

# Environmental Quality Commission special meeting

**Dec. 16, 2021: 9 a.m. to 12:30 p.m.**

*DEQ's mission is to be a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.*

# Environmental Quality Commission Special Meeting: Proposed Climate Protection Program

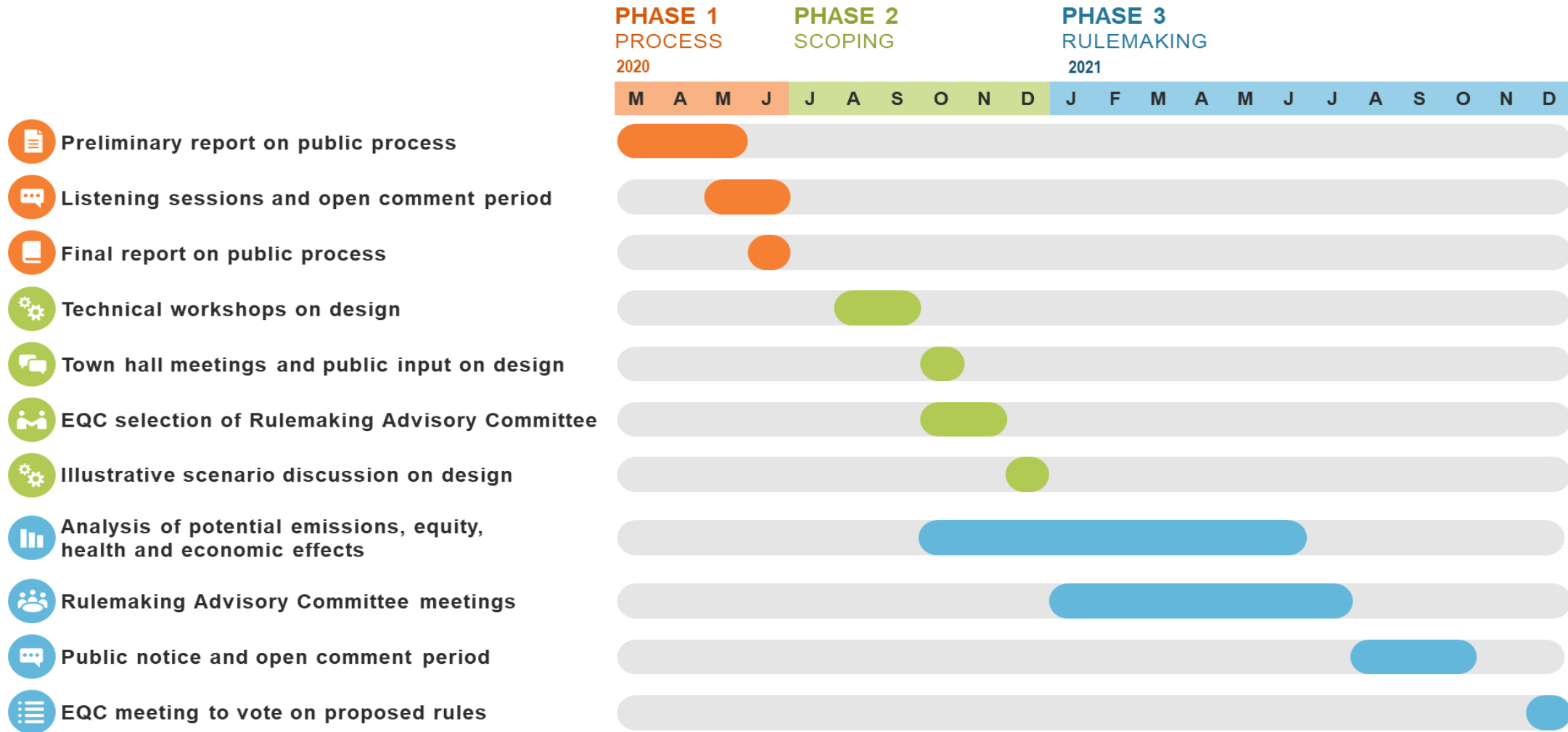
Colin McConnaha and Nicole Singh

Environmental Quality Commission  
Dec. 16, 2021, special meeting  
Action Item: A

# Proposed Climate Protection Program (CPP): Agenda

- Recap CPP program development & rulemaking process
- Review proposed new OAR division (OAR 340-271)
  - Review key rule elements
  - Review two hypothetical compliance scenarios
  - Recap public comments and discuss changes from draft rules
- Recommendation to the EQC

# CPP Development



Climate Protection Program anticipated to start in 2022  
 First compliance period 2022-2024



# CPP Rulemaking



# Public Comments: Key Themes

- Significant public engagement – received 7,620 comments
- Significant majority of comments:
  - Expressed concern over climate change impacts for current and future Oregonians
  - Emphasized need for Oregon to act now to do its part to reduce GHG emissions through programs like the CPP
  - Stressed importance of ensuring equity
  - Requested deeper emission reductions and/or including more emission sources
- Themes in other comments:
  - Concerns over affordable compliance options for fossil fuels suppliers
  - Potential fossil fuel price increases & impacts for industrial users, small businesses, and other customers

# CPP Proposed Rules Outline (1/2)

## Oregon Administrative Rules chapter 340 - proposing new division 271

Rule Number	Rule Topic
OAR 340-271-0010	Purpose and Scope
OAR 340-271-0020	Definitions
OAR 340-271-0030	Acronyms
OAR 340-271-0090 and 0100	General provisions
OAR 340-271-0110-0150	Covered entity and covered emissions applicability, changes in covered entities, cessation, permits
OAR 340-271-0300s	Provisions relating to covered stationary sources (best available emissions reduction approach)
OAR 340-271-0400s through -0900s	Provisions relating to covered fuel suppliers (cap approach)

# CPP Proposed Rules Outline (2/2)

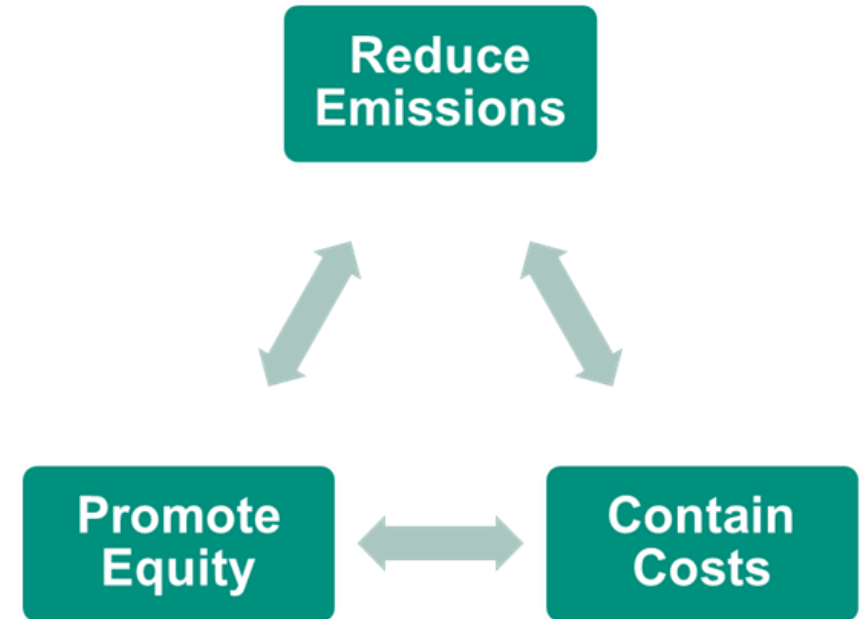
Rule Number	Rule Topic
OAR 340-271-0400s	Generation, distribution, and holding of compliance instruments
OAR 340-271-0400s	Compliance periods and demonstration of compliance
OAR 340-271-0500s	Trading of compliance instruments
OAR 340-271-0800s	Provisions relating to covered fuel supplier eligibility to receive CCI credits
OAR 340-271-0900s	CCI purposes and provisions relating to third-party entities who implement projects with CCI funds
OAR 340-271-8100	Program review
OAR 340-271-8120, 8130	Severability, deferrals
OAR 340-271-9000	Tables including applicability thresholds (T1), caps (T2), CCI credit contribution amount (T7)



# Purpose and Scope (Rule 0010)

## Purposes of CPP

- Reduce greenhouse gas emissions from sources in Oregon
- Achieve co-benefits from reduced emissions of other air contaminants
- Enhance public welfare for Oregon communities, particularly environmental justice communities



# Purpose and Scope (Rule 0010)

## EJ communities face more risks



- ↑ Greater pollution exposure
- ↑ Greater impacts of climate change
- ↓ Less representation in public processes
- ↓ Less access to new, clean technologies

**340-271-0010(1)** Environmental justice communities in Oregon are disproportionately burdened by air contamination, including through disproportionate risk of the impacts of climate change

**340-271-0020(18)** Environmental justice communities means communities of color, communities experiencing lower incomes, tribal communities, rural communities, coastal communities, communities with limited infrastructure and other communities traditionally underrepresented in public processes and adversely harmed by environmental and health hazards, including seniors, youth and persons with disabilities

# Covered Entities and Emissions (Rule 0110)

## Covered Entities

Covered Fuel Suppliers  
(Cap approach)

Covered Stationary  
Source  
(BAER approach)

Suppliers of fuels other than  
natural gas  
(gasoline, diesel, propane)

Local Distribution  
Companies  
(Natural gas utilities)

# Suppliers of fuels other than natural gas (Rule 0100)

## Fuel suppliers

- Declining thresholds
- Emissions from related entities aggregated
- 16 sources covered in first compliance period

## Covered Emissions

- Greenhouse gas emissions from fuel combustion
- Excludes biofuels

## Thresholds

- 2022-2024: 200,000 MT CO<sub>2</sub>e
- 2025-2027: 100,000 MT CO<sub>2</sub>e
- 2028-2030: 50,000 MT CO<sub>2</sub>e
- 2031 and later: 25,000 MT CO<sub>2</sub>e

# Local Distribution Companies (Rule 0100)

## Natural gas utilities

- Produces, imports, sells, or distributes natural gas, compressed, or liquified natural gas in Oregon
- 3 utilities

## Covered emissions

- Greenhouse gas emissions from natural gas combustion
- Excludes natural gas used at large electricity generating facilities
- Excludes biomass derived fuels

## Threshold

- No threshold
- All local distribution companies (natural gas utilities) covered

# Stationary Sources- BAER (Rule 0100)

## Covered Stationary Sources

- Unique GHG emissions
- Permitted industrial sources
- New permitted facilities
- Estimated 13 sources

## Covered emissions

- Emissions from industrial processes
- Emission from fossil fuel combustion not regulated by cap
  - Interstate natural gas pipeline emissions
  - Solid fuels combustion
- Excludes biomass derived fuels

## Thresholds

- Covered emissions
- 25,000 MT CO<sub>2</sub>e

# **OAR 340-271-0300s**

## **Best Available Emissions Reduction**

Stationary sources

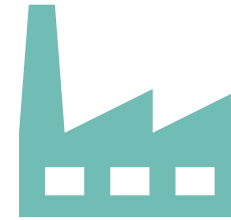


# Public Comments on BAER



## Many comments

- Concerned that emission reductions not guaranteed and could increase
- Stressed importance of on-site emissions reductions for nearby communities
- Wanted mandatory target or lower thresholds
- Concerns over timeliness of BAER process to reduce emissions



## Other comments

- Manufacturers vary significantly in processes, activities, operations, technologies, etc.
- Some industries have limited opportunities to reduce emissions, others more opportunities to reduce emissions with available technologies
- Multiple DEQ air pollution regulations



# BAER Assessment (Rule 0310)

- Covered stationary sources
  - Conduct site specific BAER assessments
  - Implement any reduction actions included in BAER orders
  - Existing sources complete assessment within 9 months of DEQ notification
- BAER assessment conducted by facility includes:
  - Identification of strategies that could reduce covered emissions
  - Estimated emissions reductions for each strategy
  - Impacts of implementing each strategy (economic, energy, environmental, health)
  - Estimated implementation timeline

# BAER Order (1/2) (Rule 0320)

- The BAER order issued by DEQ:
  - Identifies the required actions to reduce emissions
  - Establishes implementation timeline
  - Informed by BAER assessment & other information DEQ identifies
  - If DEQ does not issue BAER order within 18 months from notice, provides public update

# BAER Order (2/2) (Rule 0320)

- DEQ identifies strategies that maximize emissions reductions, and are:
  - Achievable by the facility
  - Technically feasible
  - Commercially available
  - Cost-effective
- DEQ considers:
  - Economic, environmental and public health impacts of each strategy
  - Impacts on the type or quality of good(s) produced
  - Time to implement each strategy and useful life of source
  - Input received from formal engagement with public and communities around the facility

# **OAR 340-271-0400-0900s**

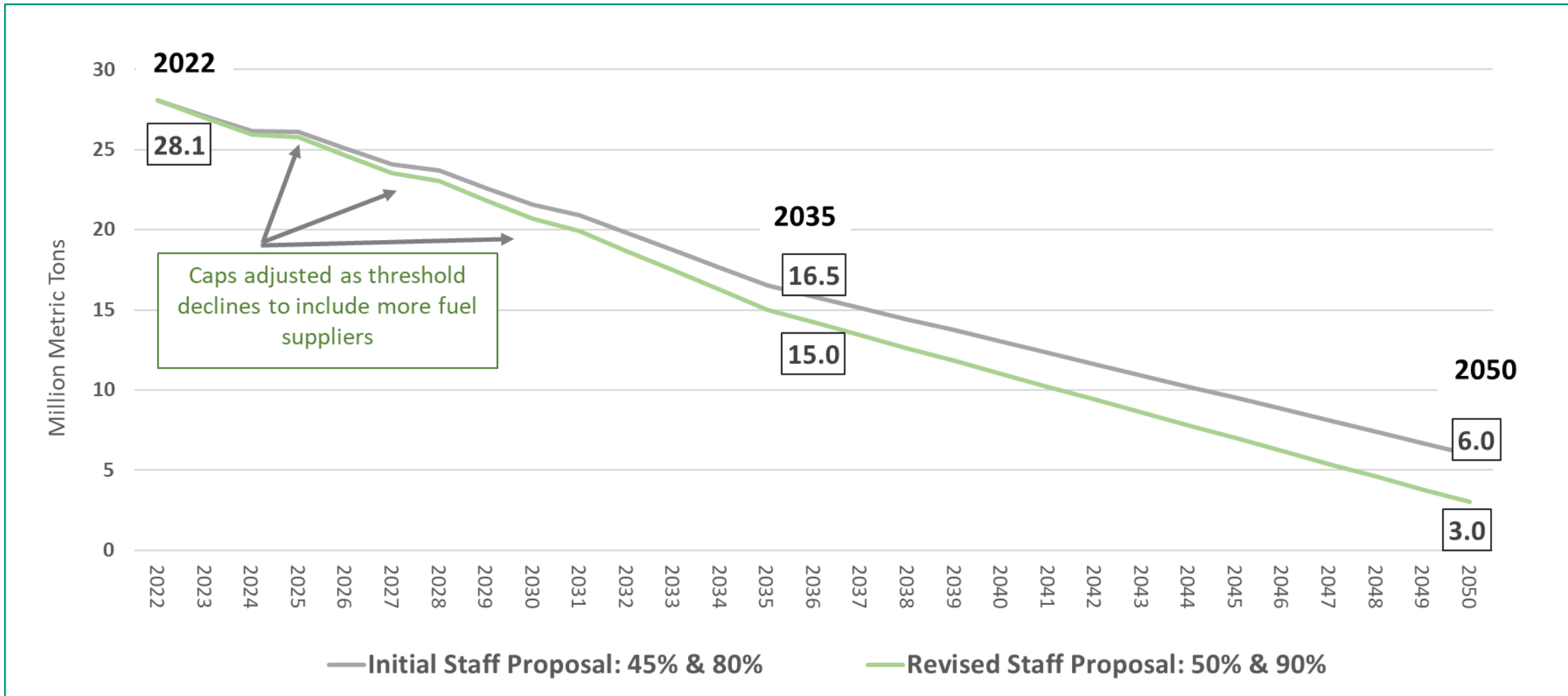
## **Cap approach**

Covered fuel suppliers

# Generation of Compliance Instruments (Rule 0410)

- Fuel suppliers demonstrate compliance using compliance instruments and CCI credits
- Compliance instrument authorizes covered fuel supplier to emit 1MT CO<sub>2</sub>e
  - Metric ton of carbon dioxide equivalent of greenhouse gas emissions
- DEQ generates compliance instruments equal to annual emissions caps in OAR 340-271-9000 Table 2
  - Lists annual caps for 2022-2050

# Climate Protection Program Caps (Rule 9000-T2)



# Distribution of Compliance Instruments (Rule 0420)

Annual cap

Start with  
annual caps in  
OAR 340-271-  
9000 Table 2

Natural gas  
utilities

Receive fixed  
number of  
instruments  
OAR 340-271-  
9000 Table 4

Liquid Fuels and  
Propane  
Suppliers

Instruments  
placed in  
reserve for new  
entrants  
OAR 340-271-  
9000 Table 3

Liquid fuels and  
Propane  
suppliers

Rest distributed  
with proportional  
formula  
Updated annually  
with more recent  
emissions  
OAR 340-271-  
9000 Table 5

# Distribution of Compliance Instruments (Rule 0420)

- Compliance instruments distributed annually by March 31
- DEQ calculates distribution every year for non-natural gas fuel suppliers
- Annual proportional calculation:
  - Based on each fuel supplier's covered emissions and biofuel emissions
  - Proportion of the total covered emissions and biofuel emissions from all these types of covered fuel suppliers
  - Proportion updated annually with a rolling 3-yr average of fuel suppliers' relative proportions



# Compliance Instruments (Rule 0420, 0440, 0500s)

## OAR 340-271-0420 Holding Compliance Instruments

- Covered fuel supplier may hold compliance instrument (bank) indefinitely

## OAR 340-271-5000s Trading

- Covered fuel suppliers may trade compliance instruments

# Demonstration of Compliance (Rule 0450)

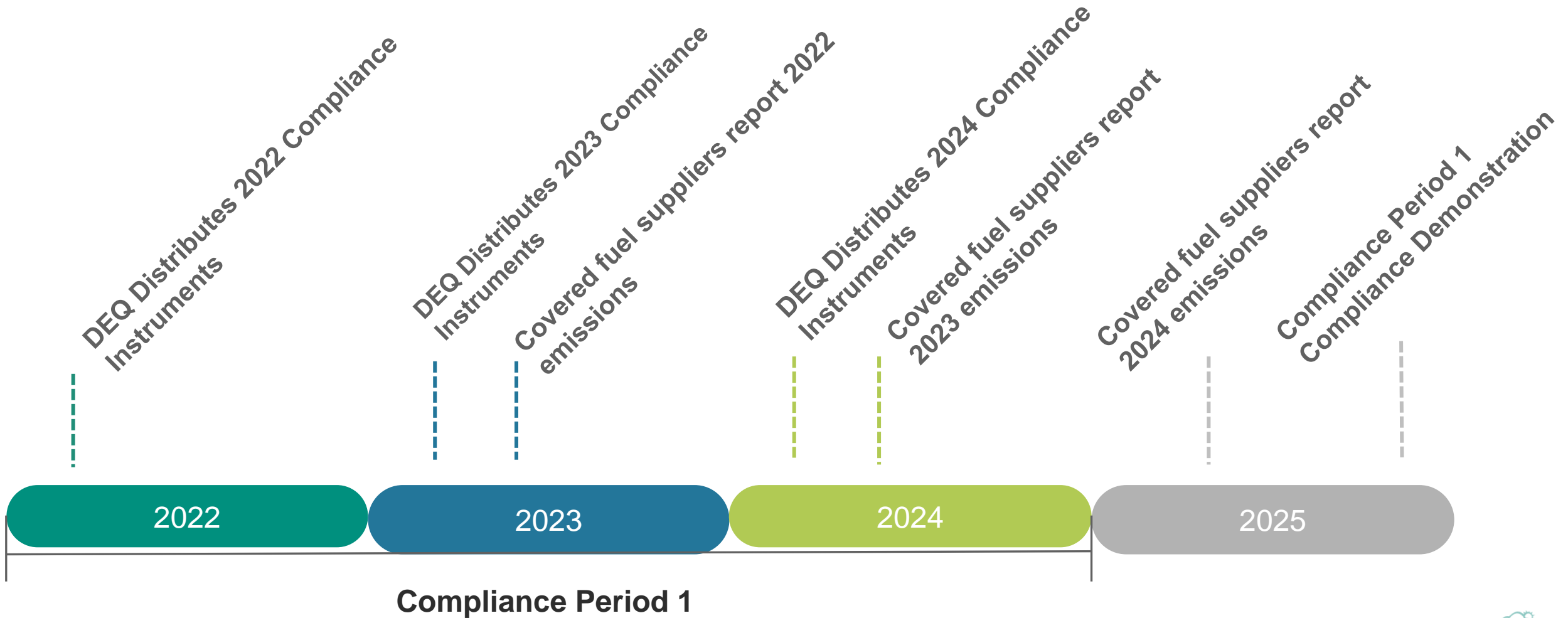
## OAR 340-271-0440 Compliance Periods

- 3-year compliance periods
- First compliance period is 2022-2024

## OAR 340-271-0450 Demonstration of Compliance

- By Nov. 28 of the year after the compliance period, demonstrate compliance for total covered emissions from the compliance period
- Each MT CO<sub>2</sub>e of covered emissions- submit 1 compliance instrument or 1 CCI credit (limited to 10%, 15%, or 20% met with CCI credits)
- Compliance instruments must have been distributed from the calendar years within the compliance period or from earlier years

# Timeline for Distribution, Reporting, and Compliance



# How Covered Fuel Suppliers Could Comply

- Following is a *hypothetical* illustration for how the first 3-year compliance period could work for 2 different fuel suppliers
  - Gasoline & diesel fuel supplier
  - Natural gas utility
- Some common compliance strategies for both types of companies
- Some distinct compliance strategies for each

# Introducing ACME Fuels

- During 2017-2019, the ACME Fuels supplied each year:
  - **2,500,000 tons of fossil gasoline**
  - 300,000 tons of ethanol
  - **2,500,000 tons of fossil diesel**
  - 200,000 tons of biodiesel
  - 100,000 tons of renewable diesel



5,000,000 tons of emissions would have had a compliance obligation if CPP had been in effect in 2017-2019

# Introducing Pacific Natural Gas

- During 2017-2019 Pacific Natural Gas supplied each year:
  - **1,000,000 tons of fossil natural gas**
  - 0 renewable natural gas (RNG)
  - 0 hydrogen
- Pacific also pays for energy efficiency programs for some of its customers

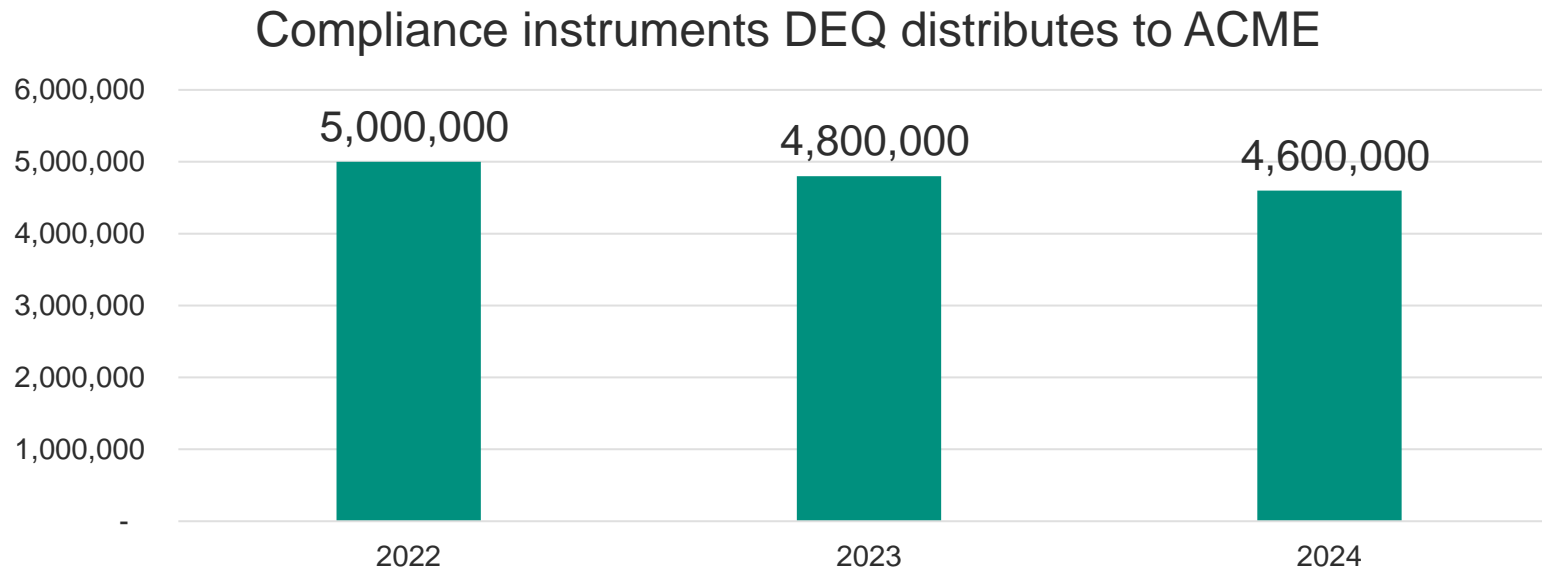


Fossil natural gas: 1,000,000 tons  
RNG/hydrogen: 0 tons

1,000,000 tons of emissions that would have had a compliance obligation if CPP had been in effect in 2017-2019

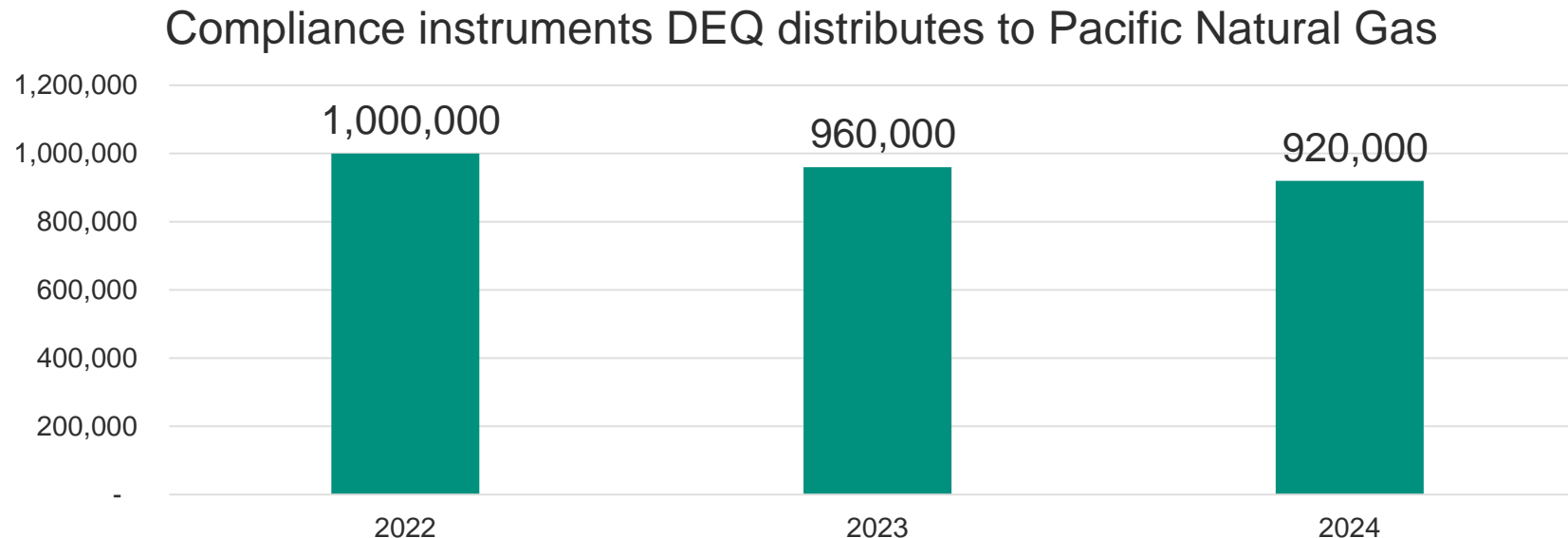
# ACME Fuels Compliance Instrument Distribution

- First year cap (2022) = proportional share of 2017 – 2019 average emissions for all non-natural gas fuel suppliers
- Declines roughly 4% year
- Distribution of compliance instruments in compliance period 1:



# Pacific Natural Gas Compliance Instrument Distribution

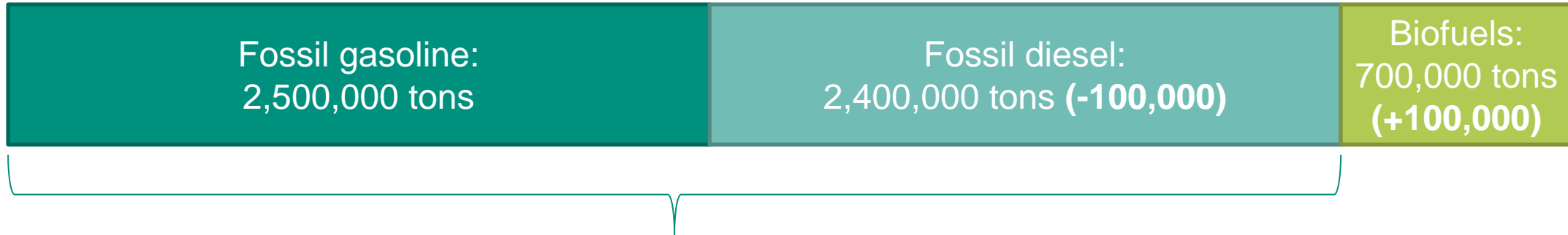
- First year cap (2022) = 2017 – 2019 average emissions for Pacific Natural Gas
- Declines roughly 4% per year
- Distribution of compliance instruments in compliance period 1:





# ACME Fuels: 2022

- Receives 5,000,000 compliance instruments
- 2022 emissions:



## Changes for ACME in 2022:

- Added 100,000 tons of renewable diesel
- Reduced fossil diesel by 100,000 tons
  - (i.e. same overall fuel volume sold in 2022 as in baseline period)
- Received 100,000 more compliance instruments than obligations generated

# ACME Fuels: 2023

- Receives 4,800,000 compliance instruments
- 2023 emissions:

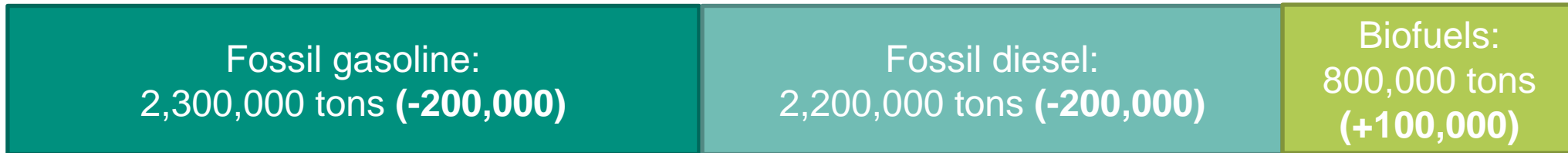


## Changes for ACME in 2023:

- No change in fuels supplied from 2022
  - Still same total volume of fuels sold in 2022 & in baseline period
- Lower allocation means ACME receives 100,000 fewer instruments than the compliance obligations it generates in 2023
  - Net of 2022 & 2023: 0 surplus/deficit

# ACME Fuels: 2024

- Receives 4,600,000 compliance instruments
- 2024 emissions:



## Changes for ACME in 2024:

- Lower overall fuel supplied for first time
  - Big dip in gasoline due to electrification
  - Further shift from fossil diesel to renewable diesel
- Despite lower allocation, received 100,000 more compliance instruments than obligations generated
  - Net of 2022, 2023 & 2024: 100,000 surplus

# Pacific Natural Gas: 2022

- Receives 1,000,000 compliance instruments
- 2022 emissions:

Fossil natural gas:  
1,100,000 tons **(+100,000)**



Renewable Natural Gas:  
50,000 tons **(+50,000)**

## Changes for Pacific Natural Gas in 2022:

- Significant load growth (e.g. new connections): 150,000 additional tons overall
- However, a portion – 50,000 tons – is met w/ new RNG
- So, Pacific's shortfall for 2022 is 100,000 tons, rather than 150,000 tons

# Pacific Natural Gas: 2023

- Receives 960,000 compliance instruments
- 2023 emissions:

Fossil natural gas:  
1,000,000 tons **(-100,000)**



Renewable Natural Gas:  
50,000 tons

## Changes for Pacific Natural Gas in 2023:

- Reduced demand/load, which could occur from any combination of:
  - Additional energy efficiency
  - Mild weather
  - Customer disconnections
- However, lower allocation for 2023 means Pacific generates an additional 40,000 deficit
  - Net of 2022 & 2023: 140,000 deficit

# Pacific Natural Gas: 2024

- Receives 920,000 compliance instruments
- 2024 emissions:

Fossil natural gas:  
800,000 tons **(-200,000)**



Renewable Natural Gas &  
**Hydrogen:**  
110,000 tons **(+60,000)**

## Changes for Pacific Natural Gas in 2024:

- Reduced demand/load, which could occur from any combination of:
  - Additional energy efficiency
  - Mild weather
  - Customer disconnections
- Additional load met with RNG and (new for 2024) Hydrogen
- Reduced load + additional renewables lower obligation to 800,000 tons, generating 120,000 ton surplus
  - Net of 2022, 2023, & 2024: 20,000 deficit

# 2022-2024 Compliance Period Summary

Year	ACME Fuels			Pacific Natural Gas		
	Compliance Instruments	Covered Emissions	Excess/shortfall	Compliance Instruments	Covered Emissions	Excess/shortfall
2022	5,000,000	4,900,000	+100,000	1,000,000	1,100,000	-100,000
2023	4,800,000	4,900,000	-100,000	960,000	1,000,000	-40,000
2024	4,600,000	4,500,000	+100,000	920,000	800,000	+120,000
<b>Total</b>	<b>14,400,000</b>	<b>14,300,000</b>	<b>+100,000</b>	<b>2,880,000</b>	<b>2,900,000</b>	<b>-20,000</b>

# 2025: Compliance

- Demonstration of compliance on November 28, 2025
- ACME:
  - Uses 14,300,000 compliance instruments to comply
  - Has 100,000 compliance instruments to bank or trade
- Pacific Natural Gas:
  - Uses all 2,880,000 instruments received from DEQ, but 20,000 tons remain
  - Uses 10,000 Community Climate Investment credits
  - Purchases/uses 10,000 instruments from ACME
    - Presumably, ACME was willing to sell instruments at a price lower than CCI cost



# **OAR 340-271-0800s-0900s**

## **Cap Approach**

Community Climate Investments (CCIs)

# Public Comment on CCIs (1/2)

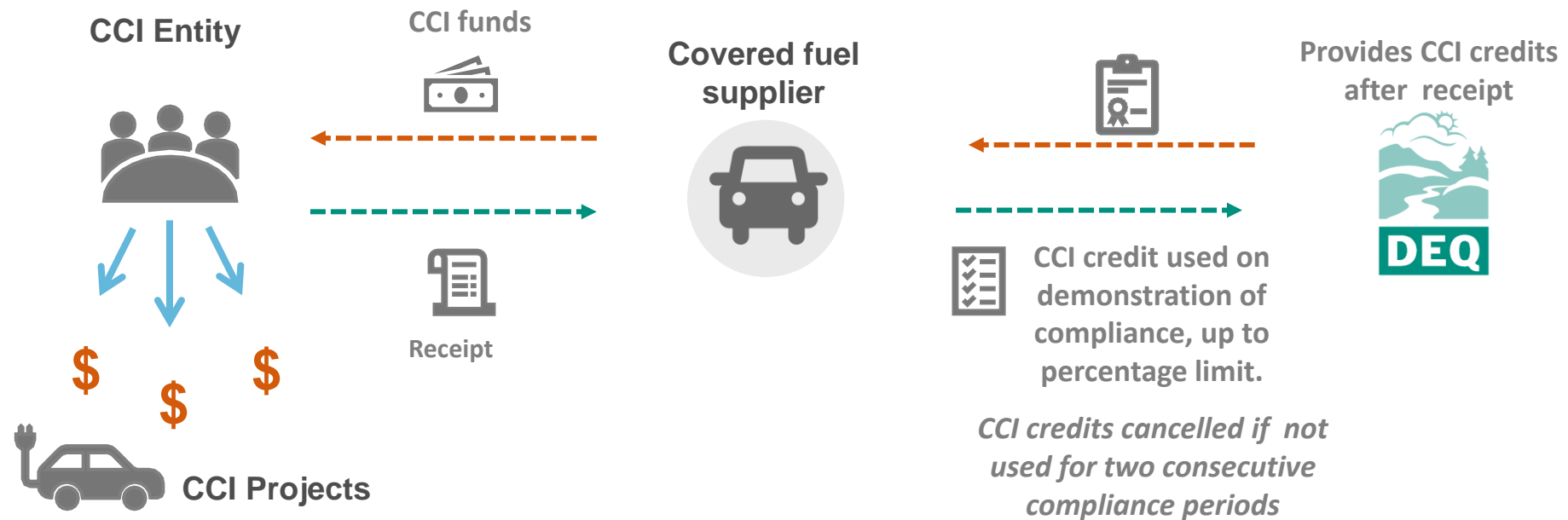
- Reduce greenhouse gas emissions by 1 ton per CCI credit
- CCIs needed to better focus on bringing benefits, reducing burdens and supporting engagement for communities disproportionately impacted by air contamination and climate change
- Concerns about early banking of CCI credits
- CCIs are important voluntary compliance options

# Public Comment on CCIs (2/2)

- Ensure the CCI price supports:
  - Capacity building for communities
  - Emission reduction monitoring
  - Achieving one ton of emissions reduction on average per credit issued
- Improve accountability of CCI third party entities & processes for selecting entities
- Proposed change on how many CCIs can be used for compliance
  - Comments supporting both higher and lower amounts of CCI utilization
- Allowing CCI projects to include sequestration:
  - Some comments supporting this, particularly for natural & working landscapes
  - Other comments supporting DEQ proposal to focus CCI projects on direct emission reductions

# CCIs Covered Fuel Suppliers (Rule 0800s)

- Covered fuel supplier contributes funds to CCI entity and applies for CCI credits
- If multiple CCI entities, covered fuel suppliers contribute equal funds to all CCI entities approved at that time.



# Usage of CCI Credits (Rule 9000-T6)

Compliance period	Allowable percentage of total compliance obligation(s) for which compliance may be demonstrated with CCI credits
Compliance period 1 (2022 through 2024)	10%
Compliance period 2 (2025 through 2027)	15%
Compliance period 3 (2028 through 2030 onward)	20%

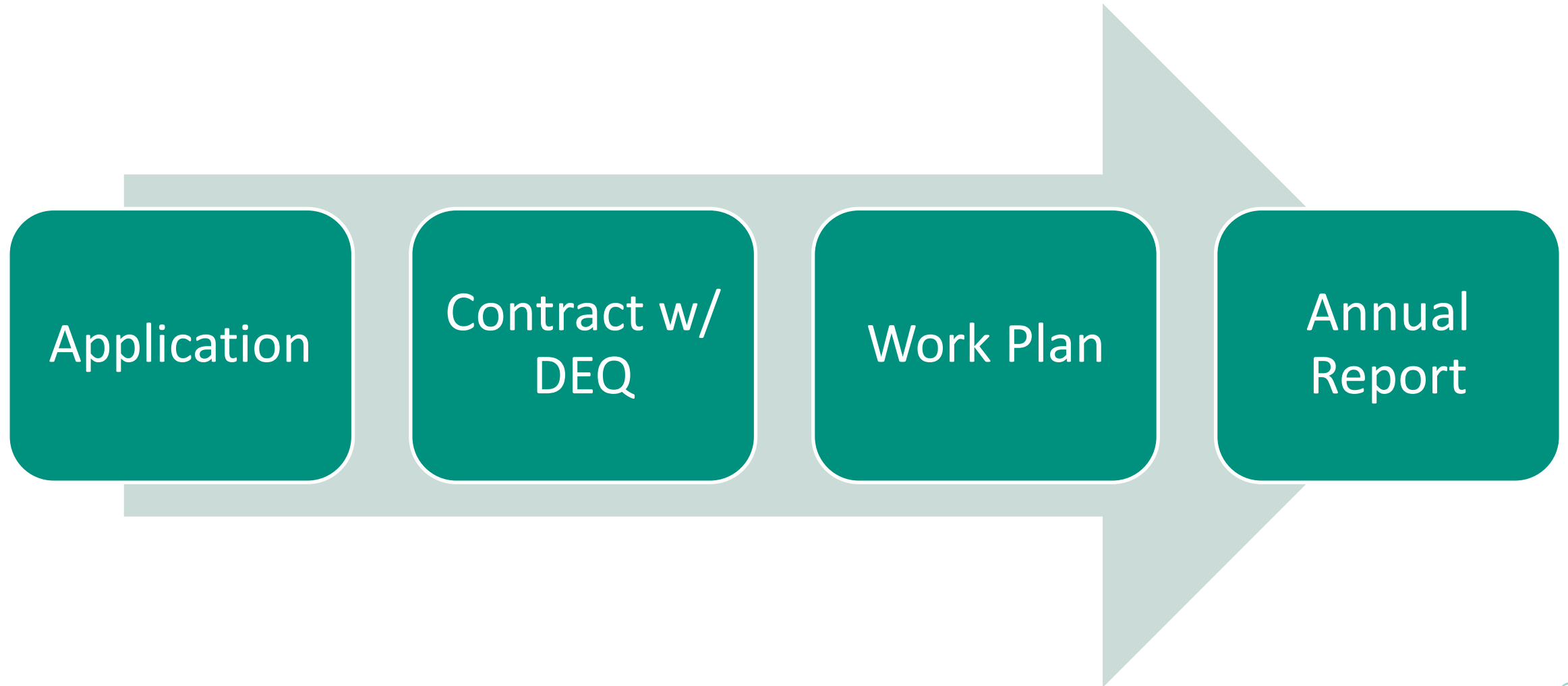
# CCI Contribution Amount (Rule 9000-T7)

- DEQ proposal to increase contribution amount for CCI credits informed by:
  - Public comments
  - Continued review of potential cost per ton of GHG reduction of CCI projects
- Contribution amount for a CCI credit will begin at \$107 in 2023 (2021\$)
  - Will increase one dollar (2021\$) per year, plus
  - Annual adjustment for increases in consumer prices (inflation adjustment)

# CCI Purposes & Uses of Funds (Rule 0900)

- Provide optional means of meeting compliance obligations
- Reduce greenhouse gas emissions on average by at least one ton per CCI credit
- Reduce emissions of other air contaminants, particularly in environmental justice communities
- Promote public health, environmental, and economic benefits for environmental justice communities
- Accelerate transition away from fossil fuels in environmental justice communities
- CCI funds spent on cost to implement projects and for related costs, such as reporting to DEQ and capacity building.

# CCI Third Party Entities (Rule 0900s)





# CCIs and CCI Entities (Rule 0930)

- CCI funds
  - Must keep separate from any other funds held by the CCI entity
  - Must complete an independent financial audit annually
- Work plan required prior to spending CCI funds to implement projects
  - Description of types and locations of the projects
  - Budget(s)
  - Calculation methodologies to estimate emissions reductions
  - How projects will support the purposes of CCIs
- Annual reports on work conducted and projects completed
- Approval can be suspended, revoked, or voluntarily withdrawn
  - May require the transfer of any unspent CCI funds to another CCI entity

# CCI Committee & EJ Engagement (Rule 0950)

- Committee provides input to DEQ
- Committee members
  - Expertise, interest, or lived experience
  - Representation from multiple regions in Oregon
  - Outreach to communities
- DEQ
  - Guidance on CCIs
  - Outreach to EJ communities

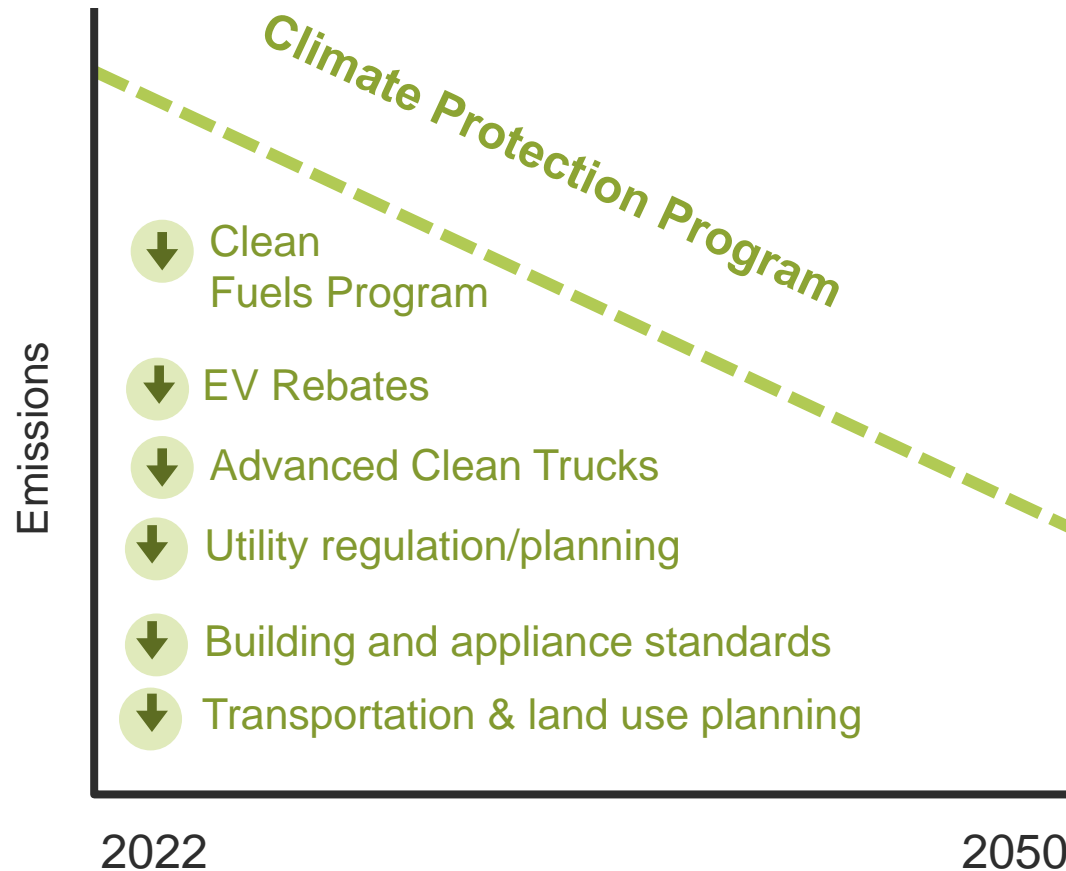
## Equity Advisory Committee



# Program Review (Rule 8000)

- Review for CCI program every 2 years
  - Includes evaluation of whether >1 MT CO<sub>2</sub>e reduced for average CCI credit distributed
- Broader CPP review every 5 years
  - Includes whether emission reductions from covered stationary sources align with the goals
- Evaluate CPP goals for stationary sources (BAER)
  - Reduce total covered emissions
  - Reduce total covered emissions from combustion of solid or gaseous fuels by 50% by 2035 from average of 2017- 2019 emissions
- DEQ will track average annual statewide retail cost of fuels in Oregon
  - If there are increases year-over-year by an amount that is >20% higher than the change in cost for the same fuel over the same period in adjacent states, DEQ will investigate and report to the EQC

# CPP Context: Oregon Programs



- Many state programs are reducing GHG emissions in Oregon
- These measures are complementary
  - Make individual programs more impactful
  - Reduce costs of individual programs

# Recess

**The commission will take a short break and return at 11:55 a.m.**

# DEQ Recommendation to EQC

- DEQ recommends that the Environmental Quality Commission adopt the proposed rules in Attachment A1 along with changes as shown in Addendum A and revisions in Amendment 1 as discussed at the meeting and Attachment A3 as part of Chapter 340 of the Oregon Administrative Rules.