



Chapter 173-446 WAC – Climate Commitment Act Program Rulemaking

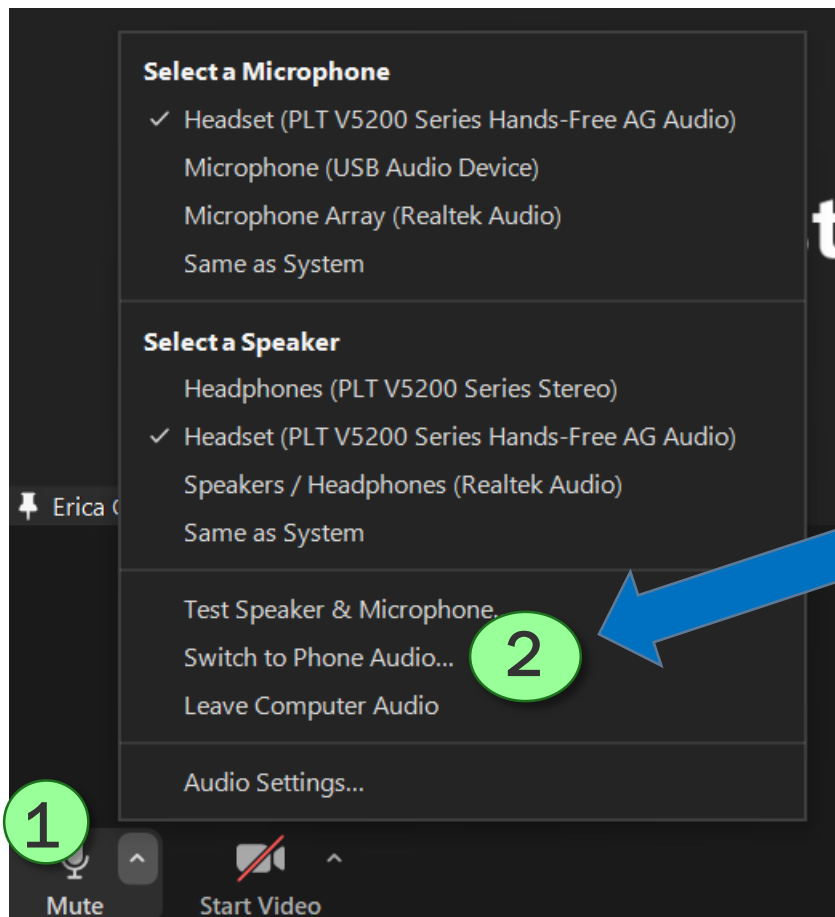
Air Quality Program

December 16, 2021

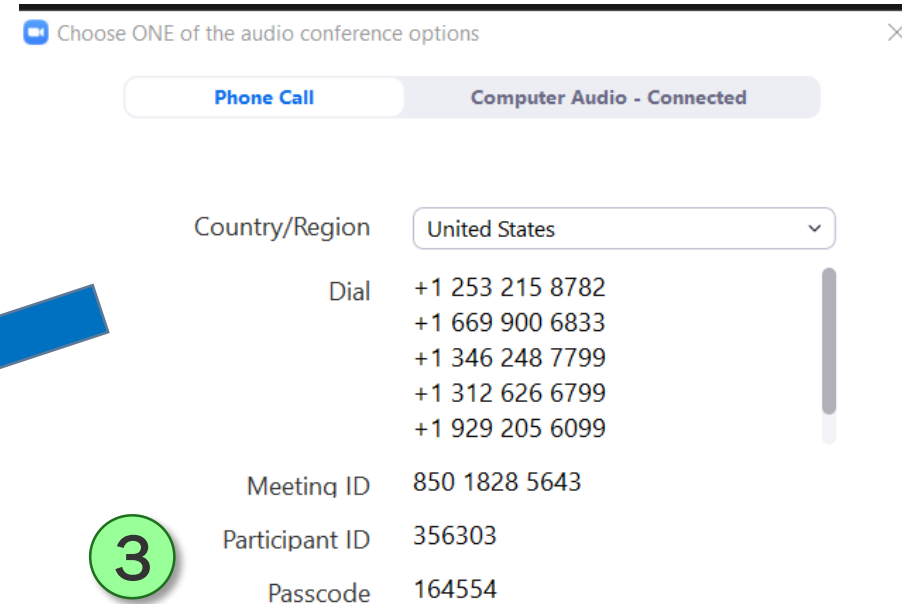
Sound Check

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All attendees are muted.

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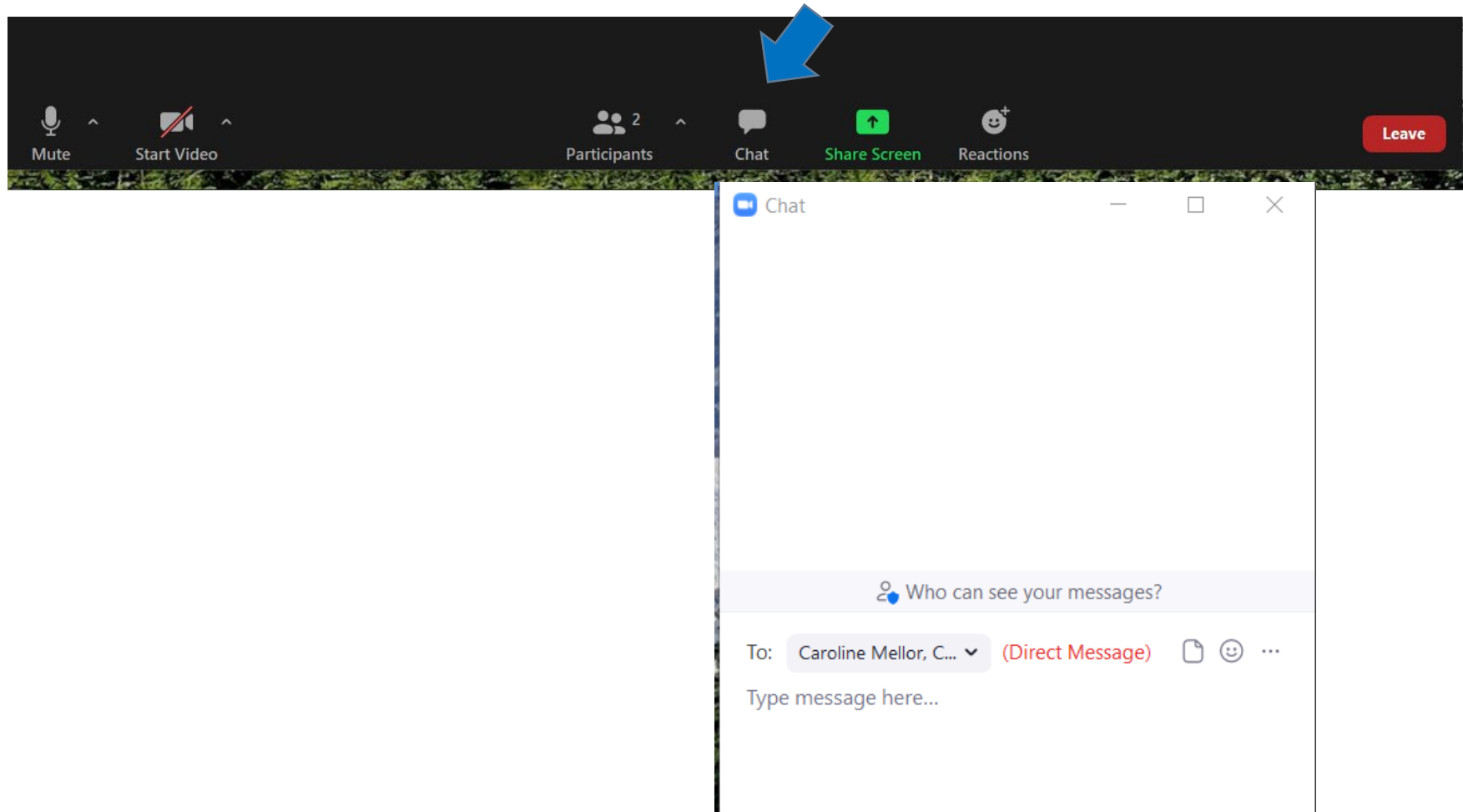


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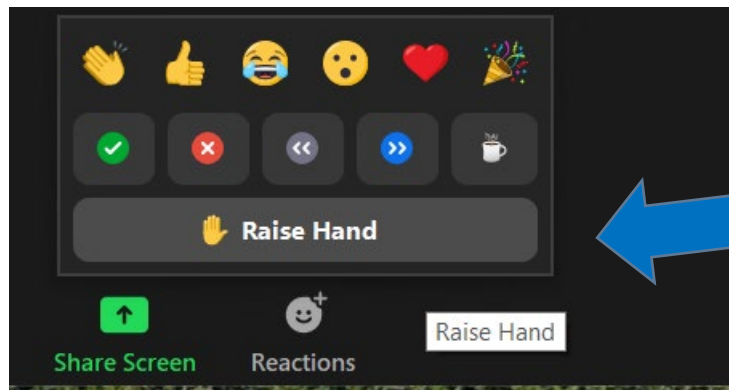
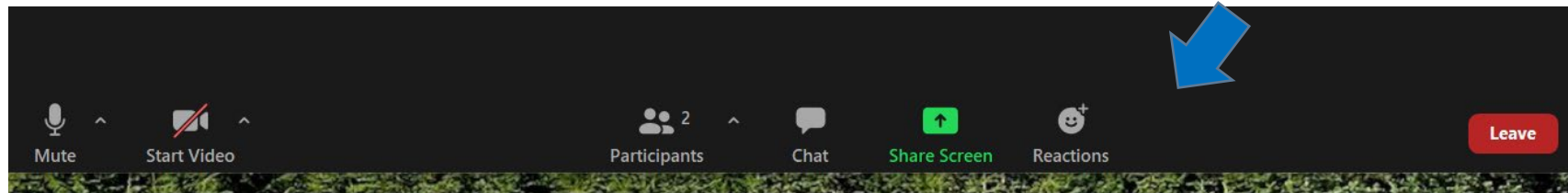


How To Use the “Chat” Function

Chat with the host for technical problems



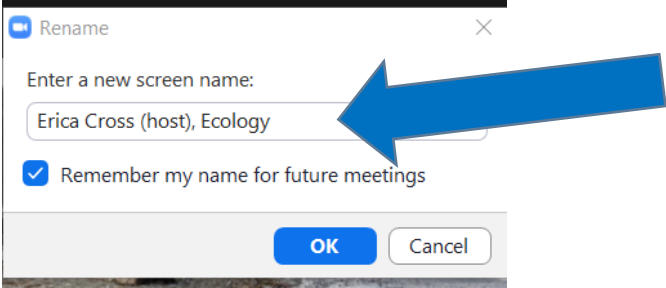
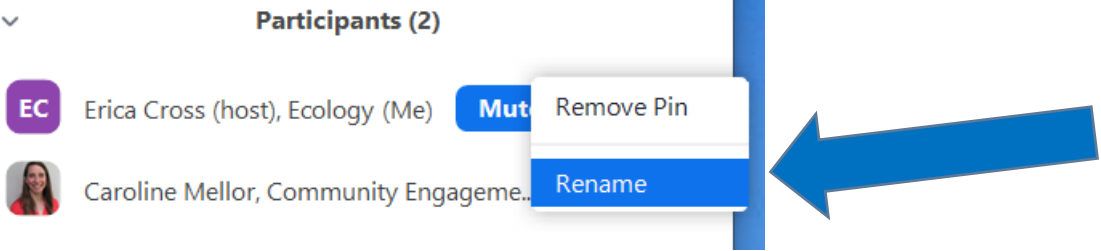
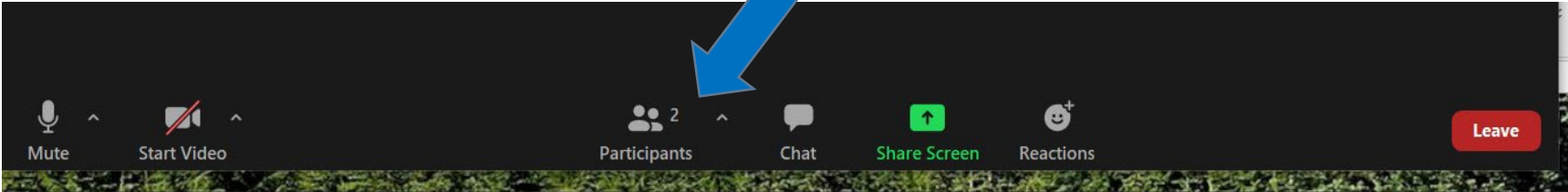
How To Use the “Raise Hand” Function



During today’s question-and-answer period:

- Participants using computer or mobile app: Use the “Raise Your Hand” button. This button is located in the reactions icon, “Raise Hand.”

How To Change Your Name



Start Recording

We will begin recording at this time.





Chapter 173-446 WAC – Climate Commitment Act Program Rulemaking

Air Quality Program

December 16, 2021

Ecology Staff



- Erica Cross – Technical host
- Martha Hankins – Policy and Planning Section Manager
- Luke Martland – CCA Implementation Manager
- Derek Nixon – Auctions Unit Supervisor (chat questions facilitator)
- Bill Drumheller – Technical Lead
- Neil Caudill – GHG Reporting Lead
- Emily Bruns – EITE Facility Lead and GHG Reporting Lead
- Kay Shirey – Rule Development Lead
- Cooper Garbe – Rulemaking Lead

Agenda

- 1 Informal comments received
- 2 Total program baseline and allowance budgets
- 3 Distribution of allowances: Natural gas utilities
- 4 Distribution of allowances: Electric utilities
- 5 Distribution of allowances: EITEs
- 6 Rule language review (time permitting)

Rule Development Timeline

Pre-proposal public participation



Informal Comments

- 10 commenters provided comments by December 3, 2021
 - Some about draft language
 - Some more general
- We have reviewed them all
- We have made some changes and are working on others
 - Landfills
 - Electricity sector

Today's Presentation of Rule Language

- Total program baseline and allowance budgets (200 – 210)
- Distribution of no cost allowances
 - Natural gas utilities (240)
 - Electric utilities (230)
 - Emissions-intensive and trade-exposed facilities (220)
- Offsets (500s)

At various times, we'll pause for questions.

This is draft language.

**We are asking for your feedback. Please provide comments online.
More information will be made available at the end of this presentation.**

Portions of CCA Program NOT Being Discussed Today

- Auctions, trading, pricing
- Accounts
- Definitions
- Timeline
- Enforcement and penalties
- Linkage
- Reviewing material from last meeting

Comments and Feedback

- Public participation
 - We are presenting a work-in-progress view of rule language
 - Input during the development phase is critical to a successful program
 - Informal comment period November 8 –January 18, may be submitted here: <https://aq.ecology.commentinput.com/?id=mgir9>

Total Program Baseline

- Used to calculate total statewide GHG emissions cap
- **Not used for requirements for a given covered entity** (allowance allocation, compliance obligations, etc.)
- The CCA reduces GHG emissions relative to the past (2015-2019)
- Covers about 75% of WA's GHG emissions
- Need to figure out average annual 2015-2019 GHG emissions from covered sectors
- Calculations performed by Ecology – Summer 2022
- Placeholder number now; final number will be in adopted rule

Total Program Baseline: Data Sources

- GHG reporting program WAC 173-441
- Sector-specific information described in subsections (2) through (4)
- Data voluntarily provided by covered parties
- Data or estimates obtained or made by Ecology

Total Program Baseline: Subtotal Baselines

- Total Program Baseline = sum of all subtotal baselines
- May be calculated for each reporter or by sector depending on data availability
- Only includes GHG emissions from facilities, suppliers, or electric power entities that would meet CCA applicability requirements 2015-2019
- **Not used for requirements for a given covered entity** (allowance allocation, compliance obligations, etc.)
- Method depends on sector:
 - Facilities that are not EITEs
 - EITE facilities
 - Suppliers of natural gas
 - Suppliers of fossil fuels other than natural gas
 - Carbon dioxide suppliers
 - Electric power entities

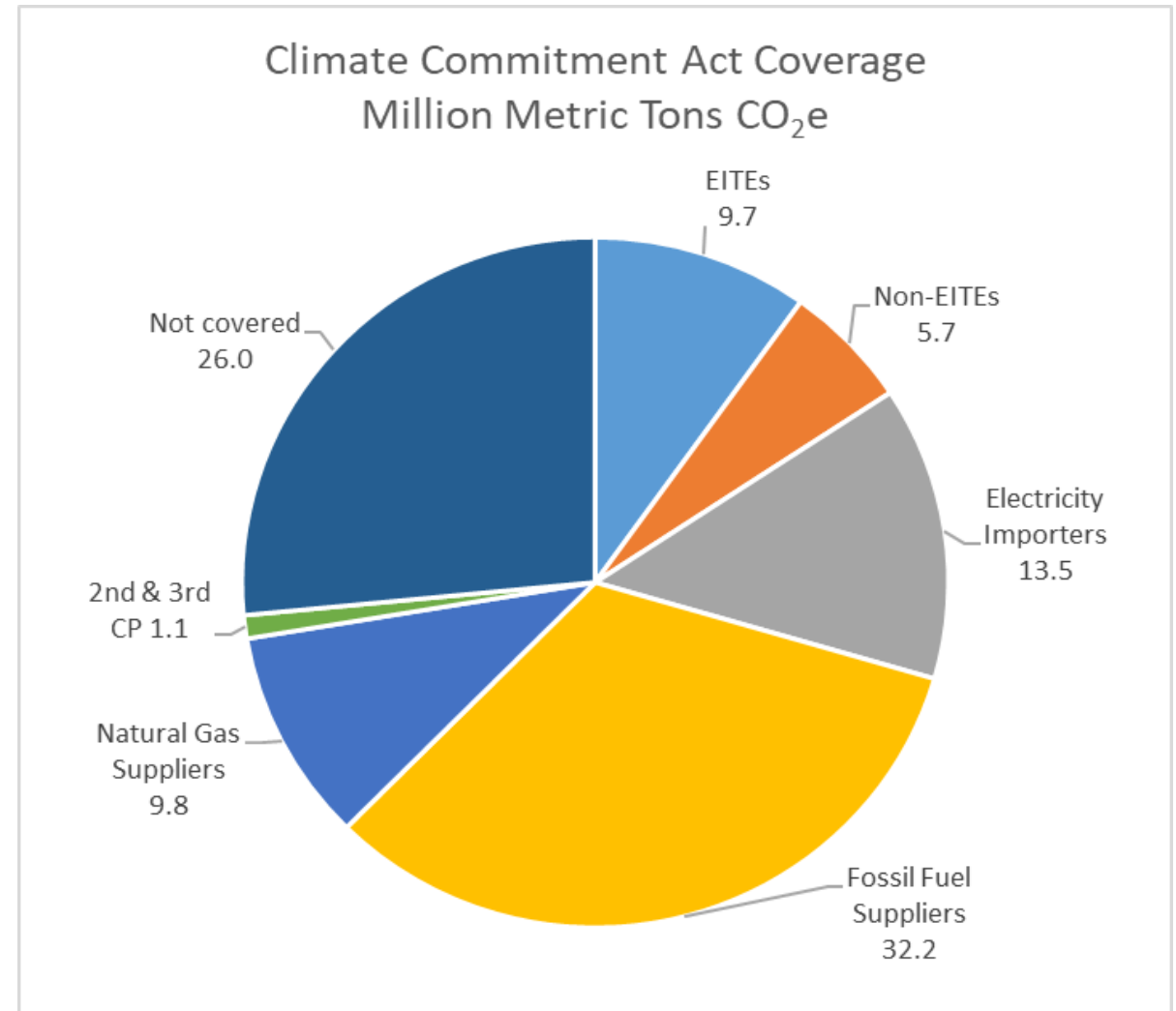
Total Program Baseline: Covered Emissions

Covered – 75%

- Gasoline and on-road diesel
- Electricity consumed in Washington
- Facilities generating more than 25,000 metric tons/year or more of greenhouse gas emissions
- Natural gas distributed to homes and commercial businesses
- 2027 – waste to energy facilities
- 2031 – railroads and certain landfills

Not Covered – 25%

- Agricultural operations
- Small businesses with under 25,000 metric tons/year of greenhouse gas emissions
- Aviation fuels
- Some marine fuels



Total Program Baseline: Facilities that are not EITEs

- Chapter 173-441 WAC data source: all reporting 2015-2019
- Adjust for covered emissions as established in WAC 173-446-040
 - Subtract biogenic CO₂
 - Subtract petroleum combustion (except fuel gas, No 5, and No 6)
 - Only subtract supplied CO₂ that meets requirements
- Includes in state electric generating facilities

Total Program Baseline: EITE Facilities

- Chapter 173-441 WAC data source: all reporting 2015-2019
- Adjust for covered emissions as established in WAC 173-446-040 like non-EITE facilities
- Mass based, not intensity based

Total Program Baseline: Suppliers of Natural Gas

- Based on supplementary reports submitted to obtain no cost allowances due 3/31/2022 (WAC 173-446-240)
- Adjust for covered emissions as established in WAC 173-446-040
- Main adjustment is for large customers: based on CCA coverage not reporting

Total Program Baseline: Suppliers of Fossil Fuels Other than Natural Gas

- Based on existing 2015-2019 transportation fuel supplier reports (RCW 70A.65.070(4))
- Adjust for covered emissions as established in WAC 173-446-040
 - Subtract biogenic CO₂
 - Subtract aviation (if possible to estimate)
 - Add petroleum from facilities (except fuel gas, No 5, and No 6)

Total Program Baseline: Carbon Dioxide Suppliers

- Chapter 173-441 WAC data source or supplemental
- Adjust for covered emissions as established in WAC 173-446-040
 - Supplied CO₂ meets sequestration requirements
 - Supplied CO₂ under responsibility of other supplier or facility

Total Program Baseline: Electric Power Entities

- Based on fuel mix disclosure reports generated by the Department of Commerce in accordance with RCW 19.29A.060
- Ecology will identify and catalog all contracted power
- Use CETA calculation methods from WAC 173-444-040 to estimate GHG emissions
- Adjust for covered emissions as established in WAC 173-446-040
- Excludes in state electric generating facilities

Total Program Baseline: Updates

- This rulemaking will only include sectors that join in first compliance period
- October 1, 2026 rulemaking will adjust total program baseline by adding facilities joining in second compliance period
- October 1, 2028 rulemaking will adjust total program baseline by adding facilities joining in third compliance period
- Data availability issues with rulemaking dates: Ecology will address in future rulemakings
- Ecology will not adjust total program baseline outside of rule
- Total program baseline not updated: reflects past and provides clarity

Total Program Baseline: Table 200-1

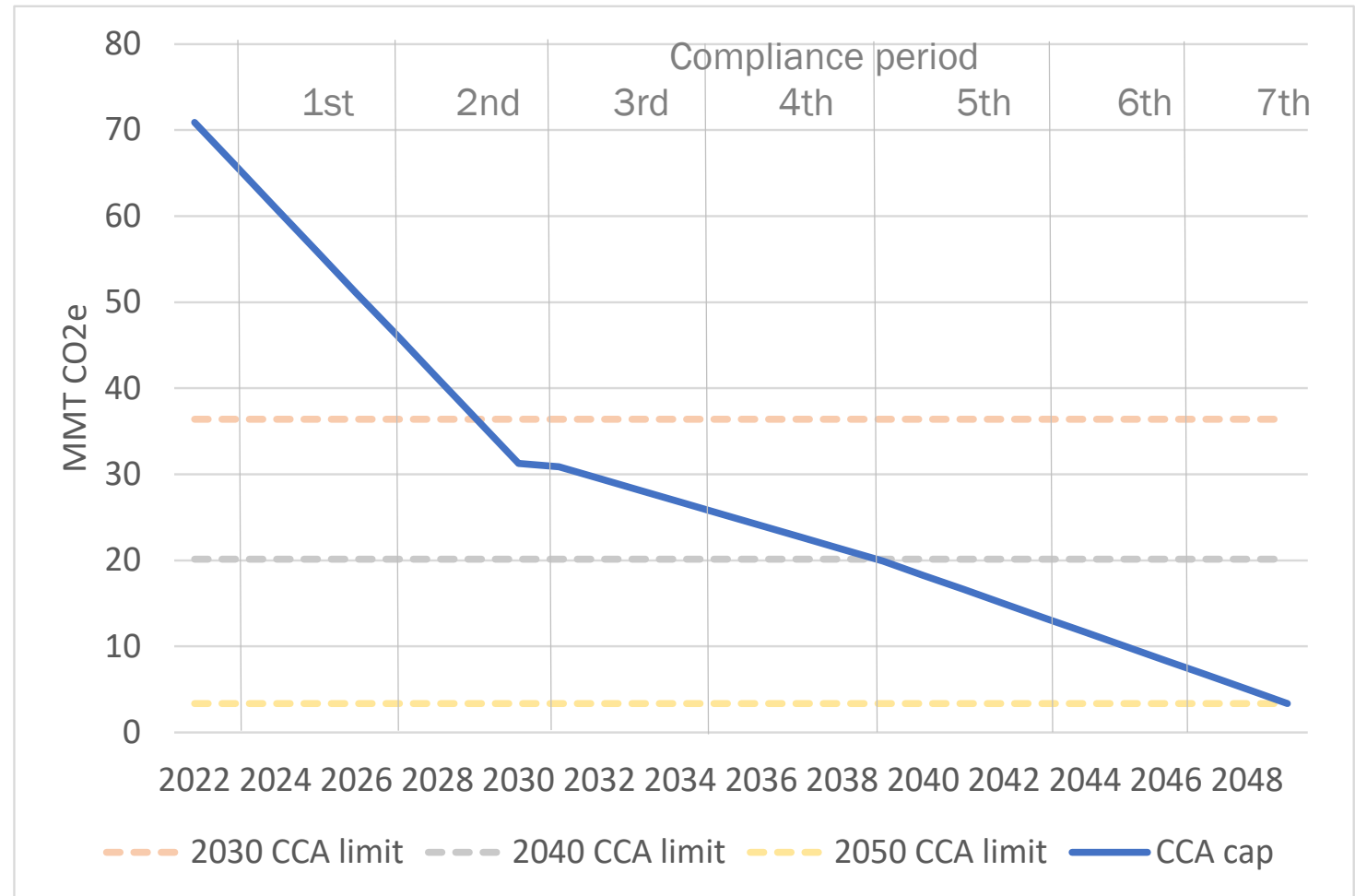
Emissions Years	Total Program Baseline (annual MT CO ₂ e)
2023-2026	TEMPORARY PLACEHOLDER VALUE 71,000,000 TEMPORARY PLACEHOLDER VALUE
2027-2030	Established by October 1, 2026 according to subsection (3) of this section
2031 and subsequent years	Established by October 1, 2028 according to subsection (4) of this section

Total Program Allowance Budgets

- Acts as total statewide cap for program = all no cost allowances, auctioned allowances, and accounts for offsets used to meet compliance obligations
- Unique for each emissions year
- Total program baseline x reduction factor = total program allowance budget
 - Uses total program baseline as starting point
 - Reduces each year by a % of total program baseline
- **Not used for requirements for a given covered entity** (allowance allocation, compliance obligations, etc.)

Total Program Allowance Budgets: Reductions

- % annual reduction based on statewide GHG limits from RCW 70A.45.020
 - By 2020: 1990 levels = 90.5 million MT CO₂e
 - By 2030: 45% below 1990 levels = 50 million MT CO₂e
 - By 2040: 70% below 1990 levels = 27 million MT CO₂e
 - By 2050: 95% below 1990 levels = 5 million MT CO₂e
- Compliance periods
 - 2023 – 2026
 - 2027 – 2030
 - 2031 – 2034
 - 2034 – 2037
 - 2038 – 2041
 - 2042 – 2045
 - 2046 – 2049



Total Program Allowance Budgets: Reductions

- $\% \times \text{total program baseline} = \text{reduction amount for given year}$
- Emissions years 2023 – 2026
 - ~7% of baseline reduction per year
- Emissions years 2027 – 2030
 - Adjust for facilities joining in second compliance period
 - ~7% of baseline reduction per year
- Emissions years 2031 – 2040
 - Adjust for facilities joining in third compliance period
 - ~2.3% of baseline reduction per year
- Emissions years 2041 – 2050
 - ~2.3% of baseline reduction per year

Total Program Allowance Budgets: Updates

- Total program allowance budgets based on total program baseline
- Therefore, this rulemaking will only include budgets for first compliance period
- October 1, 2026 rulemaking will add budgets for second compliance period
- October 1, 2028 rulemaking will add budgets for third compliance period
- Ecology will not adjust total program allowance budgets outside of rule
- Total program allowance budgets not updated: reflects past and provides clarity

Total Program Allowance Budgets: Table 210-1

Emissions Year	Total Covered Emissions (MT CO ₂ e)
2023	TEMPORARY PLACEHOLDER VALUE 66,030,000 TEMPORARY PLACEHOLDER VALUE
2024	TEMPORARY PLACEHOLDER VALUE 61,060,000 TEMPORARY PLACEHOLDER VALUE
2025	TEMPORARY PLACEHOLDER VALUE 56,090,000 TEMPORARY PLACEHOLDER VALUE
2026	TEMPORARY PLACEHOLDER VALUE 51,120,000 TEMPORARY PLACEHOLDER VALUE

Questions?

- Now: Total Program Baseline and Allowance Budgets (200 – 210)
 - Change slopes during or between compliance periods?
 - Preference for more or less frequent slope changes?
 - Provide equations for all compliance periods now and just update total program baseline?
- Next: Distribution of no cost allowances
 - Natural gas utilities (240)
 - Electric utilities (230)
 - Emissions-intensive and trade-exposed facilities (220)

No Cost Allowances: Concept

- Covered emissions = compliance obligation
- By default, covered entities must acquire compliance instruments to meet their compliance obligation
 - Allowances from auction
 - Offsets
- Per statute, some groups are allocated allowances at no cost that can be used for compliance obligations, traded, or sold to mitigate costs
 - Natural gas utilities
 - Electric utilities
 - Emissions-intensive and trade-exposed (EITE) facilities
- Based on exposure to CCA, not necessarily the covered entity
- Specific to a given covered entity or organization

No Cost Allowances: Concept

- Different for each type (natural gas utility, electric utility, or EITE)
- Allocation baseline specific to organization based on emissions
 - Different from total program baseline or subtotal baseline
 - Specific to the individual natural gas utility, electric utility, or EITE
 - Ecology may adjust allocation baseline due to new info or methods
- Allocation baseline x a declining % = total no cost allowances for a given year
- Method of allocation can vary

No Cost Allowances: Eligibility for Natural Gas Utilities

- Report GHG emissions as a natural gas supplier
- Participate in CCA
- Submit a GHG report per WAC 173-441-122(4) for each emissions year 2015 – 2021 by March 31, 2022 (or when join program)
- Must remain in compliance with Chapters 173-446 and 173-441 WAC
- Not curtailed or closed

No Cost Allowances: Calculation for Natural Gas Utilities

- Allocation baseline = average annual covered emissions for baseline period (2015–2019)
- Ecology may adjust allocation baseline due to updated reports, assigned emissions level, or methodology changes
- Total no cost allowances follow CCA reduction curve
 - 2023–2030: reduce ~7% per year
 - 2031–2050: reduce ~2.3% per year

No Cost Allowances: Allocation for Natural Gas Utilities

- No cost allowances allocated 2 ways
 - Consigned to auction for the benefit of customers, including at a minimum eliminating any additional cost burden to low-income customers
 - Given directly to natural gas utility
- 2023: 65% of no cost allowances consigned to auction
- Increases 5% per year
- 2030: 100% of no cost allowances consigned to auction
- Remainder each year provided to natural gas utility to use to offset costs or meet compliance obligation

Questions?

- Now: Distribution of no cost allowances
 - Natural gas utilities (240)
- Next: Distribution of no cost allowances
 - Electric utilities (230)
 - Emissions-intensive and trade-exposed facilities (220)

No Cost Allowances: Electric Utilities Concept

- Most important concept
 - The point of regulation for the electricity sector (first jurisdictional deliverer) is **different** than the point of allowance allocation (electric utilities)
- Role of the Clean Energy Transformation Act (CETA)
 - CETA is key electricity policy, approach for CCA maximizes use of CETA
 - CETA drives a sector-wide reduction trajectory consistent with CCA
 - All electric utilities subject to CETA are eligible for allowance allocation, so **all** electric utilities are eligible
- Allowance allocation for the electricity sector is based on the “cost burden” effect of the program on electric utilities

No Cost Allowances: Electric Utilities Cost Burden Effect

- What is cost burden (and its effect)?
 - Incremental cost to customers due to cap and invest program cost
 - Working backward, translates to how many allowances will be needed?
 - Allowances needed will be based on emissions footprint of utility
 - Emissions footprint will depend on generation resources used to serve load
 - Cost burden effect ultimately translates to expected future utility emissions
- Cost burden effect approach outlined on CARB web page, noting especially the step-by-step detail in Table 1 in the *2016 Regulation, Attachment C to the First 15-Day Notice* posted on this web page
- Practical challenge – translate this approach to Washington and CETA

No Cost Allowances: Electric Utilities Calculation (I)

- Components of the cost burden effect calculation
 - Forecasted retail electric load
 - Projected generation resource type to serve that load
- Source for both components in order of preference
 - Clean Energy Implementation Plan used for CETA
 - Integrated Resource Plan
 - Other source approved by the utility or UTC, as appropriate
- Emission factors for use in calculation
 - Natural gas and coal are TBD (seeking comment on proposed #s)
 - CETA-identified renewable and non-emitting, and coal transition power = zero
 - Unspecified power based on CETA rules

No Cost Allowances: Electric Utilities Calculation (II)

$$\text{Cost Burden Effect} = (Gen_{NG} \times EF_{NG}) + (Gen_{Coal} \times EF_{Coal}) + (Gen_{NE,RE} \times 0) + (Gen_{Remaining} \times EF_{Unspecified}) \text{ Eq 220-3}$$

Gen = Generation of:

- natural gas (NG)
- coal
- non-emitting and renewable resources (NE, RE)
- remaining generation that is not one of the above

EF = Emission factor for natural gas (NG), coal, and unspecified electricity

Note: While cost burden translates to money, the “effect” is emissions

No Cost Allowances: Other Issues for Electric Utilities

- Voluntary renewable energy purchases
 - “Green Power” customer programs and corporate arrangements
 - CETA clean energy implementation plans provide data
 - Additional administrative language forthcoming
- Statutory language mirrored in rules
 - EITE allowance pass-through from federal power marketing agency
 - Guarantee of consumer-owned utility contract value
- Consignment of allowances
 - Proposed rule text reflects first compliance period requirements in CCA
 - Second compliance period and beyond subject of future rulemaking

Questions?

- Now: Distribution of no cost allowances
 - Electric utilities (230)
- Next: Distribution of no cost allowances
 - Emissions-intensive and trade-exposed facilities (220)

No Cost Allowances: EITE Facility Eligibility

- Designated as EITE per Chapter 173-446A WAC
- Participate in CCA
- Submit data (detailed on next slide) for the facility for each emissions year 2015 through most recent emissions year by September 15, 2022 (first compliance period)
- Must remain in compliance with Chapters 173-446 and 173-441 WAC
- Not curtailed or closed

No Cost Allowances: EITE Facility Eligibility (9/15/2022)

- Submission includes
 - GHG emissions reported per Chapter 173-441 WAC, including fuel use as specified in WAC 173-441-050(3)(m) and covered emissions under WAC 173-446-040
 - Total annual facility product data, units of production, specific product, supporting data per WAC 173-441-050(3)(n)
 - Estimate of mass-based baseline and carbon intensity baseline
 - If requesting use of alternative baseline years, supporting data
 - If requesting mass-based baseline, supporting data

No Cost Allowances: EITE Facilities Allocation Baseline

- Mass-based baseline = average covered emissions for baseline period (2015-2019)
- Carbon intensity baseline = average covered emissions for baseline period (2015-2019)/average total annual product data (2015-2019)
- Allocation baseline = carbon intensity baseline (unless Ecology unable to assign a carbon intensity baseline)
- Allocation baseline will be assigned by Ecology by November 15, 2022
- Before beginning a new compliance period, Ecology may adjust allocation baseline due to updated reports, AEL, or methodology changes

No Cost Allowances: EITE Facilities Allocation

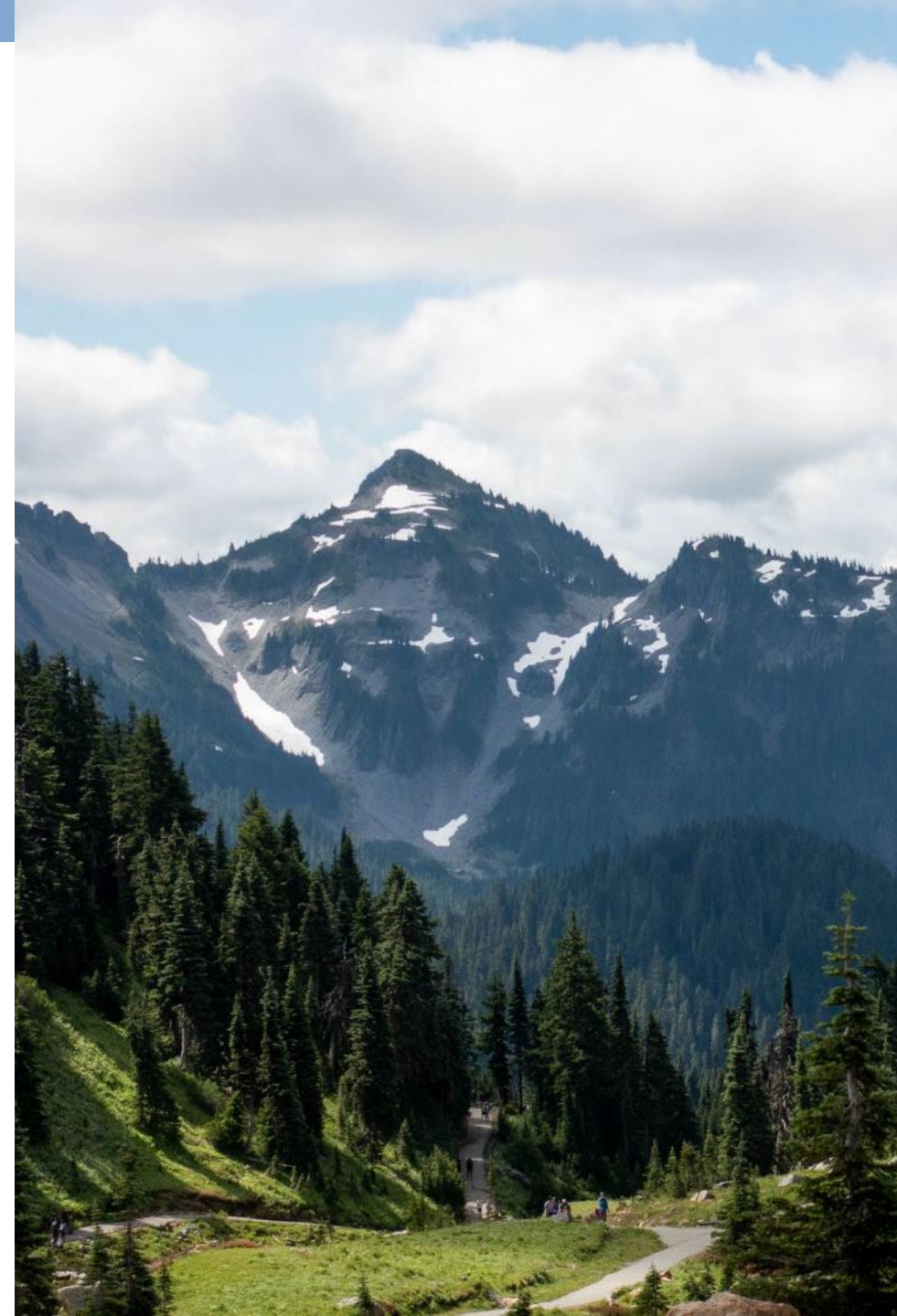
- No cost allowances reduction schedule
 - 2023–2026: 100% allocation baseline
 - 2027–2030: 97% allocation baseline
 - 2031–2034: 94% allocation baseline
- Mass-based baseline
 - No cost allowances (MT CO₂e) = Mass-based allocation baseline x reduction schedule
- Carbon intensity baseline
 - No cost allowances (MT CO₂e) = Carbon intensity allocation baseline x previous year production x reduction schedule
- Ecology may adjust amount of no cost allowances to avoid duplication, when reductions are not feasible, or facility curtails or closes

Questions?

- Now: Distribution of no cost allowances
 - Emissions-intensive and trade-exposed facilities (220)
- Next: Draft rule text (time permitting)

Draft Rule Language

- https://ecology.wa.gov/Asset-Collections/Doc-Assets/Rulemaking/AQ/WAC173-446_-21-06/Draft-rule-language-WAC-173-446-11-08-21



We Welcome Your Feedback



- Stakeholder meetings are designed to provide you with the information you need to give Ecology your considered feedback.
 - The informal comment period for this rulemaking is November 8, 2021 – January 18, 2022.
- The most effective way for you to submit your comments and suggestions is through <https://aq.ecology.commentinput.com/?id=mgir9>
- Contact Cooper Garbe at cooper.garbe@ecy.wa.gov or 360-485-7216

Wrap Up

- Next meeting will begin at 1 p.m. focused on offsets
 - Use the same link used to join this meeting
- Additional stakeholder meeting planned for January 11, 2022
 - Presenting draft rule text regarding auctions and price containment mechanisms
- Recordings are available on request
 - cooper.garbe@ecy.wa.gov

Questions?

Cooper Garbe

cooper.garbe@ecy.wa.gov

360-485-7216