



EITE Industries Advisory Group

Summary for Thursday, December 19, 2024 | 9:00 a.m. – 12:00 p.m.

Location Zoom, due to technical issues a recording is not available.

1. Welcome and meeting overview

2. Background and context: Greenhouse gas baselines and benchmarking and the CCA

- Ecology provided a quick overview of greenhouse gas baselines and benchmarks for EITEs under Cap-and-Invest and related information.
- Member sought clarification and asked the following questions:
 - Clarified the 2035-2050 reduction and adjustment schedule – In the early years there is a steeper decline than in the later years.
 - Asked for a reminder of the proportion of EITE allocation is relative to the overall program budget – In 2023, EITEs received 9.2 million allowances (~15% of ‘cap’) and utilities received 23.5 million allowances (~37% of cap)
 - Clarification about the reduction schedule if the Legislature does not make 2035-2050 – RCW 70A.65.110((4)(b) states “If the legislature does not adopt a compliance obligation for emissions-intensive, trade-exposed facilities by December 1, 2027, those facilities must continue to receive allowances as provided in the third four-year compliance period that begins January 1, 2031.”
- Ecology noted that all the presenters are speaking on behalf of themselves and/or their organizations, and are not speaking on behalf of Ecology, or representing Ecology.

3. California Air Resources Board: Industrial Allocation under Cap-and-Trade

- Presentation and discussion on industrial allocation in California’s Cap-and-Trade Program and development of product-based benchmarks. The presenter was Jason Xiao from California Air Resources Board (CARB) and Mark Sippola and Rachel Gold from CARB were also present to address questions. The presentation included:
 - An overview of the industrial facilities in the CA Cap-and-Trade Program
 - How industrial allocation is calculated for industrial facilities and the relative proportion allowances allocated to industry, utilities, and auctions.
 - Details of how product-based benchmarks were established for different products including examples from the dairy and cement sectors, noting that benchmarks were set at 90% of average or best-in-class if no facility was operating at 90%.
- Questions and comments from members included:
 - A member shared their interest in linkage and asked if to achieve linkage would Washington have to have the same approach to CARB EITE allowance allocation;
 - CARB spoke about the experience with linking with Québec sharing there are elements of being aligned that are crucial and other elements that do not need to align perfectly. CARB puts EITE allocation in the category of not needing to perfectly alignment. What needs to be tightly aligned include elements of program registration, auction participation, and how auctions are conducted. Some rational for not needing EITE allocation to be perfectly

aligned is that the make-up of the industrial sectors are different. For example, Québec produces aluminum while California does not. California however has many food production facilities and Québec does not. There are also different trading partners and elements that inform risk of leakage. These types of disparities are why allowance allocations are tailored by program and include linkage risk assessments and benchmarking. Each jurisdiction establishes and runs their program and alignment is with market rules. Expects the same approach will apply in discussions with Washington. When considering linkage, there may be an expectation for jurisdictions that are similarly situated geographically to be more closely aligned on EITE leakage mitigation policy relative to jurisdictions that are more geographically disparate.

- CA has more of each kind of facility so does lack of number of facilities affect the ability to benchmark effectively, and is benchmarking easier with more facilities?
 - CARB responded that while the CA industrial sector is broad, some sub-sectors only have 1 or 2 facilities. The general approach for these is to provide allocation based on production and allow allowance allocation to scale with production increases. The majority of the facilities use product-based benchmarks. CA used 2008-2010 production and emission data by covered facilities to calculate the benchmarks. There are two options for sectors with smaller numbers of facilities. The first is to work with a facility and develop a product benchmark. One issue with this approach is that this would publicly disclose confidential information about the individual facility's efficiency. The other option is to follow an energy-based approach where no public information is shared. Almost all facilities opted into product benchmark because of the flexibility of that allocation approach to scale with production.
- Did CA look beyond CA to inform benchmarking or only use companies in CA?
 - CARB responded that all benchmarks are based on data from CA facilities. When they started 15 years ago, they looked at benchmarks from EU trading system for awareness of what benchmark values to expect and to sense check benchmarks. Noted that the policy reason for allowance allocation is to protect against leakage and therefore the focus is on what is happening within the state.
- Member wanted further clarification about how to address leakage with benchmarking approach, particularly industries that fall below the benchmark.
 - CARB noted that benchmarking does reward the more efficient facilities. When CA sets benchmarks, they largely look at the average emission intensity multiplied by 90%. If no facility is more efficient, then the most efficient facility sets the baseline. Emission leakage risk is not directly a part of the benchmark but a part of broader allowance allocation. The allocation includes a leakage risk factor though currently the Legislation removed this from the allocation. The leakage risk assessment uses two primary metrics to calculate leak risk: emission intensity (more emission-intensive face greater leakage risk) and trade exposure. From this they categorize leakage risk factor as low, medium or high. There could be other approaches but data is not available. Providing free allowance allocation is a part of the leakage risk mitigation and steady carbon pricing encourages emission reductions.

- When thinking about adjustment relative to trade exposure, are location of other facilities competing in the same sector accounted for?
 - CARB shared yes, the trade exposure indicator takes into account data of both imports and exports.
- Are benchmarks recalculated?
 - CARB shared that the idea is it is set benchmarks on a common year and unless there are fundamental changes for new products, it stays the same.
- Ecology asked how long did it take CA to establish product-based benchmarks and what resourcing was required?
 - CARB shared the process is fairly resource intense and can take more than a year. CA has 90 benchmarks and each one required someone to fully understand the sector and data. Required interaction with experts in the industry and visiting the facility. For new products, they revisit the benchmarks. Another challenge was there were not verified emission and product data when benchmarks were first established.
- Member shared that they hope CARB and Ecology work together to have the resources to develop benchmarks for Washington since it takes time.
 - Ecology followed up that they are looking at alternatives and not committing to anything at the time. Their understanding of different approaches may be included in recommendations in the report to the Legislature.

4. Colorado Department of Public Health and Environment: GEMM 1 and BAT

- Presentation and discussion on Colorado's greenhouse gas and energy management for manufacturing rule (GEMM 1) and implementation of best available technology assessments. Presenters were Greg Marcinkowski (Industrial Greenhouse Gas Specialist) and Megan McCarthy (AQ Planner) from the Colorado Department of Public Health and Environment (CDPHE). This included the basic components of the GEMM 1 rule:
 - Requires all EITE sources to perform a greenhouse gas Best Available Emissions Control Technology (BAECT) and Energy Best Management Practice (BMP) audit and submit the report to CDPHE by December 31, 2022 and every five years thereafter.
 - Using the audit report, the CDPHE is required to make a greenhouse gas BAECT and Energy BMP determination for the source and recommend this determination for approval.
 - Starting in 2025, the EITE source must achieve a 5% annual emissions reduction using the approved intensity rate (ton of greenhouse gas emissions per ton of product) for the equipment audited.
- CDPHE also discussed the outcomes of the GEMM 1 rule audits for the four EITE facilities in CO, as well as how EITE facilities subject to the GEMM 1 rule can trade credits with manufacturing facilities subject to the GEMM 2 rule, who must achieve a 20% mass-based emissions reduction by 2030 from a 2015 baseline.
- Advisory members shared the following comments and questions:
 - Is the difference between GEMM 1 and GEMM 2 trade exposure?
 - CDPHE noted that the rule structure is different but if a facility is in GEMM 1 or GEMM 2 is directed by statute.
 - What are the industries not considered trade-exposed in Colorado?

- CDPHE noted that all types of facilities outside HB 19-1261 are noted considered EITE according to the statute, this includes 1 refinery, glass manufacturing, breweries, and others.
- BAT reviews are every five years, however for facilities this could be quick given industry timelines are often much longer, and is curious about expectations?
 - CDPHE responded that the five-year audit timeframe was set by statute to ensure that as costs and technology change facilities hit the high bar of technology for their facility. It is based on individual facilities, not grouped by sector.
- Clarification on EITE facilities that did and didn't meet BAECT?
 - CDPHE - two EITE facilities are operating with BAECT, and they still have to reduce overall mass-based emission by 5%. In 5 years they will go through the review process again. For facilities not meeting BAECT, recommend technologies that fall below the social cost of carbon.
- If auditor looks at a facility that has a technology that was an investment longer than the 5-year time period, will that be taken in consideration when recommending new technologies?
 - CDPHE responded that they did not expect technology to always change that quickly and auditor can take account market competitiveness.

5. Stockholm Environmental Institute: Issues and options for greenhouse gas benchmarks

- Ecology noted that the presentation draws on a study prepared for Ecology back in 2010. Some of the policy context has changed since, most notably the introduction of Cap-and-Invest Program, but that some of the core concepts still applicable to Ecology's review of emissions benchmarking
- Derik Broekhoff from the Stockholm Environment Institute (SEI) presented on the key consideration for developing greenhouse gas benchmarks for EITEs, including:
 - How to define the product or activity being benchmarked
 - Measurement protocols and boundaries
 - Benchmark "ambition" (average or better-than-average performance levels)
 - Data sources
- Some sectors have products and processes that are simple and uniform, others do not.
- Reviewed benefits and challenges of disaggregation including broad product category (entire sector), product-specific (single product, not individual facility), consideration to technology, feedstock, and or/fuel, and facility-specific.
- Is there an aggregation sweet spot? – Most have followed "one-product, one benchmark" rule – this avoids favoring different products over others and incentivizes structural and production process changes.
- How ambitious to set the benchmark will depend on policy context and goals. For cap-and-trade programs it includes protecting against the risk of leakage.
- A member shared that the emissions from the electricity grid vary and asked if in the emission transfer there is a multiplier effect as it relates to electrification of the grid?
 - SEI shared that the relative emission intensity of electricity is likely to differ within the state compared to outside the state. Does not have the deeper analysis to answer and recommends referring to others with cap-and-trade programs to understand how this issue is addressed in benchmarks.

6. Discussion: Alternatives for benchmarking EITEs in WA and BAT

- Ecology opened it up to discuss alternative methods for benchmarking EITEs in WA and role of best available technology assessments as a method for compliance. Ecology reiterated it can be challenging to compare baseline methods across jurisdictions and that Ecology will look to develop some materials to support with that.
- Ecology proposed some questions to help begin the discussion:
 1. Are there other policy or technical aspects related to emissions performance benchmarking that should be considered in Ecology's review of greenhouse gas baseline/benchmarking approaches?
 2. What factors should be considered when comparing alternative approaches for greenhouse gas baselines/benchmarks for EITEs?
 3. Are there any other policy examples, resources or data that Ecology should use to inform its review of these alternatives approaches?
- Member shared they found the presentations helpful and the information about Colorado was new.
- Member asked if Ecology looked at how Québec is managing their EITE?
 - Ecology shared they have had some initial discussions though it is harder because regulations are in French. Based on Ecology's review so far, it seems similar to Washington. Québec has some sector benchmarks, such as lime, but most benchmarks are set at the facility level. Not sure if the product benchmarks are by product or aggregated. Québec has recently passed some changes to allocation approach and may be looking to revise some of the baselines to reflect current carbon intensity of production.
- Member shared interest in how Colorado looks at individual facilities and the individuality of them. A single aggregation that fit all refineries (for example) would be problematic. Auditor needs to look at footprint, product types, equipment age, etc.
 - WSPA agreed with this statement and in the original benchmarking discussion, members supported the product based benchmarking like California has. Not sure how members currently feel about this.
- The member representing Aerospace also noted their two facilities in Auburn and Everett are vastly different. After the intensity benchmark was set, the intensity benchmarks now don't reflect greenhouse gas emissions. Recommends looking at benchmarks now that there is more information. Many industries have operations unique to not only the state but the world which makes it difficult to benchmark. Expressed how they like the individual approach of Colorado.
- The member representing aluminum shared each site is different and unique as well.

7. Questions or topics proposed by members

- Ecology provided an opportunity for members to ask questions or discuss topics not on the agenda.
- Members comments included the following:
 - Recommend looking at the domestic availability of alternative fuel sources and the availability of fuel source technology, especially in a regional context with Washington and Oregon, and inviting relevant SMEs to present. So far has mostly seen RNG and hydrogen as the alternative fuel sources.

- Ecology acknowledged that access to clean energy sources are an important consideration and will look at having a special meeting focused on this issue, and looking to partner with the State Energy Office in Commerce given their work on the supply side.
- Member reiterated the request to consider the long-term outlook and availability of electricity in the state.
- Member asked that Ecology invite outside speakers to share about the availability of renewable gas and hydrogen, and electrification. Specifically recommends a representative from the [Pacific Northwest Utilities Conference Committee](#). Emphasized while state agencies have an important perspective, utilities and consultants may have differing views that would be valuable considerations for the advisory group.
- Ecology indicated it is happy to reach out to them.

8. Discussion and next steps: Work program for Phase 2

- Ecology recapped some of the content discussed in the Policy Advisory Group that related to policy objectives that are potentially relevant to assessing policy options for EITE allocation as expressed in the CCA.
- A member highlighted the policy objective “Contribute to a healthy environment for all communities” and noting the definition of healthy is different for everyone. They also have a problem with trying to address local air pollution by using carbon policies, and that there is a need for clarification that the Climate Commitment Act is about carbon.
 - Ecology noted that the Cap-and-Invest Program is targeted at greenhouse gas emissions but there are some policies in the CCA that are specifically focused on air pollution.
- A member emphasized that leakage is not only about transferring emissions outside of the state but increases global emissions, and this is important when considering policies.
 - Ecology noted that the definition of leakage is to avoid an increase in emissions outside of the state.
- Ecology shared the current work program for the advisory group in Phase 2 (commencing in 2025) and invited members to share additional comments.
- Members shared the following:
 - Asked about how input from the advisory meeting will be included in the report.
 - Ecology shared the primary way will be the meeting notes to capture the key comments and will aim to reflect feedback in the final report to share what advisory group members agreed or disagreed with. The plan is to provide some content, including draft recommendations, ahead of meetings and give a space for members to provide comments during or after the meeting. Wants to be sure member sentiment is properly noted given the nuanced manner of the content.
 - Member shared they do not think there is enough open dialogue during the advisory meetings to thoroughly analyze input from members and there has not been a space for external presenters identified by advisory members, or for members to present the types of information they shared with legislators previously on leakage:
 - Ecology expects the meeting format will change in Phase 2 and acknowledged the format of the meetings in Phase 1 has been presentation heavy and less dialogue based. This was intentional to ensure that everyone

has the same foundational understanding of the issues being addressed in the report.

- Member suggested selecting specific topics and creating an in-person space to be more interactive, possibly a meeting in February or March when lobbyists are in Olympia for legislative session.
- Member confirmed something in-person would be very helpful. Oregon did this and noticed a difference in the productivity.
 - Ecology shared they will be working to find ways to make these meetings more productive and engaging, asking members to respond if they have additional ideas.

9. Public comment opportunity

There were no public comments. Comments may be submitted via email to CCAETEIndustries@ecy.wa.gov.

Resources and Assistance

- Contact Adrian Young at CCAETEIndustries@ecy.wa.gov
- [EITE Industries Advisory Group webpage](#)
- [EITE Policy Advisory Group webpage](#)
- [Cap-and-Invest EITE webpage](#)