Oregon Climate Protection Program: Rulemaking Advisory Committee Meeting 1

Jan. 14, 2021
9 a.m. - 4:30 p.m.

For Zoom technical issues, email bvaldez@kearnswest.com

RAC #1 Agenda

Time	Topic
9:00 a.m.	**Welcome and Overview**
9:45 a.m.	Committee Ground Rules and Operating Principles
10:00 a.m.	Convening and Advisory Committee Introductions
11:30 a.m.	Review Draft Committee Work Plan
11:45 a.m.	Lunch Break
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3:20 p.m.	Discussion of Proposed Policy Scenarios for Modeling
3:55 p.m.	Public Comment
4:25 p.m.	Next Steps
4:30 p.m.	Adjourn Meeting

Rulemaking Resources

Rulemaking webpage:

www.oregon.gov/deq/Regulations/rulemaking/Pages/rghgcr2021.aspx

Rulemaking contact: Nicole Singh

GHGCR2021@deq.state.or.us

Rulemaking notifications: Subscribe to DEQ

https://public.govdelivery.com/accounts/ORDEQ/subscriber/new?topic_id=ORDEQ_655

DEQ and Kearns & West

Oregon DEQ

Colin McConnaha
Manager, Office of GHG Programs

Nicole Singh
Senior Climate Policy Advisor

Elizabeth Elbel
GHG Reporting Program Lead

Lauren Slawsky
Climate Policy Analyst

Matthew Espie
Climate Policy Analyst

Chloe Brown
Greenhouse Gas Programs Analyst

Matthew Davis
Senior Policy Analyst

Kearns & West

Sylvia Ciborowski
Senior Director / Facilitator

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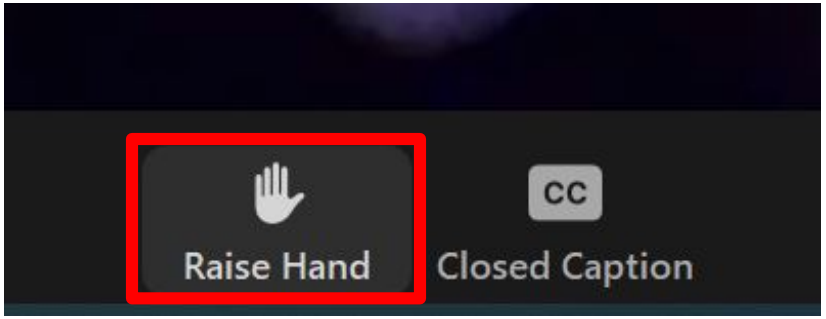
Webinar Participation Tips

Thank you for joining us today!

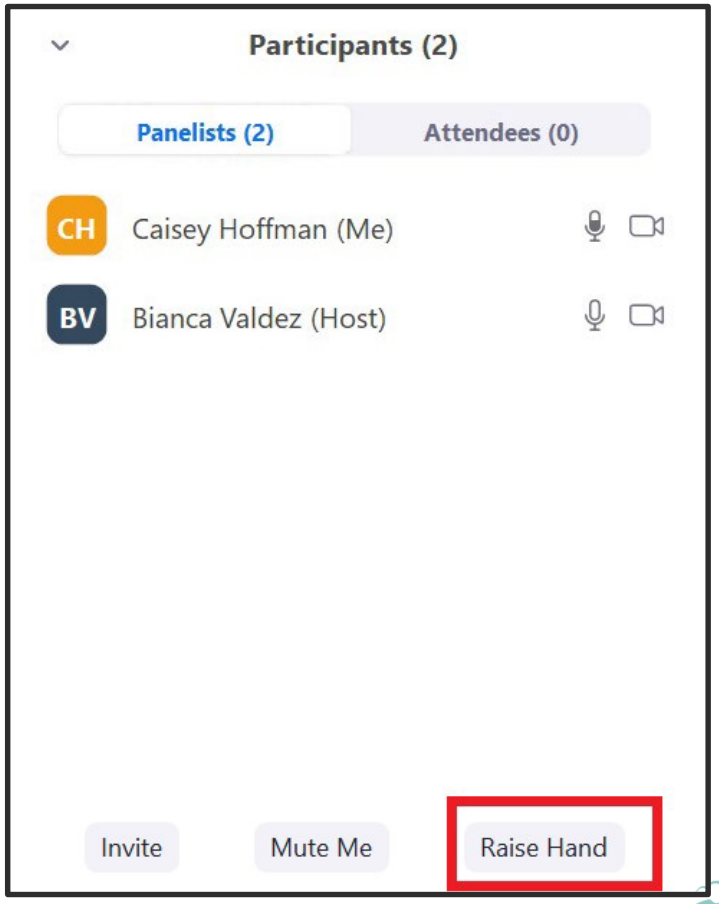
- Please join audio by either phone or computer, not both.
- RAC members: stay on mute when not speaking, and please join us on video if able
- RAC members are joined as panelists and members of public as attendees
- For discussion and comments, use “Raise Hand” button to get in the queue; if joined by phone press *9
- Say your name and affiliation before speaking
- Move around and take care of yourself as needed!
- For Zoom technical issues, email bvaldez@kearnswest.com

How to Raise Hand

Public (attendees)

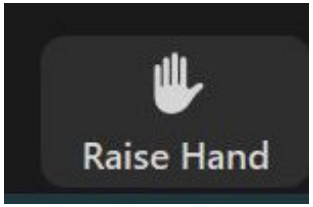


RAC members (panelists)



Public Participation Protocols

- *Show of hands of those wishing to make public comment*



- Public comment period: 3:55 – 4:25 p.m.
- Public participation is welcome – thank you!
- Each meeting will include time for public comment, though main purpose of meeting is RAC discussion
- When making public comments, please respect time limits and ground rules
- Members of the public welcome to provide written input to GHGCR2021@deq.state.or.us by **January 21st**

Meeting Ground Rules

- Honor the agenda and strive to stay on topic
- Provide a balance of speaking time
- Bring concerns and ideas up for discussion at the earliest point in the process
- Address issues and questions – focus on substance and avoid personal attacks
- Seek to learn and understand each other's perspective
- Listen and speak with respect

Role of RAC members

- This is an advisory committee, and discussions will be used by DEQ informing its draft rules.
  - Prepare for and set aside time for the meetings and reviewing materials in advance
  - Stay focused on the specific agenda topics
  - Provide constructive comments
  - Treat everyone and his/her/their opinions with respect
  - Allow one person to speak at a time

Assigning a RAC Alternate

- Please inform DEQ of any assigned alternate by sending an email to GHGCR2021@deq.state.or.us no later than **one week prior** to each meeting.
  - Indicate if the alternate is for one or multiple meetings.
- Committee member's responsibility to fully brief their alternate on relevant issues and prior to committee discussions in order to meet the meeting objectives and keep the rulemaking process on schedule.

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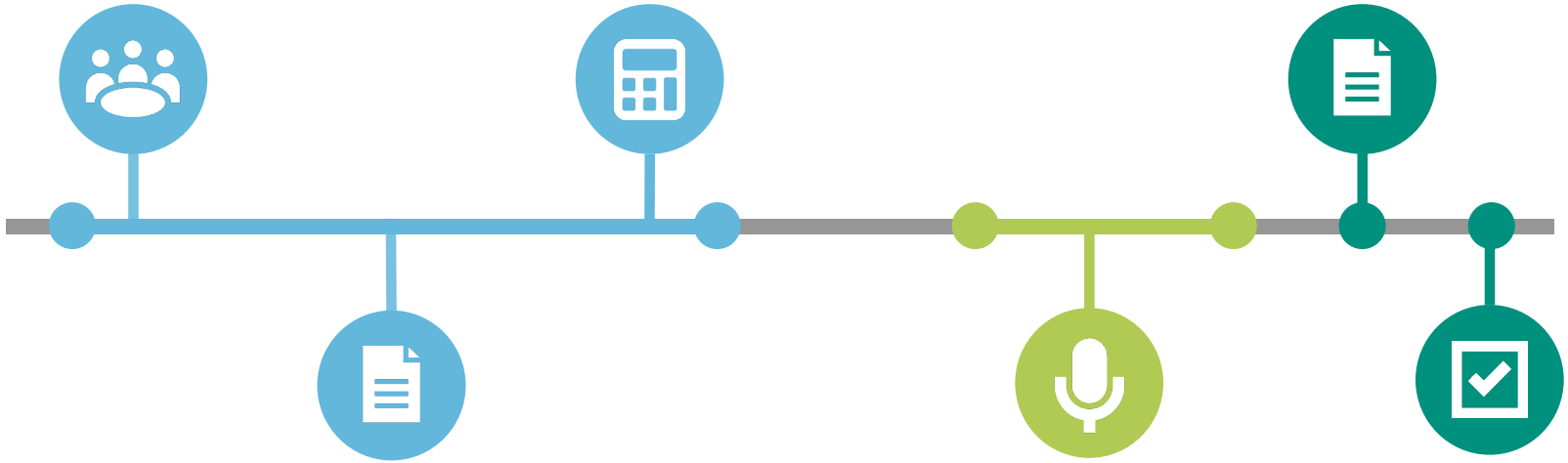
Rulemaking Objectives

- Establish a new Climate Protection Program
  - Set enforceable limits on greenhouse gas emissions from significant sources in Oregon
  - Define regulatory applicability and program requirements
  - Prioritize equity by promoting benefits and alleviating burdens for environmental justice and impacted communities

Current Rulemaking Timeline



Winter 2021

RAC: Convening, policy proposals, and initial modeling results.

Spring 2021

RAC: Draft rules, policy proposals, and modeling results.

Summer 2021

RAC: Final modeling results, fiscal impacts, and draft rules.

Aug. to Oct. 2021

Public notice and open comment period. DEQ to host public hearings in September.

Nov. 2021

DEQ submits staff report and proposed rules to EQC.

Dec. 2021

EQC meeting to vote on proposed rules

RAC Meeting #1 Objectives

- Define role of and expectations for the committee
- Outline key program design questions and current DEQ staff leanings
- Build an understanding of how analytic work supports decision making
- Identify specific topics or actions where comments are most helpful for next meeting

RAC Member Introductions

- Name
- Affiliation or interest you represent
- What inspired you to participate in this rulemaking effort?

(2 minutes each)

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RAC Meeting Dates and Topics

Jan. 14
RAC1: Convening, introduction, and overview

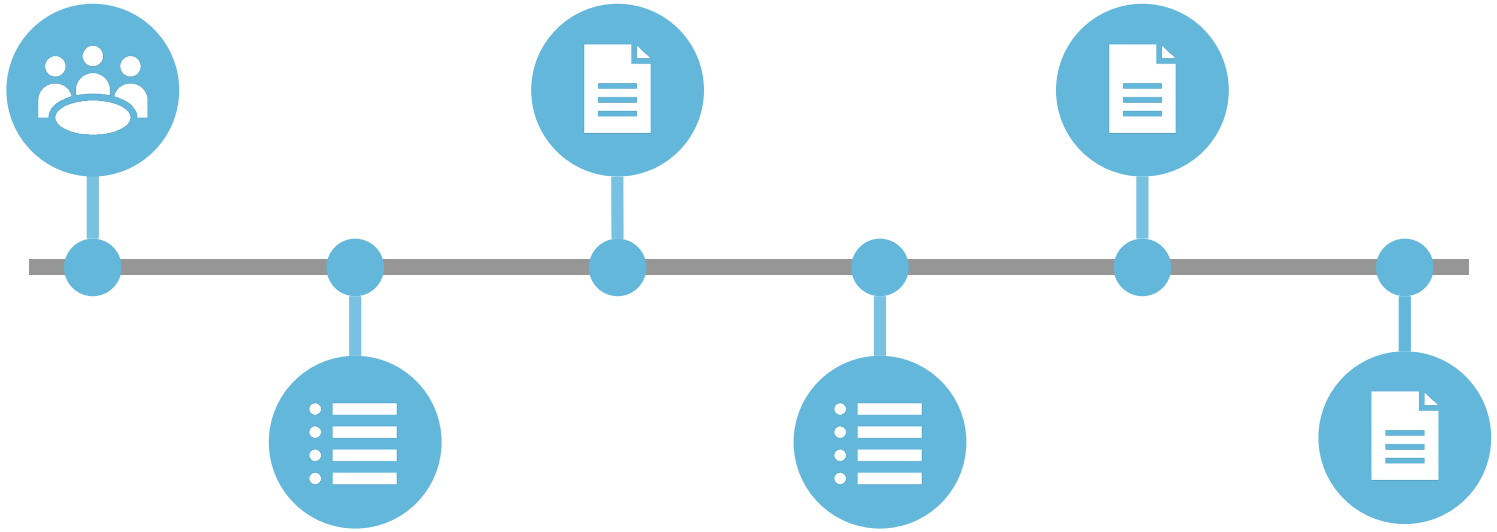
Feb. 17
RAC2: Policy proposals and initial modeling reference case results

Mar. 18
RAC3: Draft rules discussion and modeling results

Apr. 22
RAC4: Policy proposals, continued modeling results and draft rules discussion

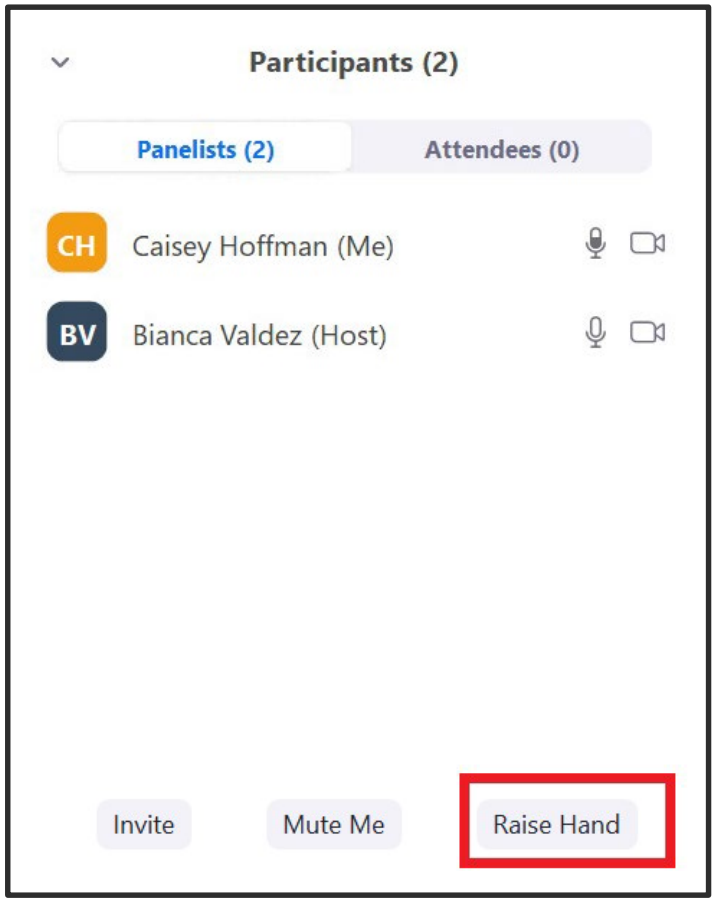
May 20
(*or May 25*)
RAC5: Draft rules and final modeling results

Jun. 17
RAC 6: Fiscal impacts and final review of draft rules



Q&A

How to raise hand: RAC members (panelists)



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Lunch Break

Meeting will resume at 12:15

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Overview of Public Engagement and Policy Context

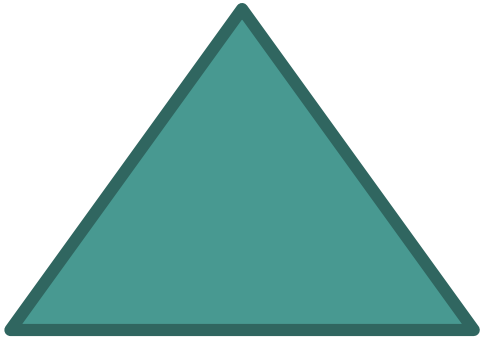
Scoping Phase Public Engagement

- Over 150 attendees at scoping kickoff meeting in July 2020
- Over 100 attendees at each of seven technical workshops
- Over 100 attendees at each of three town halls
- Almost 700 written public comments submitted

Program Goals

Achieve significant GHG reductions*

Emissions



Equity

Promote benefits and alleviate burdens for EJ and impacted communities

Costs

Contain costs for businesses and consumers

*Reducing emissions covered by the program at least 80% by 2050

Statewide Policy Context

- Oregon has statewide multi-agency effort to curb emissions
- This program to play a critical role in this effort
  - Complement and build upon emission reduction efforts, like Clean Fuels
  - Establish limits on emissions to support measurable progress
- Single, mass-based cap or limit

Initial Narrowing of Program Scope

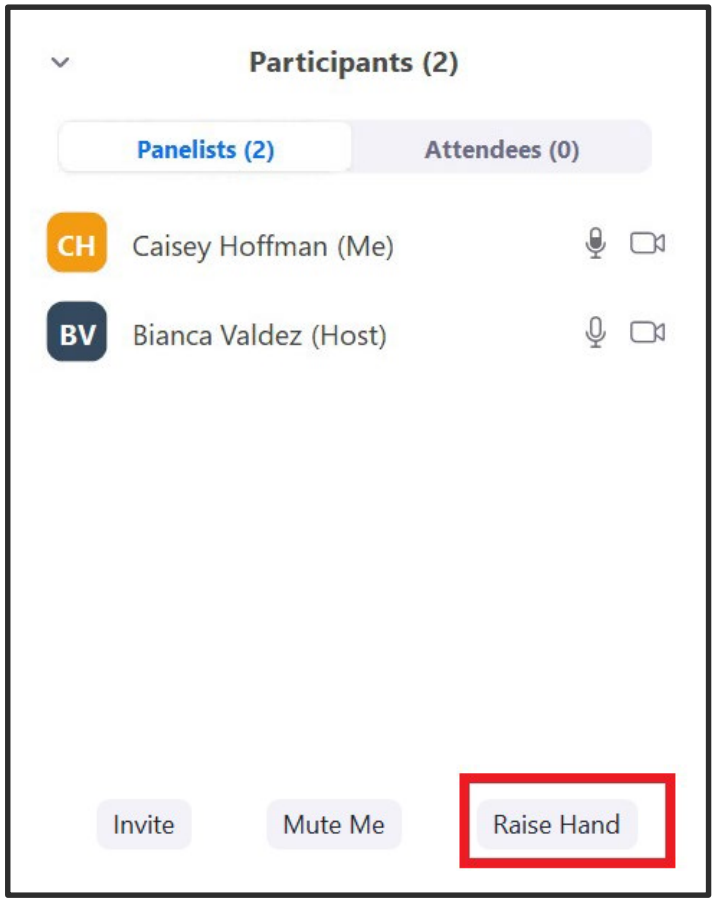
- Staff believe EQC does not have legal authority to sell compliance instruments
  - Direct distribution of compliance instruments
- Staff also understand EQC authority is limited to emissions in Oregon
  - Cannot regulate emissions from imported electricity
  - Leakage concerns if program only regulates in-state generation
  - Staff conclusion: This program is not well suited to regulating emissions from the electricity sector

Initial Narrowing of Program Scope

- Staff believe EQC does not have authority to regulate biogenic emissions, so these will be outside the scope of regulated emissions
- Landfills (municipal and industrial):
  - Intending to address these emissions in a separate DEQ rulemaking and separate program focused on reducing landfill emissions

Comments?

How to raise hand: RAC members (panelists)



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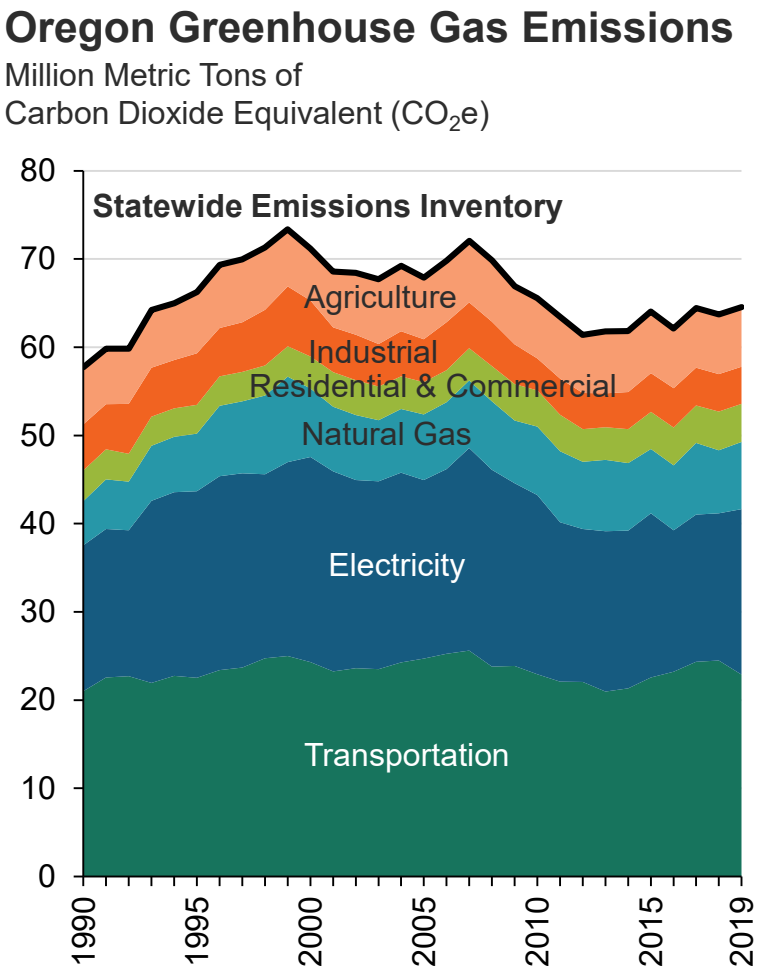
Review of Recent GHG Emissions Data

Statewide Emission Trends



- Not on track to meet the science-based emission reduction targets to do our part to avoid the worst impacts of climate change
- Statewide sector-based inventory directly informed by reported data and includes additional estimates to account for emissions and sectors beyond those that directly report
- Transportation sector and fuel uses are the largest source of emissions

GHG Emissions Reporting & Tracking

- Climate Protection Program will rely on data collected through the DEQ GHG Reporting Program
  - Reporting, Tracking and Compliance
- Objectives today:
  - Familiarize people with GHG Reporting Program data
  - Provide summary information from 2019 data
- GHG Reporting Program data informs policy design discussions

DEQ Greenhouse Gas Reporting Program

- Authorized by 2009 Legislature to inform climate policy
- Currently collects GHG emissions data from:


Fuel suppliers (100)


Natural gas suppliers (3 utilities; 3 pipelines)


Petroleum and natural gas systems (new in 2020)


Permitted air contamination sources (200+)


Electricity suppliers (40+)

Fuel Suppliers: Fuels and Thresholds

- All non-natural gas fossil fuels supplied in Oregon
- Businesses vary in size and fuel types/volumes delivered
  - Annual variability is a consideration for program design
- Balancing threshold for program inclusion with:
  - Potential leakage risk
  - Efficient program administration and regulating businesses most suited to be included

Fuel Supplier Emissions

24.1 Million Metric Tons CO_2e in 2019

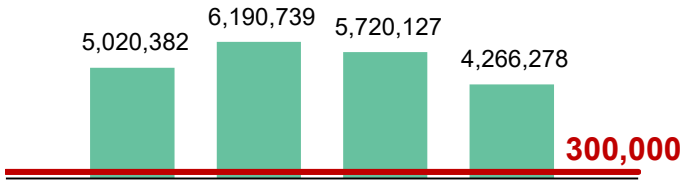
Threshold MT CO_2e	Share of Fuel Sector Emissions	Count of Suppliers
0 (state total)	100%	84
5,000	99.8%	58
25,000	99%	38
300,000	86%	6

Notes: 2019 emissions data from DEQ GHG Reporting Program.

- Examples for threshold comparisons do not account for totaling emissions between related entities under the ownership of a common parent company.
- For comparison, 5,000 MT CO2e = 558,000 gallons of gasoline; 500,000 MTCO2e = 55.8 million gallons of gasoline.

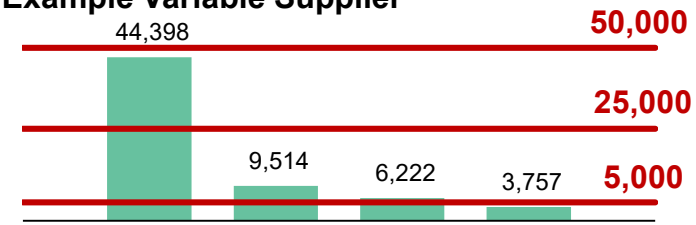
Fuel Suppliers: Variability

Example Large Supplier



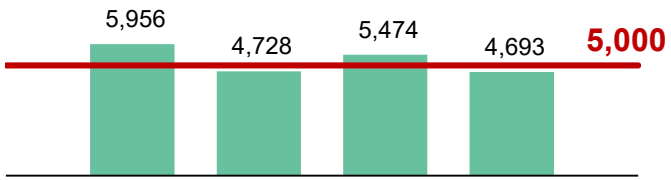
- Well above 300,000 threshold in each year
- Annual variation still a consideration

Example Variable Supplier



- Large annual variation makes it difficult to determine a threshold that provides certainty without market disruption or leakage
- Leakage = supplier's fuel quantities delivered may not change but they may supply less directly into Oregon

Example Small Supplier



- Annual variation close to a low threshold makes it difficult to provide certainty on whether an entity would be regulated or not and could result in leakage

2016 **2017** **2018** **2019**

Total anthropogenic emissions ($MTCO_2e$)

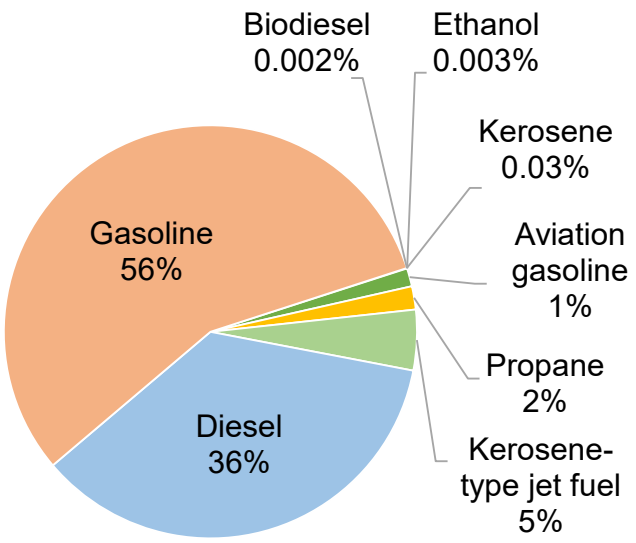
Notes: emissions data from DEQ GHG Reporting Program.

Fuel Suppliers: Fuels and Compliance

Potential program compliance based on emissions from all types of fuels delivered (e.g. gasoline, diesel, etc.), and fuel usage (e.g. transportation, heating, etc.)

Fuel Types

24.1 Million Metric Tons CO_2e in 2019



Fuel Uses

- Transportation
  - On-road
  - Aircraft
  - Watercraft
- Non-road equipment
- Heating residential and/or commercial buildings
- Etc.

Notes: 2019 emissions data from DEQ GHG Reporting Program.

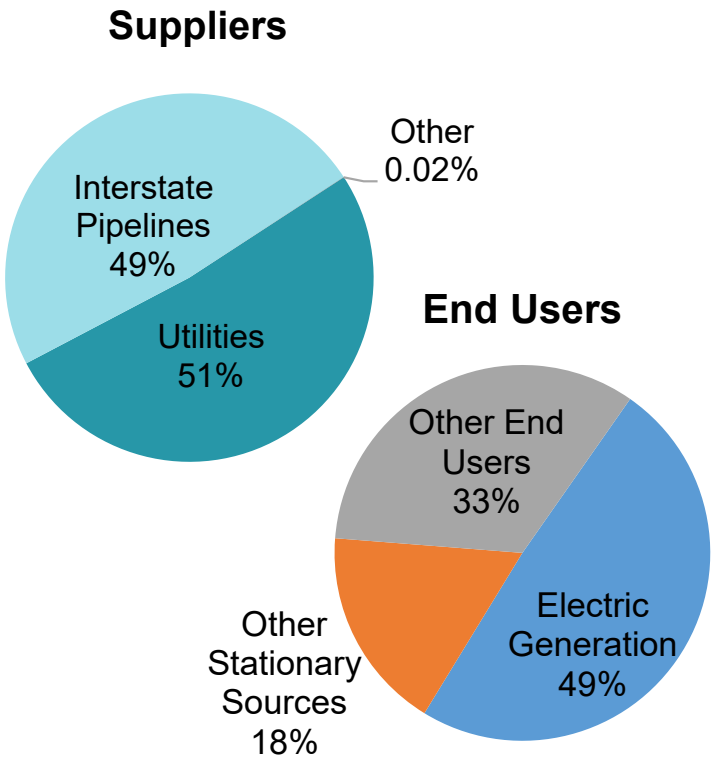
- Total emissions and pie chart include anthropogenic emissions from all non-natural gas fossil fuel (liquid and gaseous fuels) combustion including CO_2, CH_4, and N_2O. Biogenic CO_2 emissions from biodiesel and ethanol are not included.

Natural Gas Sector: Emissions

- 7 suppliers report emissions from natural gas combustion
- 51% of emissions from gas supplied by utilities
  - Residential and commercial heating
  - On-site at industrial manufacturing facilities
- Most interstate pipelines directly supply gas to power plants

Natural Gas Emissions

16.9 Million Metric Tons CO_2e in 2019



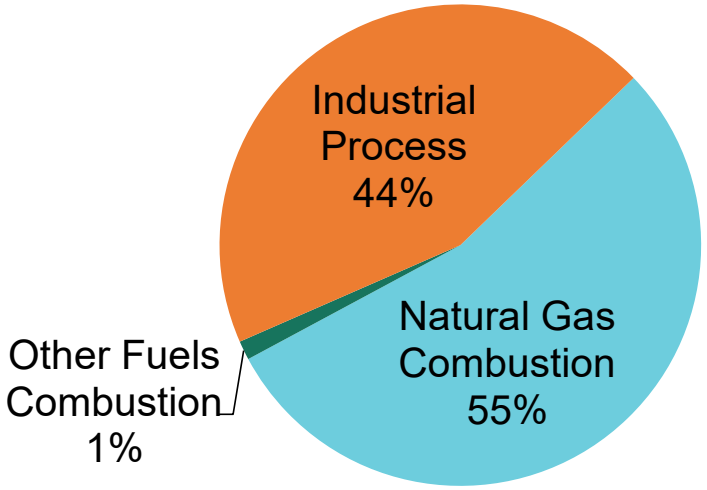
Notes: 2019 emissions data from DEQ GHG Reporting Program.

- For the End Users chart, "Other Stationary Sources" includes non-electric natural gas combustion emissions from stationary sources with total emissions greater than or equal to 2,500 $MTCO_2e$, i.e. the permitted sources that report emissions to DEQ. "Other End Users" includes natural gas combustion emissions from smaller sources below the reporting threshold, such as smaller permitted stationary sources, as well as other users including residential and commercial heating.

Stationary Sources: Emissions

- Stationary sources are permitted air contamination sources
- Primary activities resulting in reported emissions:
  - **Fuel combustion** (on-site use of natural gas, petroleum, other fuels) to generate heat, steam, or power operations
  - **Process emissions** resulting from manufacturing activities

Stationary Source Emissions
(Excluding Electric Generators)
5.4 Million Metric Tons CO_2e in 2019



Data collected for sources with emissions greater than 2,500 MT CO2e

Notes: 2019 emissions data from DEQ GHG Reporting Program.

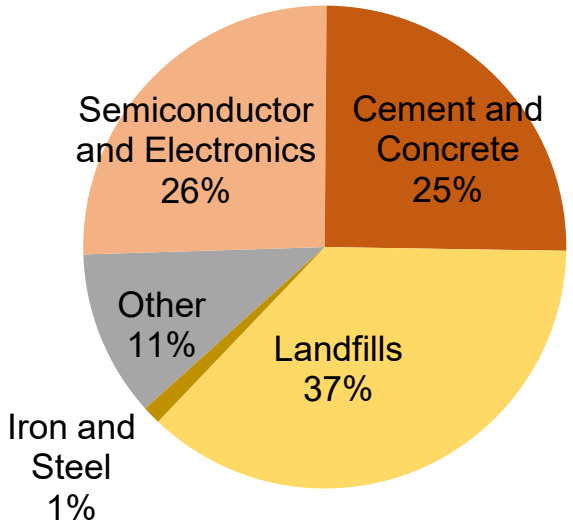
- Stationary source sector includes emissions reported to DEQ from individual permitted air contamination sources with total annual emissions greater than or equal to 2,500 MT CO_2e.
- This slide represents total anthropogenic emissions reported from permitted air contamination sources in 2019 excluding emissions from electric generating facilities.

Stationary Sources: Process Emissions

- Certain industrial activities:
  - Process emissions
  - Different GHG emissions
- Program unlikely to regulate emissions associated with landfills
  - Process emissions from 13 entities
  - Landfills intended for regulation under DEQ landfill methane gas rulemaking

Process Emissions
(Excluding Electric Generators)
2.4 Million Metric Tons CO_2e in 2019

Select Industry Types



In 2019, 45 stationary sources reported process emissions

Notes: 2019 emissions data from DEQ GHG Reporting Program.

- Stationary source sector includes emissions reported to DEQ from individual permitted air contamination sources with total annual emissions greater than or equal to 2,500 MT CO_2e.
- This slide represents total anthropogenic process emissions reported from permitted air contamination sources in 2019 excluding process emissions from Covanta, a waste to electric energy facility.

Stationary Sources: Thresholds for Process Emissions Only

- 31 stationary sources with process emissions not associated with landfills
- Threshold for inclusion
  - Interplay with potential leakage risk consideration for program design
  - Shifting emissions and business to:
    - Other jurisdictions
    - Similar industry types within state with emissions below threshold

Process Emissions
(Excluding Landfills; Electric Generators)
1.5 Million Metric Tons CO_2e in 2019

Threshold MT CO_2e	Share of Process Emissions (excluding landfills)	Count of Entities
0 (no threshold)	100% (of reported emissions)	31
5,000	98%	11
10,000	97%	10
25,000	97%	10

Notes: 2019 emissions data from DEQ GHG Reporting Program.

- Stationary source sector includes emissions reported to DEQ from individual permitted air contamination sources with total annual emissions greater than or equal to 2,500 MT CO_2e.
- This slide represents total anthropogenic process emissions reported from permitted air contamination sources in 2019 excluding emissions from landfills and Covanta, a waste to electric energy facility.

Stationary Sources: Thresholds for Process and Natural Gas Emissions

- 200 stationary sources with process emissions and/or emissions from combustion of natural gas
- DEQ is likely to regulate non-natural gas fuels upstream at the fuel supplier, but point of regulation for natural gas use may differ

Process + Natural Gas Emissions
(Excluding Landfills; Electric Generators)
4.5 Million Metric Tons CO_2e in 2019

Threshold MT CO_2e	Share of Process + Natural Gas Emissions	Count of Entities
0 (no threshold)	100% (of reported emissions)	200
5,000	94%	108
10,000	87%	63
25,000	77%	34

Notes: 2019 emissions data from DEQ GHG Reporting Program.

- Stationary source sector includes emissions reported to DEQ from individual permitted air contamination sources with total annual emissions greater than or equal to 2,500 MT CO_2e.
- This slide represents total anthropogenic process and natural gas combustion emissions reported from permitted air contamination sources in 2019 excluding emissions from landfills, electric generating facilities, and Covanta, a waste to electric energy facility.

Clarifying Questions?

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Discussion of Initial Key Design Questions

Potential Policy Elements

- **Emissions cap**: A limit on emissions
- **Compliance Instruments**: Regulated entities could be required to hold a compliance instrument for each ton emitted
- **Flexibility and cost containment elements**: Increase cost-effectiveness and flexibility in compliance, while ensuring emissions reductions
  - Banking, trading, compliance periods, alternative compliance options, reserves

Leanings: Program Design

- Several program design elements have already been discussed
- Define leaning
- Staff leanings are preferences for program design, based on:
  - Existing legal authority and those implications
  - Extensive public comment
  - DEQ analysis
- RAC discussions, public and DEQ analysis may still result in changes
- Key design element questions

Leanings: Cap and Scope

Leanings

- Single, mass-based limit or cap
  - Likely allow for cross-sector trading
- Reduce program emissions 80% by 2050
  - Not to include electricity sector, landfills, biogenic emissions

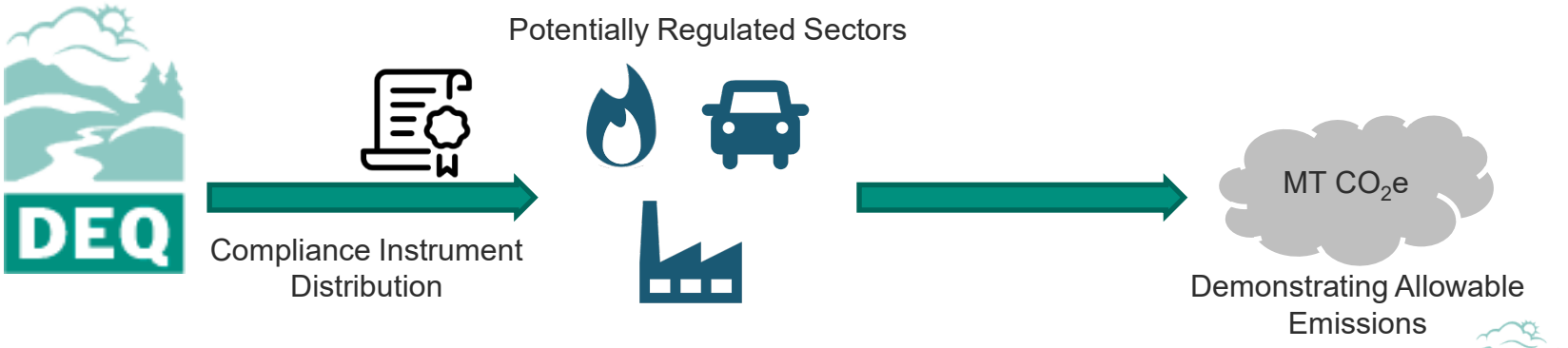
Related Questions

- How should annual caps or emissions limits align with 2050 target?
- Should the program have interim targets?

Leanings: Compliance Instruments

Leanings

- Use of compliance instruments to demonstrate compliance
- Direct distribution of instruments to regulated entities
- Distribution methodology may vary by sector



Leanings: Compliance Instruments

Leanings

- Direct distribution based on recent emissions
  - Distribution methodology will be detailed in rules
  - Example:
    - Entity produced 1% of covered emissions during a baseline period
    - Entity receives 1% of compliance instruments available for distribution in that year
- Distribution based on product output not currently feasible

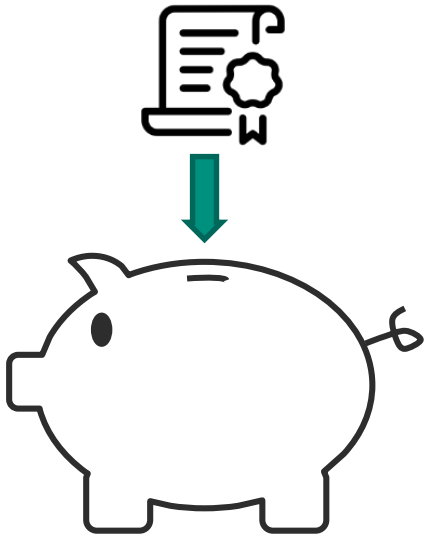
Related Questions

- Should DEQ consider ways to collect product output data to inform distribution methodology?
- Should the program also base compliance instrument distribution on long-term plans to implement best-available technologies to reduce emissions?
- What baseline period should be used for evaluating compliance instrument distribution?

Leanings: Compliance Instruments

Leanings

- Broad banking flexibility
  - Entities who do not use all of their compliance instruments can hold for use in a future compliance periods
  - Incentivizes early reductions
  - Achieves the same total required emissions reductions over time
  - Provides a buffer for unexpected market changes, mitigating risk

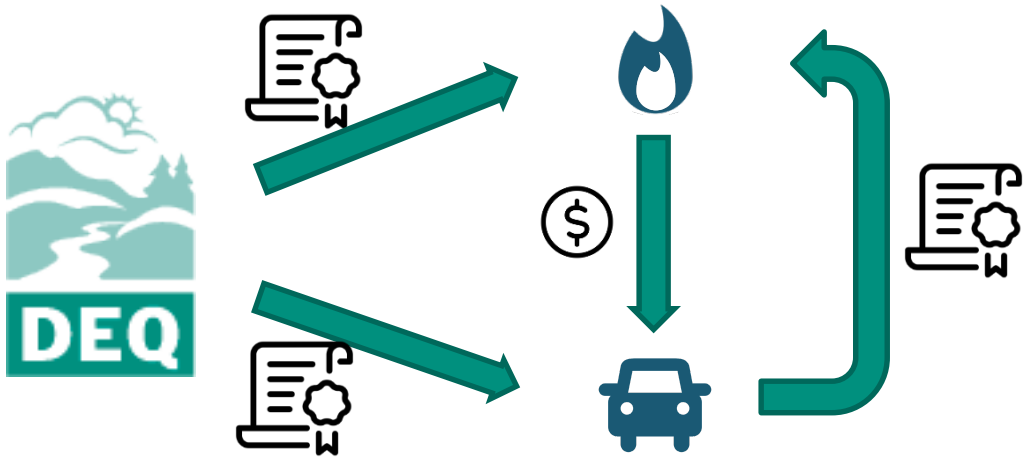


Leanings: Compliance Instruments

Leanings

- Broad trading flexibility for buying and selling of compliance instruments among regulated entities
  - Regulated entities can collectively find least-cost options
  - Incentivizes early emissions reductions
  - Limits on trading may limit compliance pathways for regulated entities
  - Option to bank compliance instruments for future years rather than sell

Illustrative Example:
Sale of compliance instruments from fuel supplier to natural gas utility



Compliance Periods

Questions

- Should the program include multi-year compliance period(s)
  - Flexibility for regulated entities will be helpful in early years of program implementation
  - Multi-year compliance periods still require compliance with emissions targets
- How long should each compliance period be?
- Should there be partial compliance obligation for each year within a multi- year compliance period?

Leanings: Alternative Compliance Options

Leaning

- Include alternative compliance options
- Additional compliance options can allow the program to require greater overall emission reductions

Topics for Next RAC Meeting

- DEQ could develop protocols that reduce emissions and provide co-benefits to Oregon communities
  - Focus on GHG reductions that are a priority of Oregon communities
  - Projects in Oregon
- DEQ could limit use of alternative compliance options to a percentage of regulated entities' compliance obligation

Additional Questions for Future Discussions

- Should emissions from natural gas combustion at stationary sources be regulated upstream at utilities?
- How should the program address stationary source process emissions?
- What threshold(s) should be set for fuel suppliers and stationary sources?

Key Discussion Questions

- Clarifying questions?
- Initial thoughts and feedback on leanings?
  - How should annual caps or emissions limits align with 2050 targets? With interim targets?
  - What data and methodology should DEQ use for compliance instrument distribution?
  - Should there be multi-year compliance periods? How should they be structured?

RAC #1 Agenda

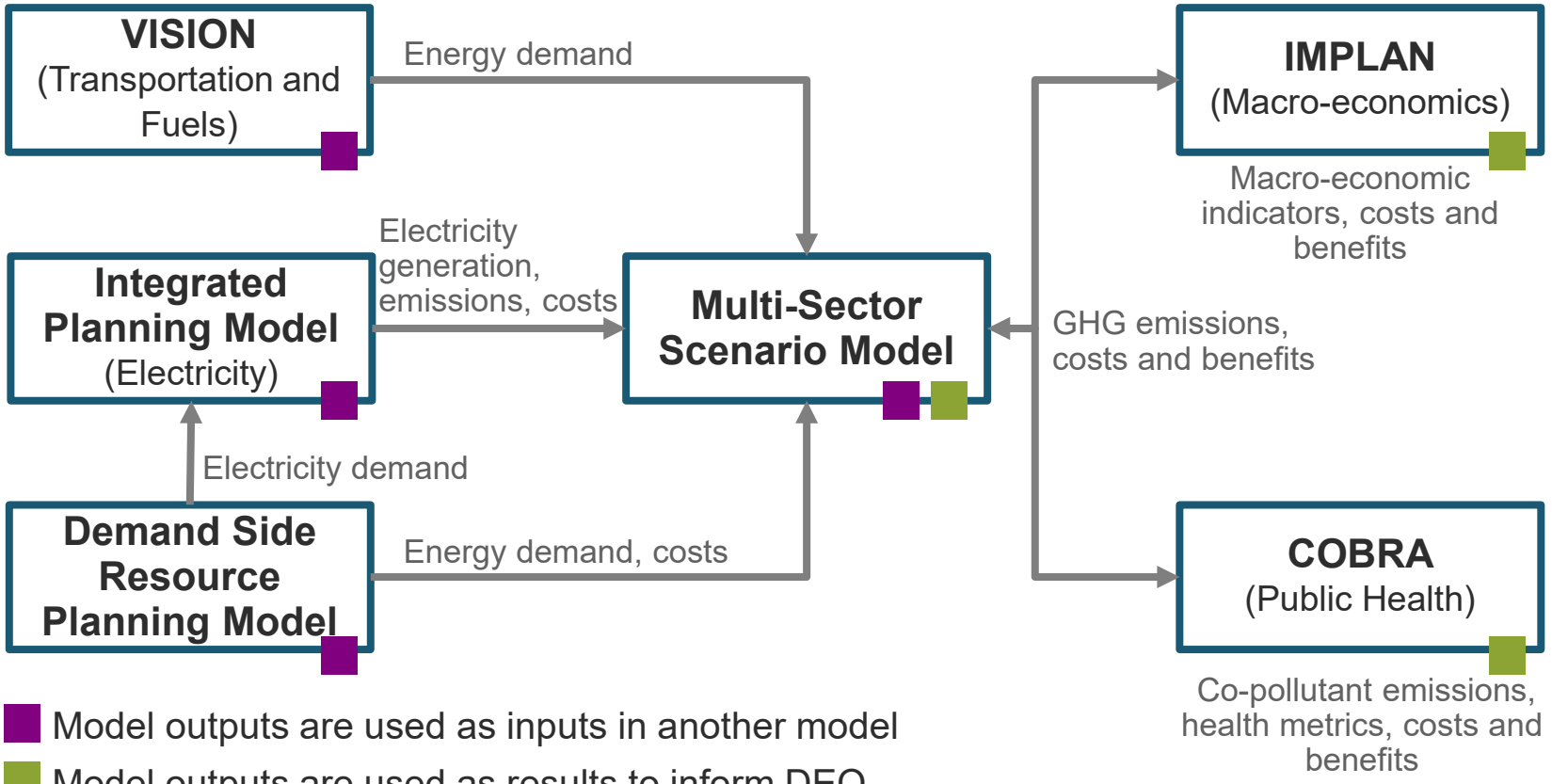
Time	Topic
9:00 a.m.	Welcome and Overview
9:45 a.m.	Committee Ground Rules and Operating Principles
10:00 a.m.	Convening and Advisory Committee Introductions
11:30 a.m.	Review Draft Committee Work Plan
11:45 a.m.	Lunch Break
12:15 p.m.	Overview of GHG Emissions and Public Engagement to Date
12:45 p.m.	Review Recent Greenhouse Gas Emissions Data
1:15 p.m.	Discussion of Initial Key Design Questions
2:30 p.m.	Break
2:40 p.m.	**Overview of Modeling Analysis and Reference Case Assumptions**
3:20 p.m.	Discussion of Proposed Policy Scenarios for Modeling
3:55 p.m.	Public Comment
4:25 p.m.	Next Steps
4:30 p.m.	Adjourn Meeting

Modeling Analysis Study

- Contracted with consultant for specialized GHG and co-pollutant emissions and economic modeling
  - ICF International
  - Many types of modeling analysis and modeling tools

- Modeling analysis objectives
  - Help analyze program design options
  - Provide information on directionality and magnitude of changes when adjusting parameters of discrete program elements
  - Inform overall program design and relationships between design elements

Modeling Approach



Analysis of Program Options

- Begin with “business as usual" or “reference” case to represent the effects of current regulations, requirements and programs
  - Represents a best guess of what future may look like without a new greenhouse gas emissions reduction program
  - Serves as a baseline to compare to against policy scenarios
- Next, various policy scenarios are modeled and compared to the reference case
  - Multiple policy cases to represent varying program design options
  - Focus is on difference and directionality between reference and policy cases, not absolute numbers

Study Approach

The study will provide:

- Review of potential program design options and impacts
- Figures to inform program design and direction, and support development of the fiscal impacts statement
- Aggregated examination of impacts at upstream, midstream, and end use levels

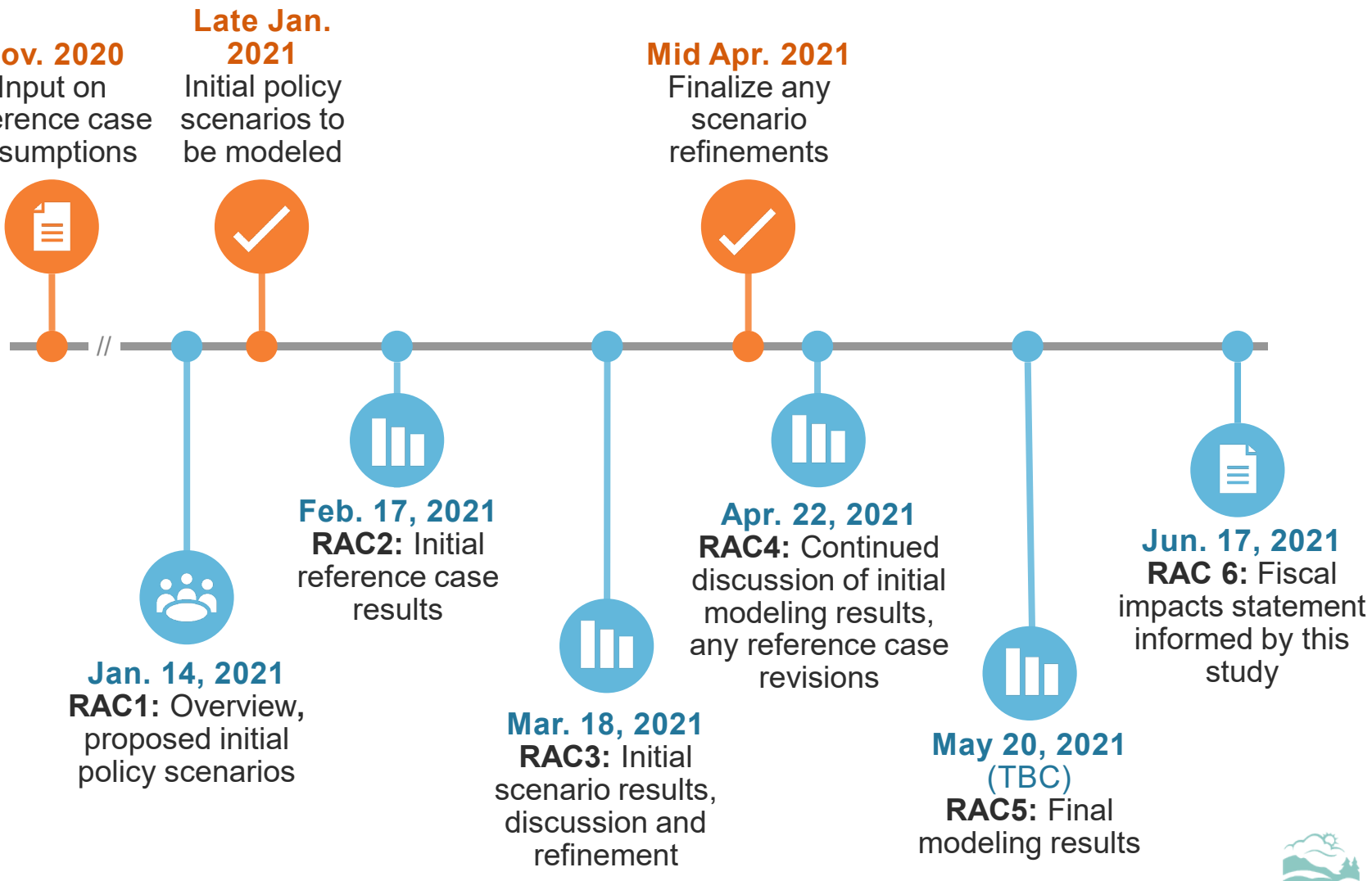
The study will NOT provide:

- X All the specific elements of policies and programs that make up emissions reduction scenarios
- X Actual data points or metrics to be used directly in rule
- X Entity-specific results or compliance pathways

Expected Results

- Select results from the modeling will include, but not be limited to:
  - Greenhouse gas emissions by sector
    - Projections out to 2050
  - Health impacts in the form of health incidence metrics and monetized avoided costs
    - Avoided hospital visits, reduction in mortality risk, etc.
  - Monetized economic impacts
    - Sector-specific job impacts, gross state product, etc.
- Assessment of potential co-benefits and positive or negative impacts to equity
- Holistic understanding of the potential costs and benefits

Tentative Modeling Analysis Timeline



Reference Case Assumptions

- Written comment period in Nov. 2020 for initial input on Reference Case assumptions
- Analysis is currently underway by ICF to keep the timeline on track to inform program design
  - GHG results to be discussed at second RAC meeting
- Reference Case results to include projected emissions:
  - Greenhouse gas emissions (metric tons of carbon dioxide equivalents)
  - Statewide by sector (aligning with the Oregon sector-based emissions inventory)
  - To understand impacts in the policy scenarios through interactions across sectors

Reference Case Policy Assumptions

Assumes policies on the books as of December 2020:

Sector	Policy	Detail
Transportation and mobile source policies	Oregon Clean Fuels Program	Reduce carbon intensity of transportation fuels from 2015 by 10% by 2025
	Senate Bill 1044	Clean vehicles programs and policies
	Federal corporate average fuel economy (CAFE)	Standards as set in 2016
Electricity generation and consumption policies	Senate Bill 1547	Renewable portfolio standard (RPS) of 50% by 2040 and no coal generation attributed to Oregon past 2030
	Other adjacent state policies impacting Oregon's mix	California's SB 100 goal of 100% renewable electricity by 2045; Washington CETA; etc.
Energy efficiency policies	Energy Trust of Oregon and Electrification programs	
	Consumer Electric Utility (COU)/Bonneville Power Administration (BPA) energy efficiency programs	
Natural gas supply and consumption policies	Senate Bill 98	Optional renewable natural gas (RNG) portfolio standard: 30% of utility natural gas supply to be RNG by 2050

Key Data Sources

- DEQ Oregon GHG Reporting Program and sector-based statewide inventory
- EPA State Inventory Data for additional historical and forecasted activity and emissions data
- Emissions factors will be specific to Oregon and will align with the DEQ GHG Reporting Program, U.S. GHG Inventory and EPA State Inventory Tool, and IPCC
- ICF's Integrated Planning Model (IPM) for forecasted electricity generation and demand
  - Will build on existing in-state and out-of-state data sources
- Argonne National Lab's VISION model for transportation fuels
  - Aligning with the activity forecasting methods used in ICF's modeling study for Oregon Clean Fuels Program transportation fuel supply and demand planning analysis
- Energy Information Administration (EIA) Annual Energy Outlook (AEO) data
  - Additional data as need for energy sector supply

Clarifying Questions?

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Discussion of Proposed Modeling Scenarios

Rationale and Considerations

- Purpose of modeling scenarios is to inform program design questions
- Focus on questions for which modeling is potentially most helpful
- Do not represent final or complete program design proposals
- Not able to represent all program details and variability in modeling
  - Often have to include simplifying assumptions for modeling

Modeling Policy Scenario Proposals

Key Topic	Scenario 1	Scenario 2	Scenario 3
Cap and Trajectory	45% by 2035, 80% by 2050		80% by 2050
Cap Application	One cap for all sectors		
Trading Allowed?	Yes and trading across sectors can occur		
Banking Allowed?	Yes; unlimited through time		
Regulated Sectors	Natural gas utilities; fuel suppliers for all fuels and uses; large stationary sources with process emissions >=25,000 MTCO2e	Natural gas utilities; fuel suppliers with total emissions >=300,000 MTCO2e	
Sector Exclusions	Electric generators, landfills, stationary source process emissions below the threshold	Electric generators, landfills, all stationary source process emissions, fuel suppliers with emissions below the threshold	
Natural Gas Point of Regulation	Upstream at utility supplier; not at stationary source		
Alt. Compliance Options Allowed?	Yes and annual supply is assumed to be available up to allowable %		
Allowable Use of Alt. Compliance	Up to 8% of compliance obligation per year		Up to 12% of compliance obligation per year
Expanded Complementary Policies	Proposals for Discussion		

Modeling Next Steps

- Accepting written comment on proposed initial policy scenarios to be modeled
- Based on comments DEQ and ICF will finalize the policy scenario assumptions by the end of January so that modeling can begin
  - DEQ will provide an update at the next RAC meeting
- Opportunities to provide feedback as future policy scenario are refined as modeling results are reviewed and discussed at future meetings

Questions for Discussion

- Clarifying questions on proposed policy scenarios?
- Initial thoughts and feedback on proposed policy scenarios?
- Initial thoughts and feedback on potential approaches for including expanded complementary policy scenarios?

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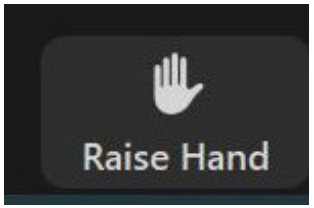
Public Comment Period

- Public comment period: 3:55 – 4:25 p.m.
- Raise your hand if you'd like to make a comment



- When making public comments, please:
  - Respect time limits as assigned
  - Use respectful language
  - Address issues and questions—focus on substance
  - When possible, relate comments to topics on the RAC agenda
- Members of the public welcome to provide written input to GHGCR2021@deq.state.or.us by January 21st

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Next Steps: Written Comments

- DEQ is currently accepting written comment on today's discussion items
  - Feedback on the assumptions for the three proposed modeling scenarios
  - Feedback and comments on DEQ leanings
    - How should annual caps or emissions limits align with 2050 targets? With interim targets?
    - What data and methodology should DEQ use for compliance instrument distribution?
    - Should there be multi-year compliance periods? How should they be structured?
  - Any initial comments on questions for future discussion (see slide 55)
- Please submit comments by end of day **Jan. 21, 2021** to GHGCR2021@deq.state.or.us

Next Steps

- DEQ intends to post written comments and a meeting summary
- Next rulemaking advisory committee meeting (#2)
  - **Feb. 17, 2021, 9 a.m. to 4:30 p.m. PT**
  - Program design discussion including focus on cost containment measures like alternative compliance options
  - Review reference case modeling results and takeaways
  - Update on proposed modeling scenarios
- Sign up for meeting notifications

Rulemaking webpage:
www.oregon.gov/deq/Regulations/rulemaking/Pages/rghgcr2021.aspx

Rulemaking contact:
GHGCR2021@deq.state.or.us