius and then further asserts that "siting decisions must be informed by a comprehensive understanding of a project's statewide and *global* impact" (emphasis added).

2. Regulatory context

BGA recognizes that this section is provided for background and will not be included in the draft GAP rule language. Accuracy is nonetheless important to ensure a solid foundation for the rule. To that end, we offer two clarifications and recommendations.

First, Ecology notes that the GAP rule will support Washington's legislative limits as outlined in RCW 70A.45.020.

RCW 70A.45.020 also explicitly establishes the state's intent to pursue its climate limits in a way that "[m]aintains Washington's manufacturing economy and avoids leakage of emissions to other jurisdictions". The GAP rule should honor this intent.

Ecology further notes that the GAP rule will support the state energy strategy by "providing for a consistent and comprehensive assessment of GHG emissions for projects and providing for alignment for the state's GHG reduction limits".

To be fully consistent with the state energy strategy, the GAP rule must also enable expanding the Washington's manufacturing base.

The 2021 State Energy Strategy suggests two ways that Washington's industrial sector can contribute to reducing carbon pollution: 1) make industry as clean and efficient as possible; and 2) grow that clean and efficient industry *in Washington*.

Specifically, the 2021 State Energy Strategy states that: "Washington has some of the most sophisticated low-carbon manufacturing technology capabilities in the world. The state is home to some of the best-in-class facilities on the planet in terms of production of low-carbon building and manufacturing materials such as steel rebar and aerospace aluminum products" (pg. 104).

The 2021 State Energy Strategy further asserts that Washington—with its low-carbon electricity and highly skilled workforce—is well-positioned to meet growing demand for low-carbon goods and that the state's leadership in clean manufacturing can significantly reduce both in-state and global emissions. Put differently, an important part of Washington's contribution to industrial decarbonization is to grow its own industrial sector to displace more carbon-intense manufacturing.

The 2021 State Energy Strategy acknowledges that "[b]alancing these two, sometimes competing, opportunities will require creativity and commitment". The GAP rule is an important tool in that balancing act, which is why it is so important that we get it right.

3. Rule Applicability

One of the most important components of the GAP rule is the promise of consistency in how the climate impacts of industrial and fossil fuel projects are assessed. However, this consistency should not come at the cost of good policy. The GAP rule should differentiate between energy products and non-energy products and treat them as two distinct categories.

As the draft conceptual framework notes, the rule is likely to cover a large variety of facility types, including power plants, petroleum refineries, pulp and paper plants, metals (aluminum and steel), glass plants, chemical producers, electronics manufacturers, general manufacturing, facilities with large boilers, food processors, and waste facilities.

These different types of projects differ dramatically in terms of available decarbonization technologies, vulnerability to leakage, and contribution to a low-carbon transition.

To provide agencies with the data necessary to discern what projects are consistent with a low-carbon transition and to define appropriate mitigation plans, the rule must recognize and allow for this variation.

As noted previously, one simple distinction that has a valuable impact is to differentiate between energy products and non-energy products throughout the rule—non-energy products should be treated as a separate category. This distinction is especially important in mitigating the risk of leakage in energy-intensive trade-exposed sectors. Equally important, evaluating the climate impact of non-energy products requires data on carbon-intensity (i.e., product-level accounting).

4. Environmental assessment

The lifecycle component of the "Greenhouse Gas Emissions Analysis" for non-energy products should be done at the product level and include A1-A3 lifecycle stages.

Product-level emissions (i.e., carbon intensity) is required to assess the *global* impact of project. This is especially important in determining the impact of materials production, like aluminum and steel manufacturing. These are materials that are energy-intensive to produce and many of the manufacturing processes cannot be electrified. As a result, they are inherently carbon intense. At the same time, they are extremely necessary for not only our daily lives but also for a low-carbon transition (for example, lightweight aluminum that is critical for reducing transportation emissions).

This is consistent with the Clean Air Rule, which used an output-adjusted compliance pathway for energy-intensive trade-exposed industries.

This product-level lifecycle analysis should be limited to A1-A3 lifecycle stages.⁶ The product-level lifecycle analysis should not include construction or decommissioning emissions. These are one-time emissions that are determined largely by land use, construction regulations, and decommissioning regulations (as opposed to manufacturing inputs and industrial processes). Including them in the product-level lifecycle analysis would interfere with an agency's ability to use this data to compare carbon intensity across manufacturers and relative to industry benchmarks.

For many sectors, environmental product declarations—essentially nutrition labels for carbon content offer a standardized tool for reporting product-level global warming potential. They are the building industry standard for reporting embodied carbon and the key to procurement policies like Buy Clean that drive innovation in low-carbon materials manufacturing and reduce the embodied carbon footprint of infrastructure.

5. Baseline condition

To enable fair and consistent evaluation of the carbon intensity of non-energy products, Ecology must establish sector-specific carbon-intensity benchmarks that reflect best available emissions reduction technology. The use of best available technology is the only route to meeting a 1.5°C climate target.

⁶ See the below discussion on environmental assessment parameters for more on why the focus on cradle to grave is most appropriate.

Establishing industry-specific benchmarks would not be new for Washington. Ecology has collaborated on research exploring best practices for benchmarking industrial greenhouse gas emissions.⁷ The Clean Air Rule, which, as noted previously, used an output-adjusted compliance pathway for energy intensive trade exposed businesses, also established a system for establishing industry benchmarks.

BGA does not offer these examples as recommendations but rather to underscore that there is precedent for this approach. The process of establishing these benchmarks should include stakeholder engagement, including representation from manufacturing and industrial unions, and Ecology must update them regularly to reflect changes in available technology.

6. Environmental assessment parameters

For calculating the carbon intensity of non-energy products, BGA recommends including the emissions resultant from extraction through manufacturing.

The bulk of the global warming potential for most non-energy products, particularly in energy-intensive sectors, is captured in the cradle to gate life cycle stages. Focusing on cradle to gate is also important for assessing relative carbon intensity.

Including facility-level construction and decommissioning emissions in calculating the carbon intensity of individual non-energy products would interfere with the ability to make meaningful comparisons of relative carbon intensity using industry benchmarks.

This recommendation is outlined further in the subsequent discussion on "life cycle analysis of GHG Emissions".

7. Facility emissions

In outlining what is included in "construction emissions", Ecology notes in the draft conceptual framework that "[e]mbedded GHG emissions are considered in the LCA". BGA requests clarification of this statement. It is unclear exactly what "embedded emissions" are being considered.

BGA recommends that the GAP rule consider the embodied carbon impacts of building materials in the facility-level analysis to reduce the carbon footprint of infrastructure and incentivize the production of lower-carbon materials.

8. Life cycle analysis of GHG Emissions

Pursuant to BGA's strong recommendation that the greenhouse gas analysis for non-energy products include a product-level life cycle assessment, we encourage Ecology to outline specific guidelines for how this assessment is calculated or point to established tools to facilitate this analysis. This should include identifying the life cycle stages that must be included in the analysis.

⁷ Erickson, P., M. Lazarus, H. Hermann et al. (2010). Issues and Options for Benchmarking Industrial GHG Emissions. White Paper submitted to the Washington Department of Ecology. SEI-US.

ISO 14025:2006 offers one model that is actionable and appropriate for many energy-intensive tradeexposed manufacturers. It outlines the use of ISO 14040, which Ecology specifies for the calculation of facility-level emissions, for the creation of product-specific environmental product declarations.

The guidelines for completing a product-level lifecycle assessment should include specification of what life cycle stages should be included. In the case of the GAP rule and for most non-energy products, BGA believes that cradle to gate is most appropriate—it will provide agencies with the most valuable data in evaluating climate impacts. For many energy-intensive non-energy products, cradle to gate captures the majority of a product's global warming impact. Cradle to gate assessments also best enable understanding of relative carbon intensity. Impacts that follow the departure of a product from the factory gate are more a product of land use, and construction and decommissioning regulations than manufacturing processes; those are not product specific and will likely vary dramatically depending on where the product is used and how.

9. Energy analysis

BGA strongly supports Ecology's direct acknowledgement that an assessment of geographic carbon leakage should be included in the energy analysis. Equally critical, the energy analysis section should require project applicants to discuss how, if at all, the project contributes to a circular economy and/or supports decarbonization.

10. Defining projects that support decarbonization

In BGA's view, projects that support decarbonization include the production of low-carbon materials and goods and technologies that reduce emissions.

The production of low-carbon materials can be further specified as any modification or expansion that reduces the carbon intensity of the non-energy product or a new project that will produce non-energy products with a low-carbon intensity using best available emissions reduction technology as a benchmark.

Clean technology refers to those technologies—particularly component technologies—that are essential to major climate solutions. This includes major manufactured goods—like clean vehicles and offshore wind turbines—and, notably, their components such as batteries and cells, as well as technology for reducing emissions in energy, transportation, buildings, industry, agriculture, and other sectors.

11. Mitigation for projects that support decarbonization

For non-energy products, mitigation should include the difference between the greenhouse gas emissions of a best-in-class facility, as determined by Ecology's benchmarks, and the proposed facility's greenhouse gas emissions. This calculation should be output-adjusted (i.e., based on carbon intensity).

Thank you again for the opportunity to provide input on the GAP rule. This input is provided with an eye towards ensuring that the GAP rule yields the data necessary for agencies to accurately assess the

impacts of all projects that would be covered by the rule and to mitigate the risk of unintended consequences. It is vital for our climate and economy that the GAP rule does not grow the carbon loophole or make it more difficult to reduce.

The BlueGreen Alliance appreciates your consideration and would be happy to discuss these recommendations further with Ecology staff.

Sincerely,

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