### Report to Legislature on EITE Allowance Allocation 2035-2050 Document 6: Draft recommendations



The Washington Department of Ecology (Ecology) is preparing a report about no-cost allocation to emissions-intensive, trade-exposed Industries (EITEs) under the Cap-and-Invest Program.

EITEs are important local industries and manufacturing facilities that produce a variety of products including paper, food, building materials, glass, and airplanes. In establishing the Climate Commitment Act (CCA), the Legislature recognized that EITEs faced unique challenges in reducing their greenhouse gas emissions in the early years of the Cap-and-Invest Program.

The Legislature decided to issue allowances at no cost to these industries through to 2034 and didn't specify the approach to providing no-cost allowances to EITEs for 2035-2050. Ecology is required to prepare a report to the Legislature that offers information and recommendations on how best to proceed. This report will include consideration of:

- Best practices for avoiding leakage (when EITEs relocate or limit their operations)
- Different approaches for measuring the emissions generated by EITEs per unit of production
- Opportunities and barriers for decarbonizing EITEs in Washington
- How to allocate no-cost allowance to EITEs from 2035-2050
- Implications for environmental justice outcomes, local air quality, statewide emissions limits, and revenues generated by Cap-and-Invest auction

Further information on EITEs can be found at Ecology's website: <u>Emissions-intensive</u>, tradeexposed industries.

#### **Opportunities to provide report input**

Ecology is providing multiple engagement opportunities to make sure EITEs, Tribes, covered entities, community organizations, and other interested parties can provide input into the development of Ecology's report to the Legislature. This includes establishing two advisory groups – <u>EITE Industries Advisory Group</u> and <u>EITE Policy Advisory Group</u> – as well as hosting forums for Tribes, the public, and community organizations.

Ecology is specifically seeking feedback on the approach for allocating no-cost allowances from 2035-2050 as well as understanding the potential impacts on individuals and communities where EITE facilities are located. Comments may be submitted through the <u>electronic platform until Sept.</u> 3, 2025 at 11:59 p.m.

To stay updated on the progress of the report, the advisory groups, and public meetings, sign up for the <u>EITE Industries email list</u>.

#### Document 6: Draft recommendations

#### Disclaimer

This document sets out the draft recommendations from the staff review of potential options for allocating allowances to emissions-intensive, trade exposed industries (EITEs) from 2035-2050 to avoid leakage and maintain the competitiveness of EITEs within the Cap-and-Invest Program. The purpose of the document is to support discussions with advisory groups and enable interested parties and the public to provide feedback on the draft findings and information.

The draft recommendations and information in this document do not represent the official position of Ecology or the Legislature on any policy or issue mentioned in this document. The final report will incorporate feedback received from advisory group members and other interested parties.

This is the sixth document with draft materials that Ecology has released to date as follows:

- Document 1: Best practice policies for avoiding leakage (May 1, 2025)
- Document 2: Methods for developing greenhouse gas benchmarks (May 1, 2025)
- Document 3: Framework for assessing potential methods for EITE allowance allocation (May 29, 2025)
- Document 4: Potential methods for allocating allowances to EITEs from 2035-2050 (May 29, 2025)
- Document 5: Review of options for allocating allowances to EITEs for 2035-2050 (June 26, 2025)
- Document 6: Draft recommendations (July 24, 2025)

#### Section 1: Context and Background

- The Climate Commitment Act (CCA) requires Ecology to provide a report to the Legislature that "...describes alternative methods for determining the amount and a schedule of allowances to be provided to facilities owned or operated by each covered entity designated as an emissions-intensive, trade-exposed facility from January 1, 2035, through January 1, 2050. The report must include a review of global best practices in ensuring against emissions leakage<sup>1</sup> and economic harm to businesses in carbon pricing programs and describe alternative methods of emissions performance benchmarking and mass-based allocation of no-cost allowances."
- 2. This document builds off the draft findings and information contained in Documents 1-5 released by Ecology from May 1 to June 26, 2025. It provides draft recommendations regarding the approach for allocating allowances to EITEs from 2035-2050. Staff have also compiled information and are seeking feedback on complementary measures that could potentially be progressed alongside the Cap-and-Invest Program to support decarbonization by EITEs and related program objectives.
- 3. This document is structured as follows:
  - a) Section 1: Context and Background
  - b) Section 2: Draft recommendation for allocating allowances to EITEs from 2035-2050
  - c) Section 3: Supporting information, including further details of options assessed and how draft recommendations would be implemented
  - d) Appendix 1: List of complementary measures for supporting decarbonization of EITEs in Washington
- 4. The purpose of this document is to enable advisory group members and other interested parties to provide feedback on the draft recommendations for EITE allowance allocation for 2035-2050. This is the final document to be released for feedback ahead of the deadline for providing comments on September 3, 2025.
- Staff want to acknowledge the members of the <u>EITE Industries Advisory Group</u> and <u>EITE</u> <u>Policy Advisory Group</u> who have provided important feedback and insights during the Phase 1 (August to December 2024) and Phase 2 (May to July 2025) engagement windows that helped informed these draft recommendations.

#### Method for developing draft recommendations

6. As required by the CCA, staff reviewed best practice policies for avoiding leakage and maintaining competitiveness of EITEs under carbon pricing programs. The draft findings of this policy review were set out in Document 1, alongside the staff review of methods for benchmarking EITEs as set out in Document 2.

<sup>&</sup>lt;sup>1</sup> As defined in the CCA as: "Leakage" means a reduction in emissions of greenhouse gases within the state that is offset by a directly attributable increase in greenhouse gas emissions outside the state and outside the geography of another jurisdiction with a linkage agreement with Washington (see RCW 70A.65.010(43)).

- 7. Staff also developed a two-step assessment framework for identifying and assessing potential options for EITE allowance allocation that was set out in Document 3.
- 8. Based on Document 1, staff identified four policy design considerations for allocating allowances to EITEs from 2035-2050 as follows:
  - a) Establish a level playing field for EITEs producing within the jurisdiction vis-àvis competitors in jurisdictions without comparable carbon pricing policies.
  - b) Identify and target assistance to industrial sectors that are most at risk of leakage.
  - c) Maintain incentives for EITEs to decarbonize their operations and reward efficient production within the jurisdiction.
  - d) Align with the overarching goal of carbon pricing programs to reduce emissions in line with jurisdictional (and global) emission reductions targets.
- 9. These four policy design considerations were used to identify policy options for avoiding leakage and maintaining competitiveness of EITEs under the Cap-and-Invest Program from 2035-2050, which were described in Document 4.
- 10. Staff then used a modified version<sup>2</sup> of the assessment framework proposed in Document 3 to evaluate sixteen policy options for allocating allowances to EITEs from 2035-2050 as set out in Document 5.
- 11. The findings of the draft assessment in Document 5, along with feedback and input from advisory group members and other interested parties, were used to inform the draft recommendations in this document.

<sup>&</sup>lt;sup>2</sup> Modifications to the assessment framework were made to address feedback from advisory group members.

#### Section 2: Draft recommendations

- 12. This section sets out the draft recommendations for allocating allowances to EITEs from 2035-2050. Further details on each recommendation are provided in Section 3, including a summary of interim feedback from advisory group members and further details on how each of the draft recommendations are proposed to be implemented.
- 13. In developing these draft recommendations staff have assumed that, if supported by the Legislature, these recommendations would be progressed in 2026 to inform EITE allowance allocation policy development. Staff note that policy development could be progressed in part through rulemaking if authorized by the Legislature.
- 14. Ecology is therefore seeking feedback on the policy options set out in the draft recommendations as well as the approach for progressing them.

**Draft Recommendation 1.1 –** The Legislature should maintain Ecology's authorization to provide no-cost allowances to EITEs from 2035 onwards provided it aligns with program objectives, allowance budgets, and emissions limits.

**Note:** All the draft recommendations listed below are contingent on the implementation of this recommendation.

**Draft Recommendation 1.2** – Ecology should monitor developments in carbon pricing policies in key jurisdictions and relevant federal policies as part of periodic program evaluations, including developments in carbon border adjustment mechanisms or alternative policies to address leakage risk.

**Draft Recommendation 2.1 –** Ecology should develop an objective approach for assessing leakage risk for EITEs in Washington and assess the impacts of implementing an assistance factor<sup>3</sup> that targets allowance allocation based on this objective approach.

**Draft Recommendation 2.2 –** Ecology should assess the implementation requirements and impacts of providing no-cost allowances to EITEs for addressing leakage risk associated with purchased electricity.

**Draft Recommendation 3.1 –** Ecology should assess the implementation requirements and impacts of adopting product-based benchmarks<sup>4</sup> or alternative methods for establishing allocation baselines for EITE allowance allocation.

<sup>&</sup>lt;sup>3</sup> As noted in <u>Document 1</u> (page 6, line 20), assistance factors can be used to differentiate the level of free allocation based on carbon leakage risk.

<sup>&</sup>lt;sup>4</sup> As noted in <u>Document 2</u> (page 9 line 39), product-based benchmarks express the amount of greenhouse gas emissions generated per unit of industrial product (e.g. average tons of CO2 per unit of steel) and can involve differentiation between products within a facility or sector.

**Draft Recommendation 3.2 –** Ecology should assess the implementation requirements and impacts of using consignment<sup>5</sup> to require EITEs to invest some of the value of their no-cost allowances in decarbonization projects.

**Draft Recommendation 4.1 –** Ecology should assess the policy design requirements and impacts of implementing a cap adjustment factor to ensure EITE allowance allocation aligns with program allowance budgets and net-zero emissions limits.

**Draft Recommendation 4.2 –** Ecology should assess at least one alternative policy option that would achieve a similar outcome as a cap adjustment factor.

**Draft Recommendation 5.1 –** Ecology should assess the environmental justice and economic impacts of the proposed policy options in Draft Recommendations 1.1, 1.2, 2.1, 2.2, 3.1, 3.2, 4.1 and 4.2 and interactions with existing CCA policies.

- 15. Staff have also identified some complementary policies and strategies that could potentially be pursued to support the decarbonization of EITEs in Washington. These include the policies and strategies being considered as part of Washington's <u>draft</u> <u>Comprehensive Climate Action Plan.</u>
- 16. Staff have not yet evaluated any complementary measures to enable any draft recommendations to be developed. However, staff have prepared an initial list of potential complementary measures in Appendix 1 of this document based upon information identified by Ecology to date or presented at EITE advisory group meetings.
- 17. Ecology is therefore seeking feedback on whether these policies, or other policies or strategies, should be considered by the Legislature to support the decarbonization of EITEs in Washington and the achievement of statewide emissions limits.

<sup>&</sup>lt;sup>5</sup> As defined in <u>Document 1</u> (page 13 line 65) consignment means allowances are 'consigned to auction', which means they are sold at auction and entities receive the revenue from the sale of the consigned allowances, often with conditions specifying how revenue can be used.

#### Section 3: Supporting information

- 18. This section provides supporting information regarding the draft recommendations for allocating allowances to EITEs from 2035-2050. This includes a summary of interim feedback from advisory group members, details of the policy options that were assessed, and further information on how each of the draft recommendations are proposed to be implemented.
- 19. As noted above, the draft findings and information contained in Documents 1-5 released by Ecology from May 1 to June 26, 2025, along with feedback and input from advisory group members and other interested parties, were used to inform the draft recommendations in this document.
- 20. In this section, the draft recommendations for EITE allowance allocation are grouped under the four policy design considerations identified in Document 5:
  - a) Establish a level playing field for EITEs producing within the jurisdiction
  - b) Identify and target industrial sectors most at risk of leakage
  - c) Maintain decarbonization incentives for EITEs and rewarding efficient production
  - d) Align with program cap and emissions limits.
- 21. Staff have also provided an additional draft recommendation related to the environmental justice and economic impacts EITE allowance allocation.

#### Summary of Interim Feedback from advisory groups on Document 5

- 22. The interim feedback received from the EITE Industries Advisory Group and EITE Policy Advisory Group on the draft assessment of policy options in Document 5 indicated that:
  - a) For Policy Design Consideration 1, there was in principle support from members of both advisory groups to continue providing no-cost allowances to EITEs from 2035 onwards (Option 1a) in some format. Some members wanted to see further assessment of the feasibility of a carbon border adjustment mechanism (Option 1c) while other members raised concerns about this option, including whether it would fully address competitiveness concerns for product exports.
  - b) For Policy Design Considerations 2-4, there was, in principle, support for specific policy options from certain advisory group members. However, some members of both advisory groups indicated they wanted further information and analysis to better understand the details and differences between the policy options and their impacts. This included, for example, the design of a cap adjustment factor, the impacts of updating allocation baselines for EITEs, and how permitting requirements, investment timeframes, and facility-specific circumstances would be accounted for. Some members also indicated the need for further engagement with industry and subject matter experts on policy design and impact assessment.
- 23. Further details on this interim feedback from advisory groups can be found in the advisory group meeting summaries.

## Policy Design Consideration 1: Establish a level playing field for EITEs producing within the jurisdiction

- 24. As identified in Document 4, establishing a level playing field for EITEs within Washington vis-à-vis competitors in jurisdictions without carbon pricing policies is a key design consideration for addressing leakage and maintaining competitiveness of EITEs regulated by the Cap-and-Invest Program.
- 25. As set out in the draft assessment of policy options (Document 5), staff assessed the following three policy options within this policy design consideration:
  - a) **Option 1a** Continue providing no-cost allowances to EITEs from 2035 onwards using an output-based allocation method that aligns with program objectives
  - b) **Option 1b** Periodically monitor developments in carbon pricing policies in key competitor jurisdictions and relevant federal policies to identify any major changes
  - c) **Option 1c** Implement a carbon border adjustment mechanism (CBAM)<sup>6</sup> or equivalent policy from 2035 onwards and phase out no-cost allowances.
- 26. Based on the draft assessment in Document 5, and feedback received from advisory groups and interested parties to date, staff developed the following draft recommendations:

Draft Recommendation 1.1 – The Legislature should maintain Ecology's authorization to provide no-cost allowances to EITEs from 2035 onwards provided it aligns with program objectives, allowance budgets, and emissions limits.

Based on Option 1a, this recommendation would include:

- A legislative extension of the existing statutory authority for Ecology to provide nocost allowances to EITEs from 2035 onwards using an output-based allocation approach.<sup>7</sup>
- A requirement for Ecology to ensure that the design and implementation of EITE allowance allocation aligns with annual allowance budgets and other applicable program objectives, including supporting the achievement of statewide emissions limits.

It is important to note that all the draft recommendations listed below under Policy Design Considerations 2-4 (i.e. Recommendations 2.1, 2.2, 3.1, 3.2, and 4.1) are contingent on the implementation of this recommendation.

<sup>&</sup>lt;sup>6</sup> As defined in <u>Document 1</u> (page 5 line 15b) Carbon Border Adjustment Mechanisms (CBAM) impose a

carbon price on imports of emissions intensive products from countries with less stringent climate policies. <sup>7</sup> As defined in <u>Document 1</u> (page 11 line 56), 'output-based allocation' approaches target leakage risk more robustly through adjustment of allowances based on actual production at each EITE facility.

Draft Recommendation 1.2 – Ecology should monitor developments in carbon pricing policies in key jurisdictions and relevant federal policies as part of periodic program evaluations, including developments in carbon border adjustment mechanisms or alternative policies to address leakage risk.

Based on Option 1b, this recommendation would involve periodic monitoring of new developments in carbon pricing policies in key competitor jurisdictions (i.e., other U.S. states and countries with manufacturers that sell products into the Washington market and compete directly with EITEs), and relevant federal policies (for example, trade, climate, and/or energy policies) in order to identify any major changes in leakage risk that may warrant changes to EITE allocation policies in Washington.

This would include:

- Closely monitoring policy developments in linked jurisdictions or jurisdictions with which Washington contemplates linkage.
- Monitoring developments in carbon border adjustment mechanisms or alternative policies to address leakage risk that could complement or supplant no-cost allowance allocation over time.

Ecology is required to conduct a comprehensive review of the implementation of the Cap-and-Invest Program, including outcomes relative to EITEs, every four years beginning in December 2027 as per RCW 70A.65.060(5). This recommendation could potentially form part of this existing program evaluation requirement.

If these evaluations identified major changes in leakage risk or important developments in leakage mitigation policies, then Ecology would need to consider whether any changes to EITE allocation policies in the Cap and Invest Program may be warranted. Developing and implementing any major changes to EITE allowance allocation would most likely require authorization from the legislature.

## Policy Design Consideration 2: Identifying and targeting assistance for EITEs in Washington that are most at risk of leakage

- 27. As identified in Document 4, identifying and targeting assistance for EITEs in Washington that are most at risk of leakage is a key design consideration for addressing leakage and maintaining competitiveness of EITEs regulated by the Cap-and-Invest Program.
- 28. As set out in the draft assessment of policy options (Document 5), staff assessed three policy options within this policy design consideration:
  - a) **Option 2a** Developing an objective approach for assessing leakage risk for EITEs in Washington, including from purchased electricity
  - b) **Option 2b** Applying an 'assistance factor' that provides differentiated levels of no-cost allowances to industrial sectors based on leakage risk

- c) **Option 2c** Provide no-cost allowances or other compensation to EITEs to address any leakage risk associated with purchased electricity.
- 29. Based on the draft assessment in Document 5, and feedback received from advisory groups and interested parties to date, staff developed the following draft recommendations:

Draft Recommendation 2.1 – Ecology should develop an objective approach for assessing leakage risk for EITEs in Washington and assess the impacts of implementing an assistance factor that targets allowance allocation based on this objective approach.

The draft assessment in Document 5 indicated that developing an objective approach for assessing leakage risk is a prerequisite for implementing an assistance factor and/or extending leakage risk mitigation to include purchased electricity.

Based on options 2a and 2b, this recommendation would involve:

- Identifying quantitative and/or qualitative criteria and methods that can be used to objectively assess leakage risk for EITEs in Washington, for example, the metrics used to assess 'emissions-intensity' and 'trade exposure' as identified in Document 1.<sup>8</sup>
- Assessing leakage risk associated with electricity purchases by EITEs.
- Determining how to differentiate leakage risk associated with different industrial activities or sectors in Washington.<sup>9</sup>
- Assessing the impacts of implementing an assistance factor that targets allowance allocation based on the objective leakage risk assessment.
- Seeking input from EITE representatives and subject matter experts on the above.

Draft Recommendation 2.2 – Ecology should assess the implementation requirements and impacts of providing no-cost allowances to EITEs for addressing leakage risk associated with purchased electricity.

Based on Option 2c, this recommendation would involve:

- Analyzing data on purchased electricity by EITEs and associated emissions
- Assessing methods for determining the amount of no-cost allowances required to mitigate leakage risk associated with purchased electricity
- Assessing options and impacts of delineating electric load associated with purchased electricity by EITEs from load used to calculate no-cost allowances for electric utilities
- Assessing implementation requirements associated with the provision of no-cost allowances to EITEs to address leakage risk from purchase electricity

<sup>&</sup>lt;sup>8</sup> See page 9 of <u>Document 1</u>.

<sup>&</sup>lt;sup>9</sup> For example, the

- Assessing the impacts of providing no-cost allowances to EITEs for purchased electricity, including impacts on decarbonization incentives for EITEs
- Seeking input from EITE representatives, electric utilities, and subject matter experts on the above.

## Policy Design Consideration 3: Maintain decarbonization incentives for EITEs and reward efficient production

- 30. As identified in Document 4, maintaining incentives for EITEs to decarbonize their operations and rewarding investment in efficient production within Washington is a key design consideration for addressing leakage and maintaining competitiveness of EITEs regulated by the Cap-and-Invest Program.
- 31. As set out in the draft assessment of policy options (Document 5), staff assessed six policy options within this policy design consideration:
  - a) Option 3a Continue using the output-based allocation method with facilityspecific carbon-intensity baselines<sup>10</sup>, as currently prescribed in the CCA, from 2035 onwards.
  - b) **Option 3b** Re-establish allocation baselines for EITEs from 2035 onwards using the most recently available emissions and production data.
  - c) **Option 3c** Transition EITEs to product-based benchmarks by 2035 and use output-based allocation with benchmarking from 2035 onwards.
  - d) **Option 3d** Enable new EITE facilities to be benchmarked against a comparable EITE facility in Washington.
  - e) **Option 3e** Require the consignment of a portion of EITE allowance allocation with associated revenues to be used to fund EITE emission reduction projects.
  - f) **Option 3f** Apply an adjustment to allowance allocation based on Best Available Technology Assessments.<sup>11</sup>
- 32. Based on the draft assessment in Document 5, and feedback received from advisory groups and interested parties to date, staff developed the following draft recommendations:

Draft Recommendation 3.1 – Ecology should assess the implementation requirements and impacts of adopting product-based benchmarks or alternative methods for establishing allocation baselines for EITE allowance allocation.

<sup>&</sup>lt;sup>10</sup> As noted in <u>Document 1</u> (Page 6 line 22) each EITE facility is assigned a 'carbon-intensity baseline' which is based on facility-specific average emissions and production during 2015-2019.

<sup>&</sup>lt;sup>11</sup> <u>RCW 70A.65.010(10)</u> defines best available technology as: "...a technology or technologies that will achieve the greatest reduction in greenhouse gas emissions, taking into account the fuels, processes, and equipment used by facilities to produce goods of comparable type, quantity, and quality."

The draft assessment in Document 5 indicated that any changes to the existing allocation baselines for EITE allowance allocation need to provide important additional benefits.

This recommendation would involve assessing the impacts of implementing productbased benchmarks (e.g. Option 3c) or alternative methods for establishing allocation baselines (e.g. Option 3b or 3f) when compared to retaining the existing allocation baselines (Option 3a).

This would include:

- Assessing the potential design of product-based benchmarks for EITEs in WA, including the collation of information on the different products produced by each facility and identifying changes to reporting requirements that may be needed to implement product-based benchmarks
- Assessing the potential design of at least one alternative method for establishing allocation baselines that maintains decarbonization incentives for EITEs and rewards investment in efficient production in Washington. This could include, for example, benchmarking based on 'best available technology' assessments or resetting allocation baselines based on updated emissions and production data
- Assessing the implementation requirements associated with establishing product-based benchmarks and alternative methods for establishing allocation baselines
- Assessing the impacts of retaining existing allocation baselines compared to implementing product-based benchmarks or alternative methods for establishing allocation baselines, including impacts on incentives for decarbonization and investment in efficient production in Washington
- Seeking input from EITE representatives and subject matter experts on the above.

Draft Recommendation 3.2 – Ecology should assess the implementation requirements and impacts of using consignment to require EITEs to invest some of the value of their no-cost allowances in decarbonization projects.

The CCA requires that most no-cost allowances allocated to natural gas utilities are consigned to auction, starting from 65% on allowances in 2023 and reaching 100% by 2030. Natural gas utilities must use the proceeds from the sale of no-cost allowances at auction to benefit utility customers, including at minimum, covering cost impacts to low-income customers from the Cap-and-Invest Program.

Based on Option 3e, this recommendation would involve adopting a similar approach for EITEs whereby a specified percentage of the no-cost allowance distributed to EITEs would be consigned to auction. EITEs would then need to use the proceeds from the sale of their no-cost allowances to invest in projects that decarbonize their operations and reduce their greenhouse emissions.

This recommendation would involve:

- Assessing the potential design of criteria and methods for EITEs to demonstrate how proceeds from the sale of consigned allowances will be invested in projects that decarbonize their operations and reduce their greenhouse emissions, including consideration of project timelines, facility turnarounds, and permitting requirements.
- Assessing the impacts of requiring a percentage of no-cost allowance distributed to EITEs to be consigned to auction, including implications of shifting a portion of EITE allowance allocation provided for leakage mitigation toward more directly subsidizing emissions reductions by EITEs.
- Assessing the implementation requirements associated with requiring EITEs to demonstrate how proceeds from the sale of consigned allowances will be invested in projects that decarbonize their operations and reduce their greenhouse emissions.
- Seeking input from EITE representatives and subject matter experts on the above.

#### Policy Design Consideration 4: Align with program cap and emissions limits

- 33. As identified in Document 4, policies designed to mitigate leakage and maintain the competitiveness of EITEs, including the allocation of no-cost allowances, must align with the overarching purpose of carbon pricing programs: to reduce emissions in line with emission reduction targets or limits.
- 34. In the case of the Cap-and-Invest Program the overarching purpose is to ensure that greenhouse gas emissions are reduced by all covered entities, including EITEs, consistent with the statewide emission limits established in RCW 70A.45.020.<sup>12</sup>
- 35. As set out in the draft assessment of policy options (Document 5), staff assessed four policy options within this policy design consideration:
  - a) **Option 4a** Applying a cap adjustment factor to EITE allowance allocation from 2035 onwards that is calibrated with annual allowance budgets and other forms of allowance distribution.
  - b) **Option 4b** Establishing an annual cap on total no-cost allowance allocation from 2035 onwards so that it does not exceed a certain proportion of each annual budget.
  - c) **Option 4c** Prioritizing allowance allocations for industries manufacturing products that are consistent with statewide net-zero emissions limits.
  - d) Option 4d Sector-specific benchmarking and reduction schedules.<sup>13</sup>

<sup>&</sup>lt;sup>12</sup> See RCW 70A.65.060(1) and RCW 70A.65.070(2).

<sup>&</sup>lt;sup>13</sup> As set out in this <u>RMI report</u>, these sector-specific benchmarks and reduction schedules are based on technical pathways developed for each industrial sector by RMI.

36. Based on the draft assessment in Document 5, and feedback received from advisory groups and interested parties to date, staff developed the following draft recommendations:

#### Draft Recommendation 4.1 – Ecology should assess the policy design requirements and impacts of implementing a cap adjustment factor to ensure EITE allowance allocation aligns with program allowance budgets and net-zero emissions limits.

Based on Options 4a, this recommendation would involve:

- Undertaking market analysis (e.g. modeling and forecasting) to determine what cap decline factor would need to be applied to ensure EITE allowance allocation aligns with annual allowance budgets established by Ecology under RCW 70A.45.020<sup>14</sup> and auctioned allowance requirements under RCW 70A.65.100.
- Assessing options and impacts of applying a cap adjustment factor, including whether or not it is applied uniformly across emissions years and/or uniformly across all EITE sectors.
- Undertaking analysis to determine how total no-cost allowances provided to EITEs and electric and natural gas utilities, as well as the allowances distributed by Ecology via auction, will align with the annual allowance budgets established by Ecology under RCW 70A.45.020<sup>15</sup> and auctioned allowance requirements under RCW 70A.65.100.

Draft Recommendation 4.2 – Ecology should assess at least one alternative policy option that would achieve a similar outcome as a cap adjustment factor.

This recommendation would involve assessing the potential design of at least one alternative policy option that could achieve a similar outcome as a cap adjustment factor. This would include, for example, developing an alternative policy based on Option 4c or 4d, that would then be used to assess and compare the impacts of implementing a cap adjustment factor.

#### Environmental justice and economic impacts

- 37. As indicated in the above draft recommendations, further work is required to assess the design and associated impacts of potential new policies for EITE allowance allocation. This includes assessing the impacts of proposed policy options on environmental justice outcomes and local and state economies once there is sufficient detail about the design of proposed policies to undertake these assessments.
- 38. Staff are evaluating data prepared for Ecology by Eastern Research Group (ERG) to consider how environmental justice and economic impacts can best be assessed both

<sup>&</sup>lt;sup>14</sup> Annual allowance budgets are established by Ecology through rule – see <u>WAC 173-446-210</u>.

<sup>&</sup>lt;sup>15</sup> Annual allowance budgets are established by Ecology through rule – see <u>WAC 173-446-210</u>.

as part of its report to the Legislature and in future work to assess the policy options for EITE allowance allocation as proposed in the draft recommendations above.

- 39. Ecology has also received feedback from advisory group members on the importance of assessing the interactions of proposed policy options on existing policies in the CCA, as well as interactions with other existing state policies designed to support the achievement of statewide emission limits.
- 40. On this basis staff have developed an additional draft recommendation:

# Draft Recommendation 5.1 – Ecology should assess the environmental justice and economic impacts of proposed policy options in Draft Recommendations 1.1, 1.2, 2.1, 2.2, 3.1, 3.2, 4.1 and 4.2<sup>16</sup> and interactions with existing CCA policies.

This recommendation would involve:

- Analyzing data to assess local and statewide impacts of proposed policies options on air pollution, community health, tax revenues and employment, including impacts on overburdened communities and Tribes.
- Assessing the interactions between proposed policy options and the existing environmental justice requirements in the CCA and Cap-and-Invest Program rule, for example, the requirement for Ecology to restrict the use of offsets by EITE facilities that contribute substantively to cumulative air pollution in overburdened communities.
- Analyzing impacts of proposed policy options on auction proceeds, including how proceeds are used to support emissions reductions by EITEs and/or provide benefits for overburdened communities.
- Engaging with overburdened communities and Tribes to assess and inform policy options, and following all applicable requirements of the HEAL Act.
- Assessing alignment of proposed policies with other policies in the CCA and related state climate policies for achieving statewide emissions limits.

#### Approach and timeframes for progressing recommendations

- 41. In developing these draft recommendations, staff have assumed that, if supported by the Legislature, these recommendations could be further assessed in 2026 ahead of final policy development on EITE allowance allocation legislatively or administratively. Policy options could be actuated in part through rulemaking if the Legislature authorized it.
- 42. In Document 5, staff provided estimated timeframes for implementing potential policy options through rulemaking. Staff note that the draft recommendations do not factor in the full implementation of the proposed policy options. Rather, the recommendations

<sup>&</sup>lt;sup>16</sup> Unless these assessments are already required to be undertaken by Ecology in accordance with the HEAL Act and/or Administrative Procedures Act.

focus on the development and assessment of specific policy options in more detail to better inform decisions by the Legislature and possible needed future rulemaking.

43. Ecology is therefore seeking feedback on the details of the draft recommendations as well as the approach for progressing them.

#### **Complementary policies and strategies**

- 44. Staff have identified an initial list of complementary measures that could potentially be pursued to support the decarbonization of EITEs in Washington and the objectives of the Cap-and-Invest Program. This includes, for example, the policies and strategies being considered as part of Washington's <u>draft Comprehensive Climate Action Plan</u>.
- 45. Staff have not yet evaluated these potential complementary measures but have begun compiling information on policies that could warrant further consideration by the Legislature when making decisions on EITE Allowance Allocation for 2035-2050.
- 46. Appendix 1 provides a list of the policies and strategies staff have identified to date. These are based on recommendations and concepts that have been put forward during Ecology's process to develop its report to the Legislature, as well as measures proposed in the recently released draft Comprehensive Climate Action Plan. Staff have also identified existing state policies, programs, or resources related to the proposed policies and strategies compiled in Appendix 1.
- 47. Ecology is seeking feedback on the extent to which the policies in Appendix 1 could complement the EITE allocation policy options identified in this document, as well as any additional policies that could be used to support the decarbonization of EITEs in Washington and the objectives of the Cap-and-Invest Program.

Recommendation or proposal	Source	Description	Policy Type <sup>[1]</sup>	Links to existing state p
Expedite electrical grid enhancements for industrial electrification	<u>RMI Report</u>	Advancing electrical grid reliability, capacity, and affordability improvements outside of adding additional generation capacity can facilitate easier access to the electricity needed for industrial electrification. It can also potentially reduce financial and logistical barriers to transitions from fossil fuel–based processes to electric alternatives.	Supporting Policies	Washington examples:Regional ResilienceState DepartmentResource AdequateCommerceUtility Resource ParticipationCommerceCommerceCommerceCommerceDepartment of Commerce
Incentivize the electrification of process heat equipment	Draft CCAP	Existing alternative technologies can be adopted to electrify industrial process heat equipment. One such technology, industrial heat pumps (IHPs), can provide process heat for industrial facilities including food and beverage processing, chemical manufacturing, and pulp and paper facilities. (CCAP)	Incentives, RDD&D	Reference information:•How to Decarboni American Manuface•Electrification Roa•Industrial Electrification Collaborative
Reform industrial electricity tariffs and ratemaking	<u>RMI Report</u>	Utilities accommodating increased electrification-related loads must balance costs to existing ratepayers without jeopardizing progress on clean energy goals. Differentiated large load tariff rates may aid industries to decarbonize while insulating other customers from infrastructure costs	Supporting Policies	Washington examples:         Senate Bill 5295         Performance-Base         Examples from outside of         Utah: Electric Utili         Green Source Adv
Accelerate permitting procedures for critical decarbonization projects	<u>RMI Report</u>	Efficient and effective permitting and siting of industrial locations is a crucial element to facilitate the energy transition, and is often cited by developers as one of the greatest barriers to new projects. Washington has taken some crucial steps in the past few years to address these barriers. In November 2022, the Washington State Departments of Ecology and Commerce released a comprehensive report with recommendations for improving the siting and permitting processes for industrial clean energy facilities. However, additional is recommended related to local coordination, funding, and equity and environmental justice consideration, as detailed in Appendix G, Exhibit G1 of the RMI report.	Supporting Policies	Washington examples:         Clean energy coor         Ecology         Low-Carbon Energy         Report
Circular economy policies	Jeffery Rissmam Presentation	Right-to-repair, extended producer responsibility, increase demand for recycled materials, prohibit destroying excess inventory and returns, disposable item and packaging restrictions, recycling availability and requirements.	Standards, Supporting Policies	<ul> <li>Examples from Washington</li> <li>Recycling Develop</li> <li>Ecology</li> <li>Modeling a path to</li> </ul>

Appendix 1 – List of complementary measures supporting decarbonization of industry in Washington as proposed in selected reports and presentations to the EITE Industries Advisory Group in 2024-25

policies, programs or other related resources

ncy Assessment Program (RRAP) – Washington nt of Commerce

<u> acy – Washington State Department of</u>

Plans – Washington State Department of

sts over \$23 million to improve grid infrastructure, eliability for 18 communities – Washington State ommerce

nize Industrial Process Heat While Building acturing Competitiveness | ACEEE bad Map – Renewable Thermal Collaborative fication in U.S. States – Renewable Thermal

sed Regulation (PBR)

of WA:

ility Amendment for Large-Scale Electrical Loads <u>dvantage Program - Duke Energy</u>

ordination - Washington State Department of

rgy Project Siting Improvement Final Legislative

gton:

opment Center - Washington State Department of

Modeling a path towards a circular economy in Washington

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				<ul> <li><u>NextCycle Washin</u> <u>Washington State</u></li> <li><u>Industrial Symbios</u> <u>Thing Begins</u></li> </ul>
Develop additional offset protocols	<u>RMI Report</u>	Washington could develop one or more additional offset protocols for other types of high-quality CDR that apply to emissions not covered by the Cap-and-Invest program. CDR is defined by the Intergovernmental Panel on Climate Change as "anthropogenic activities removing carbon dioxide from the atmosphere and durably storing it in geological, terrestrial, or ocean reservoirs, or in products."	Supporting Policies	Washington example: • Use of Carbon Dio Emissions Reduct
Increase funding for the Hard-to- Decarbonize Sector Grants Program	<u>RMI Report, Draft</u> <u>CCAP</u>	The existing Hard-to-Decarbonize Sector Grants Program provided \$20 million in grants in 2024, but the funding levels are too low for major industrial decarbonization projects. Some EITEs, particularly smaller companies, lack the funds to invest in new technologies to reduce emissions. (RMI) New state-level incentives should be focused on providing industrial businesses with upfront capital to plan and execute their projects, ideally grant funding and/or low-cost loan options. (CCAP)	RDD&D, Incentives	Washington example: • <u>Commerce invests</u> <u>Washington state</u>
Introduce a clean heat standard	<u>RMI Report</u>	A clean heat standard (CHS) sets an emissions performance standard for industrial heat sources. The policy seeks to reduce and regulate emissions from conventional fossil fuels, including natural gas, heating oil, and propane.	Standards	Examples from other stat Massachusetts Cla Colorado   Clean H
Introduce state- level tax credits for clean manufacturing production	<u>RMI Report</u>	A clean manufacturing production tax credit is a fiscal incentive that can help producers of high-emitting products switch to cleaner modes of production. Unlike an investment tax credit for emissions-reducing equipment, a clean manufacturing production tax credit would be claimed by a business year after year and help cover higher operating costs associated with less-carbon-intense production methods.	Incentives	
Introduce state- level tax credits for emissions- reducing equipment	RMI Report, Jeffery Rissmam Presentation	State-level tax credits for industrial decarbonization can ease the cost differential between legacy fossil equipment and lower-carbon-intensity and electrified equipment. Cost is the major determinant of whether a facility adopts new technologies, and currently electrified process heating sources for manufacturing make financial sense in only a handful of applications, typically in lower temperature processes with lower heat duties. (RMI)	Incentives	State-level example from Colorado Industria Utility-level examples: Utility-level rebate compressed air, ge
Leverage state procurement to encourage low- carbon manufacturing	RMI Report, Jeffery Rissmam Presentation	Robust "Buy Clean" procurement requirements that set clear standards for the carbon intensity of products can help leverage the purchasing power of the government to create a consistent market for clean, locally produced products. (RMI) A green public procurement program establishes an emissions intensity standard for goods purchased or funded by the government. (JR)	Supporting Policies	Washington example: Buy Clean and Buy <u>Commerce</u>
R&D support mechanisms	<u>Jeffery Rissmam</u> <u>Presentation</u>	Research, development, and demonstration support mechanisms focused specifically on industrial decarbonization. Examples include grants and	RDD&D	Examples from Washingto

nington teams pioneer circular economy projects te Department of Ecology osis - Washington State - Where the Next Big

ioxide Removal to Meet Washington State's ction Limits

sts \$37 million in 46 clean energy projects across e – Washington State Department of Commerce

ates:

<u>Clean Heat Standard | Mass.gov</u> n Heat Plans | Public Utilities Commission

<u>m outside of WA:</u> rial Tax Credit Offering | Colorado Energy Office

te programs in WA for heat pumps, motors, general industrial systems, etc.

uy Fair (BCBF) – Washington State Department of

gton:

		funding programs, smart patent protections, and centers that facilitate coordination of research efforts and partnerships.		<u>Clean Energy Fund</u> <u>Commerce</u>
				Examples from other state NYSERDA   Commendation 4120) California Energy C Development Divis Maryland Energy Ad Agricultural Grant I
Set up an industrially focused green bank	RMI Report, Jeffery Rissmam Presentation	A state-chartered green bank, a form of state energy financing institution focused on industrial decarbonization, could speed up emissions reductions at EITE facilities by providing financial services such as low- interest loans. (RMI) Green banks are best suited to overcoming a gap where clean technology is available, but financing or cost barriers hamper its deployment. (JR)	Incentives	Washington example:• Washington State (International examples:• Making the Clean In scale sustainability Environment – Fina• The State of Green structures around the
Expand methane regulations	<u>RMI Report</u>	If Washington wanted to better understand the upstream and midstream emissions associated with the natural gas consumed within the state, it could establish robust, measurement-based reporting requirements covering these emissions. As more information is understood about these emissions, Washington could also choose to impose standards on what natural gas can be consumed within the state. Washington could strengthen its monitoring and control requirements for municipal solid waste landfills to better characterize — and minimize — the fugitive methane emissions associated with biomethane used within the state.	Standards	<ul> <li>Washington examples:         <ul> <li>Chapter 70A.540 R</li> <li>Landfill Methane End Department of Eco</li> </ul> </li> <li>Examples from other state         <ul> <li>Oil and gas greenhed</li> <li>Department of Pub</li> <li>Oil and Gas Methan</li> <li>DEC Releases Draft Emissions Data - N</li> </ul> </li> </ul>
Incentivize transitions of refineries to other functions	<u>RMI Report</u>	While our core suggestions seek to retool existing refineries to keep fossil- based transport fuels as their primary products for most sites, current market trends may drive site closures, such as those recently announced in California (Wilmington, Benicia) and Texas (Houston).	Incentives, Standards	Washington example:     Washington State F
Update existing rules on oil refineries	<u>RMI Report</u>	Washington has an existing regulation to maintain above-average energy efficiency or reduce GHG emissions from oil refineries 10% from 2010 levels by 2025. With the target broadly achieved and deadline expiring, Ecology may wish to update the regulation in accordance with the court's decision and the 2030, 2040, and 2050 economy-wide targets.	Standards	Washington example: • Oil refinery required <u>Ecology</u>
Energy efficiency subsidies	Draft CCAP	In order to maximize Washington's potential for reducing industrial emissions though energy efficiency, the state can increase the subsidy available to these projects.	Incentives	State- and utility-level exaDatabase of State IEnergy Efficiency P

nd (CEF) – Washington State Department of

#### ates

mercial & Industrial Carbon Challenge 2025 (RFP

/ Commission | Energy Research and vision Administration | Commercial, Industrial & nt Program

e Green Bank

n Industrial Deal bankable: Recommendations to lity across EU industry – United Nations nance Initiative en Banks 2025: Learnings from green financing id the world - CPI

RCW: LANDFILLS—METHANE EMISSIONS Emissions Reduction Grants - Washington State cology

#### tes:

house gas intensity program | Colorado ublic Health and Environment nane Regulation | California Air Resources Board raft Regulations to Collect Greenhouse Gas - NYSDEC

e Refinery Economic Impact Study

rements - Washington State Department of

#### <u>xamples:</u>

te Incentives for Renewables & Efficiency® - DSIRE y Programs and Incentives | ENERGY STAR

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Equipment fees, rebates, and feebates	Jeffery Rissmam Presentation	A fee is a sales tax applied to equipment that fails to meet an efficiency or emissions intensity threshold. A rebate is the opposite of a fee: government pays buyers of equipment that exceeds an efficiency or emissions intensity threshold. A feebate combines a fee and a rebate in a single policy.	Incentives	<ul> <li><u>State- and utility-level examples:</u></li> <li><u>Database of State Incentives for Renewables &amp; Efficiency® - I</u></li> <li><u>Energy Efficiency Programs and Incentives   ENERGY STAR</u></li> </ul>
Incentivize co- generation and storage of energy using thermal batteries	Draft CCAP	For industrial facilities that require high-temperature heat during manufacturing (greater than 400° Celsius), many standard electrification technologies may not be applicable. Thermal batteries, also known as heat batteries, store electricity as heat using storage material such a graphite surrounded by an insulating shell. This heat is stored for hours or days, and when needed, is extracted and pumped into the industrial facility for use.	Incentives, RDD&D	<ul> <li><u>Reference information:</u> <ul> <li><u>Thermal Batteries: Opportunities to Accelerate Decarbonizat of Industrial Heat – Renewable Thermal Collaborative</u></li> <li><u>Combined Heat and Power   Better Buildings Initiative</u></li> </ul> </li> </ul>
Promote industrial efficiency through waste heat recovery	Draft CCAP	Waste heat recovery refers to technologies that allow industrial facilities to convert heat that is discharged by electrical processes back into energy. These waste heat sources can be harnessed and reused, replacing the demand for fossil fuels with emissions-free recovered heat energy.	Incentives, RDD&D	<ul> <li><u>Reference information:</u></li> <li><u>Waste Heat Recovery Basics   Department of Energy</u></li> <li><u>Unlocking the potential of waste heat recovery   McKinsey</u></li> </ul>
Provide voluntary efficiency audits for industrial facilities [additional funding]	<u>Draft CCAP</u>	The efficiency audit services that are currently offered could be enhanced with additional funding to provide a more permanent implementation subsidy for Washington's facilities. Additional implementation incentives will increase private sector interest, empower more innovative efficiency solutions, and help to use other existing efficiency incentives.	Incentives, Supporting Policies	<ul> <li>Technical assistance programs:         <ul> <li>Efficiency services for manufacturing and industrial facilities Washington State Department of Ecology</li> <li>Industrial Training and Assessment Center: University of Washington</li> <li>WSU Energy Program &gt; Industrial Efficiency &gt; Onsite Energy Technical Assistance Partnership</li> </ul> </li> <li>Examples of State-Level Incentives:         <ul> <li>Database of State Incentives for Renewables &amp; Efficiency® - I</li> </ul> </li> </ul>
Deliver technical assistance for carbon capture, use and storage	Draft CCAP	Deploying CCUS technologies can be challenging for industrial facilities due to the need for suitable geologic conditions, complex permitting, and community engagement. A technical assistance program offering voluntary CCUS audits can help facilities navigate these barriers by providing expert guidance on feasibility, siting and implementation.	Supporting Policies	<ul> <li><u>Reference information:</u> <ul> <li><u>Carbon Capture, Utilization, and Storage (CCUS) Resources</u> <u>Commercial Law Development Program</u></li> <li><u>Carbon Utilization and Storage Partnership of the Western Ur</u> <u>States   netl.doe.gov</u></li> </ul> </li> </ul>
Facilitate carbon dioxide transportation infrastructure	Draft CCAP	Help developers obtain federal funding and coordinate transportation planning. Creating a working group to identify potential carbon dioxide transportation corridors, consider safety and siting concerns, analyzing and optimizing pipeline or trucking routes, and standardizing permits could speed up project schedules significantly and improve feasibility.	Supporting Policies	Reference information:         • CO2 Transportation Infrastructure (CIFIA) Financing   Departmont of Energy         • Carbon Transport   netl.doe.gov         • Map of Carbon Pipelines - American Carbon Alliance
Green electrolytic hydrogen and renewable fuels: recommendations for deployment in Washington	<u>Dept of Commerce</u>	Dept of Commerce provided six high level recommendations, each followed by specific sub-recommendations, totaling 27 recommendations, available in their report <u>here.</u>	Supporting Policies, Incentives, RD&D	<ul> <li><u>Hydrogen and Renewable Fuels – Washington State Departmon State </u></li></ul>

xamples: te Incentives for Renewables & Efficiency® - DSIRE

es: Opportunities to Accelerate Decarbonization t – Renewable Thermal Collaborative and Power | Better Buildings Initiative

#### <u>rograms:</u>

l Incentives: te Incentives for Renewables & Efficiency® - DSIRE

, Utilization, and Storage (CCUS) Resources <u>v Development Program</u> on and Storage Partnership of the Western United .gov

ion Infrastructure (CIFIA) Financing | Department

rt | netl.doe.gov ipelines - American Carbon Alliance enewable Fuels – Washington State Department

Incentivize	Draft CCAP, Dept	Continuing to fund green hydrogen tax incentives and grants to local	Supporting	Washington examples:
hydrogen	of Commerce	municipalities and small businesses will help Washington achieve its	Policies	State Policy Incent
investments		climate goals while furthering economic development across the state.		Washington State
		Producing green hydrogen and hydrogen-derived fuels is energy intensive.		<u>CommerceReports</u>
		The state should focus on using these fuels in the most effective ways to		
		get the biggest reduction in carbon emissions. Commerce may consider a		
		new grant program to support planning and demonstration projects for		
		industries that could use hydrogen in the future but aren't currently using		
		green or renewable hydrogen.		
Invest in common	RMI Report	Building a hydrogen delivery network, including assessing compatibility of	Supporting	Washington example:
carrier		existing pipelines with hydrogen, optimizing design, and demonstrating	Policies	<u>CommerceReports</u>
infrastructure for		efficient delivery, will take between 5 and 12 years. To that end,		
the transportation		Washington would benefit from consulting with its industrial facilities and		
of green hydrogen		establishing a plan to invest in and build the required common carrier		
		infrastructure and establish the appropriate regulatory authorities.		
Replace fossil-	Draft CCAP	There is an opportunity to replace hydrogen produced through steam	Incentives,	Washington example:
derived hydrogen		methane reforming (SMR) with green electrolytic or other renewably	Standards	State Policy Incent
with green		generated hydrogen. Replacing fossil-derived hydrogen with green		Washington State
hydrogen		hydrogen would significantly lower the carbon intensity of fossil fuels		<u>CommerceReports</u>
		produced at Washington's refineries.		

<sup>[1]</sup> Based on the policy types set out in Figure 4 of the US Climate Alliance policy guidebook for enabling industrial decarbonization.

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