

Ecology requested feedback on electricity imports and centralized electricity markets

On March 6, 2025 Ecology hosted a [Cap-and-Invest Electricity Forum](#) on electricity imports and centralized electricity markets. Ecology requests interested parties [submit written feedback](#) to the following questions by 11:59 p.m. PT April 4, 2025. Ecology understands that interested parties may choose to respond to a limited set of topics of particular interest or import.

In developing comment, Ecology asks that interested parties weigh the following considerations.

Considerations

- Impart appropriate incentives to achieve state GHG emission limits
- Consistently and appropriately assess emissions and compliance obligations
- Consider risk for emissions leakage
- Cohesive across bilateral transactions and various CEMs designs
- Compatibility with potential linkage partners
- Implementation and reporting feasibility
- First-jurisdictional approach

Defining GHG Zone and treatment of system power

1. **Central question:** How should the WA GHG Zone be defined within CEMs and how does this interface with existing reporting frameworks?
2. What load and what generation resources should be included in the WA GHG Zone for:
 - a. BAAs located entirely within WA
 - b. BPA BAA (multi-state BAA federal power marketing administration)
 - c. multi-state BAAs that are also multijurisdictional retail providers
 - d. multi-state BAAs that do not have load in WA

Understanding CEMs and BPA interactions

1. How are BPA's system generation resources represented in a CEM model? Are distinct generation resources represented at distinct nodes and can be separately scheduled or awarded by a CEM?
2. What EF should be used in the GHG bid adder for BPA system energy or generation resources for CEM attribution to the WA GHG Zone?
3. What EF should be used to determine Cap-and-Invest compliance obligations for BPA system energy or generation resources attributed to the WA GHG Zone?
4. When attribution to the WA GHG Zone is enabled by CEMs, how should BPA system energy supplied to WA and associated emissions be accounted for within the Cap-and-Invest Program?

- a. Should BPA participation in a day-ahead or real-time only CEM impact the usefulness or calculation of the BPA ACS EF?
- b. If BPA participates in a day-ahead CEM, would all energy and emissions associated with BPA system imports to WA be accounted for by attribution of BPA generation to the WA GHG Zone?
- c. Would BPA export energy from the CEM to WA customers outside the market footprint?

Understanding CEMs and MJRP interactions

1. How does an MJRP represent load in a CEM? Should WA retail load for an MJRP be represented as within the WA GHG Zone?
2. When attribution to the WA GHG Zone is enabled by CEMs, how should imported MJRP system energy and emissions be accounted for within the Cap-and-Invest Program?
 - a. Should MJRP participation in a day-ahead or real-time only CEM impact the usefulness or calculation of emissions associated with imported system power serving WA retail load?
 - b. If an MJRP participates in a day-ahead CEM, would all energy and emissions associated with MJRP system imports to WA retail load be accounted for by attribution of MJRP generation to the WA GHG Zone?

Unspecified imports from CEMs

1. **Central question:** Considering potential pathways listed by Ecology
 - a. What emission factor should be used to determine the compliance obligation associated with unspecified source imports attributed to the WA GHG Zone?
 - b. What emission factor should be used in the GHG adder for unspecified source imports in the M+ optimization? Should any pathway listed by Ecology be considered?
 - c. What emission factor should be used for interchange import transactions (bulk market-to-market transfers)?
 - d. Must unspecified
2. If a calculated (annual or dynamic) emission factor is suggested, what data should be used?
 - a. What considerations should be made for “null power” in a calculated EF if any?
3. Must unspecified emission factors used to account for electricity imports from CEMs match the unspecified emission factor used for bilateral unspecified transactions?

Potential EF pathways

- Static EF
 - Existing unspecified source EF: 0.428 MTCO₂e/MWh
 - Previously proposed CEM “assigned” unspecified EF: 1.0 MTCO₂e/MWh

- Other
- Annually updated EF
 - Calculated by market operator or ECY
 - Based on CEM data from previous year
- Dynamic EF
 - Reflect time dependent grid conditions
 - Could use high or low level of granularity in time
 - Could reflect average, residual, or marginal resources
- Other

Potential CEMs and e-tag interactions

1. **Central question:** Given use of e-tags to support reporting of electricity imported via bilateral transactions, is there potential for electricity imported via a CEM to be “double counted” due to creation of e-tags accounting for transfers between BAAs scheduled by a CEM?
 - a. Must market participants create e-tags for both day-ahead and real-time market awards that result in imports/exports between BAAs?
 - b. Are e-tags documenting transfers resulting from CEM awards clearly identifiable as associated with a CEM result or award?
2. Should the lesser-of-analysis (WAC 173-441-124(3)(b)(ii)(B)(VI)) be applied to imported electricity from a specific resource that is attributed to WA by a CEM? Does this depend on whether the BAA participates in a day-ahead CEM or a real-time only CEM?
3. Do the stated assumptions and outcomes for day-ahead and real-time CEMs below hold if market participants bid in resources external to the market footprint, also referred to as import interchange transaction offers?

Day-ahead CEMs and e-tags

Are the following assumptions and outcomes accurate?

For BAAs participating in a day-ahead CEM (WEIM-EDAM, M+):

Assumptions

- All generation resources and load within BAA are registered, scheduled, and settled through the CEM.
- Any energy transferred into a BAA is a result of CEM schedules or dispatch.

Reporting and Cap-and-Invest Outcomes

- All imported electricity for BAAs participating in a day-ahead CEM will be determined based on market attribution to the GHG-zone.

- Market attribution of MWh from non-GHG zone resources to GHG zone determines MWh of specified imports and entity responsible for reporting and associated emissions.
- E-tags should not be used to report imports for any electricity sinking to a participating BAA. Doing so would result in double-counting of imported electricity delivered through the CEM.

Real-time only CEMs and e-tags

Are the following assumptions and outcomes accurate?

For BAAs participating only in a real-time CEM (WEIM only)

Assumptions

- Only “balancing” energy is scheduled and dispatched through the CEM.
- A participating BAA’s load is primarily met through scheduled generation and transfers made outside of the CEM.
- Transfers into the BAA made outside the CEM will be documented by e-tags.

Reporting and Cap-and-Invest Outcomes

- For BAAs participating only in a real-time CEM, only a fraction of imported electricity may be determined based on market attribution to the GHG-zone.
- Market attribution of MWh from non-GHG zone resources to GHG zone determines MWh of specified imports and entity responsible for reporting and associated emissions.
- E-tags may also be necessary to support reporting of electricity imports which occur outside the CEM for any electricity sinking to a participating BAA.

Emissions Leakage

- CEMs emissions leakage discussed in [electricity markets rulemaking](#)
 - Proposals and feedback throughout rulemaking
 - Nov 2023 workshop and comment period focused on emissions leakage
- [ECY welcomes additional comment on addressing emissions leakage informed by updated understanding or progress in EDAM and M+ market development.](#)
- ECY will provide future opportunity for more feedback on addressing emissions leakage.