

PACT CPR Update

March 7, 2023

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Air, Energy, and Materials Sustainability



Please note this meeting is being recorded and will be made available online. All presented material will also be available online.

As a courtesy to all, please turn off your microphone and camera during this presentation.

**Please also note this meeting is
for informational purposes only.
The concepts and ideas
presented and discussed do not
reflect any final decision making.**

At various points during the presentation, we will pause for questions.

If you have a question, please raise your hand.

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Agenda

01

Background

02

Recap PACT
CPR-I

- Questions?

03

Introduce PACT
CPR-II + other
activities

- Questions?

04

Wrap up

- Questions?

Background: Mandates

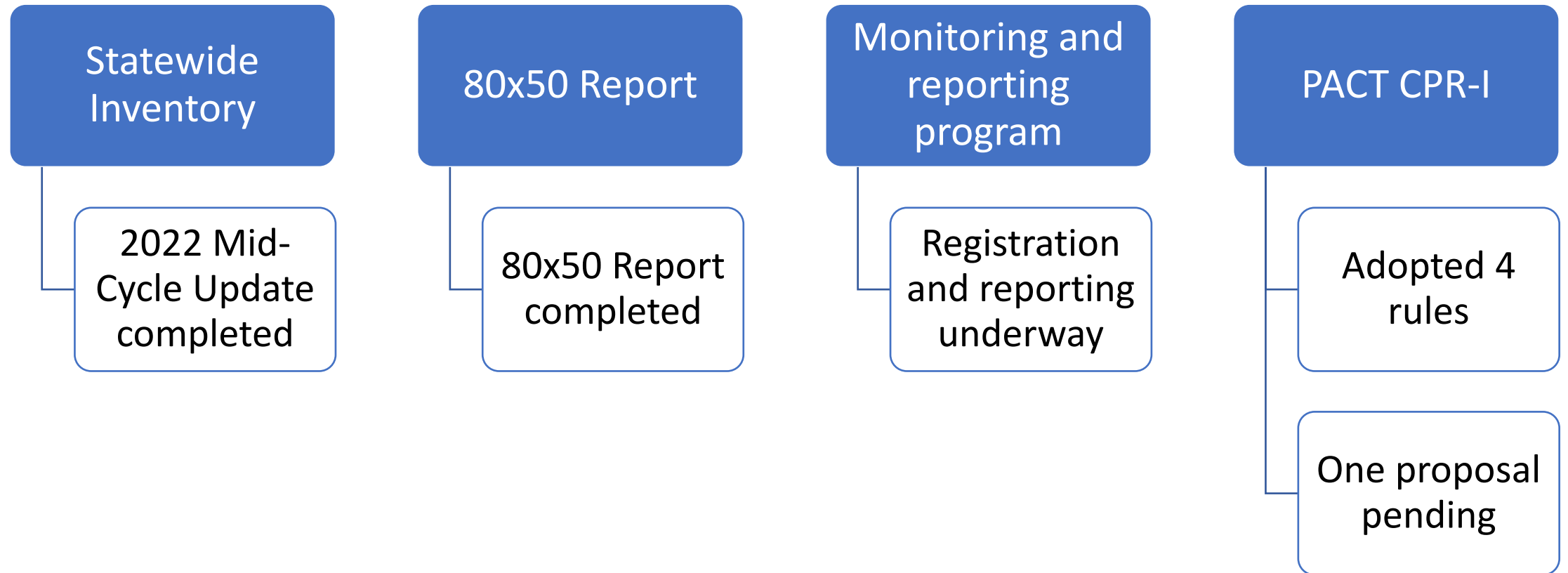
Global Warming Response Act

- Directs the Department to publish a Statewide inventory
- Directs the Department to prepare report recommending measures necessary to meet the 80x50 goal
- Directs the Department to establish monitoring and reporting rules

Executive Order 100

- Directs the Department to establish criteria that will govern and reduce emissions of carbon dioxide and where necessary, short-lived climate pollutants
- Directs the Department to establish monitoring and reporting program

Overview of Department actions completed to date



NEW JERSEY PACT
Protecting Against Climate Threats

Climate Pollutant Reduction:

Strengthening air pollution rules to help reduce future greenhouse gas and other climate emissions by improving the State's greenhouse gas reporting and inventory system and reducing emissions of carbon dioxide and short-lived climate pollutants.

PACT CPR-I: Adopted

Advanced Clean Trucks/Fleet Reporting Rule

- Zero-emission truck sales + one-time fleet reporting
- Estimated reductions in 2040
 - 4.2 tons per day NO_x (1,300 tons per year NO_x)
 - 0.13 tons per day PM_{2.5} (40 tons per year PM_{2.5})
 - 0.44MMT/year CO₂e
- Estimated cumulative total CO₂e benefits from 2024 through 2040: 2.6 MMT CO₂e
- Additional global warming benefits of black carbon reductions

PACT CPR-I: Adopted

Greenhouse Gas Monitoring/Reporting Rule

- Reporting requirements for natural gas utilities, methane emission sources, and refrigerated system owners/operators
- Information will better quantify emissions of climate pollutants to support future reduction reforms

PACT CPR-I: Adopted

Control and Prohibition of Carbon Dioxide Emissions Rule

- CO₂ emission limit for new fossil fuel-powered EGUs and a 3-tiered emission limit applicable to existing EGUs
- Estimated net CO₂ emission reductions
 - 519,169 tons in 2024 + 41,719 tons reduction in 2027 + potentially 1,987,322 tons of avoided CO₂ emissions in 2035
- Estimated total potential avoided CO₂ emissions is approximately 2,548,210 tons per year
- Ban on combustion of No. 4 and No. 6 heavy fuel oils

PACT CPR-I: Adopted

Mobile cargo handling equipment at ports and intermodal rail yards

- Equipment must meet performance standards that reflect best available control technology
- Estimated emission benefits in 2028
 - 6.4 tons of direct PM2.5
 - 82 tons of NOx
- Estimated cumulative emissions benefits from 2024 through 2035
 - 38 tons of direct PM2.5
 - 500 tons of NOx

PACT CPR-I: Proposed

Model Year 2027 and Later Heavy-Duty New Engine and Vehicle Standards and Diesel Vehicle Inspection Tests and Procedures

- Main components:
 - Incorporate California's emission standards and supporting requirements for new model year 2027 and later gasoline and diesel engines and vehicles with a gross vehicle weight rating (GVWR) greater than 8,500 pounds
 - Ensure that all medium-duty and heavy-duty vehicles are subject to the same emission inspection procedures and standards

Questions?

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What's next?

PACT CPR-II

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California Advanced Clean Cars II*

*Information from [Advanced Clean Cars II | California Air Resources Board](#)

California's Advanced Clean Cars II regulations will rapidly scale down light-duty passenger car, pickup truck and SUV emissions starting with the 2026 model year through 2035.

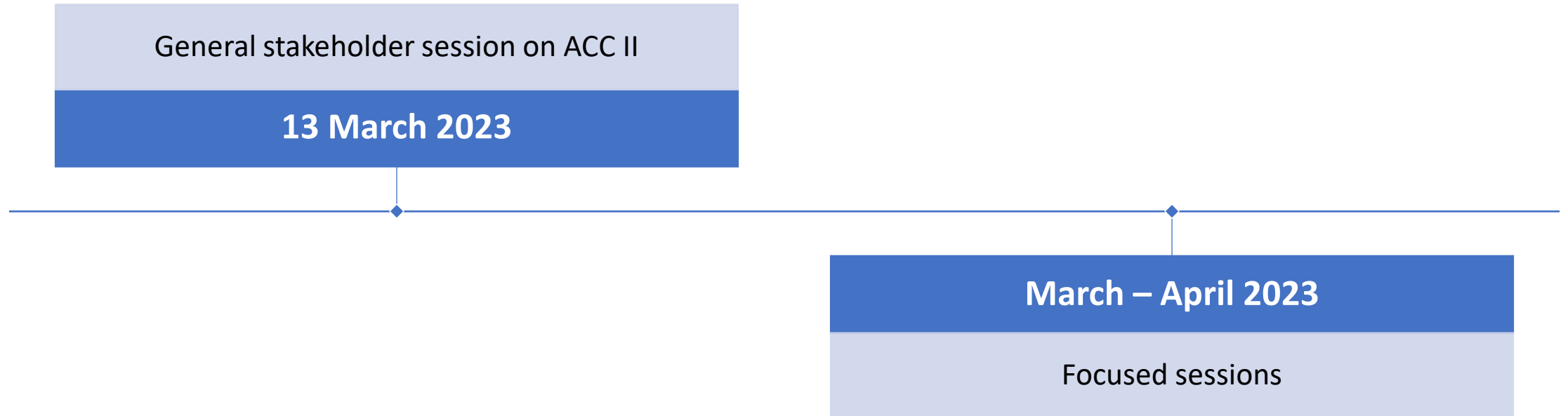
California Advanced Clean Cars II*

*Information from [Advanced Clean Cars II | California Air Resources Board](#)

California's ACC II regulation:

- Amends the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles, and relies on currently available advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric-vehicles, to meet air quality and climate change emissions standards.
- Amends the Low-emission Vehicle Regulations to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions.

ACC II Stakeholder Schedule



Control and Prohibition of CO₂ Emissions: Electric Generating Units (EGUs)

- The Control and Prohibition of Carbon Dioxide Emissions rule was published 1/3/23.
- The rule is expected to reduce CO₂ emissions from fossil fuel-fired electric generating units through the application of output-based emission limits.

Control and Prohibition of CO₂ Emissions: Electric Generating Units (EGUs)

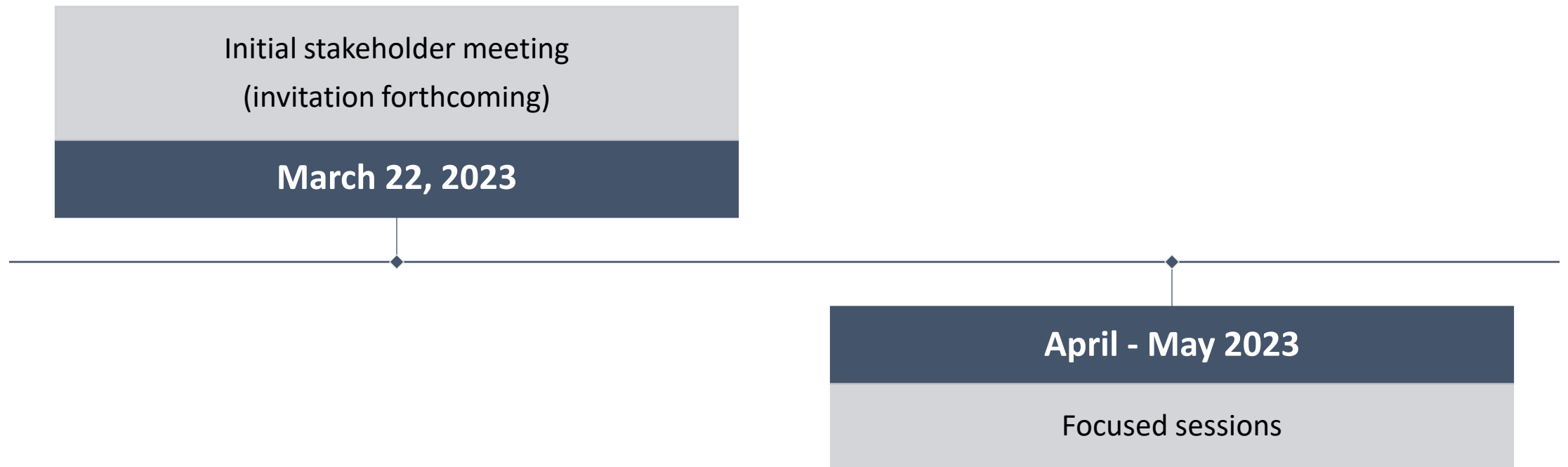
Emission limits for existing EGUs

Compliance deadline	Emission limit
June 1, 2024	1,700 lb CO ₂ /MWh gross energy output
June 1, 2027	1,300 lb CO ₂ /MWh gross energy output
June 1, 2035	1,000 lb CO ₂ /MWh gross energy output

Control and Prohibition of CO₂ Emissions: Electric Generating Units (EGUs)

- The Department is considering potential rulemaking to encourage the incorporation of zero or low emitting electric generation into an existing EGU's total electric output, which would lower the unit's average emission rate (lb./MWh) and allow the unit to comply with an emission limit.
- As part of this rulemaking concept, the Department will explore options to give existing EGUs flexibility to comply with Tier 2 and Tier 3 CO₂ compliance deadlines.
- Flexibility would allow a facility to use alternative zero to low emitting electric generating technologies (like renewable energy and battery storage) to meet the emissions limit through averaging.

EGU Stakeholder Schedule





Facility/Campus decarbonization

- The Department received numerous comments when it proposed rules to replace fossil fuel-fired boilers in non-residential buildings. Commenters were divided.
- While many support policies to lower emissions from the buildings sector, many also expressed concern about the increased costs of installing (including building retrofitting and infrastructure) and operating an electric boiler compared with an efficient natural gas boiler.
- The Department will continue to explore potential alternatives to reduce facility and campus emissions.



Facility/Campus decarbonization

- Executive Order 316 directs the Office of Climate Action and the Green Economy to develop and release by March 2024 a strategic roadmap to building decarbonization
- Executive Order 317 directs the Board of Public Utilities (BPU) to engage stakeholders on the development of natural gas utility plans to reduce emissions from the natural gas sector



Department stakeholder session

- Department's role to help inform the policy/regulatory framework that would be part of the building decarbonization roadmap and complement BPU's efforts
- General meeting in May 2023 to be scheduled

Questions?

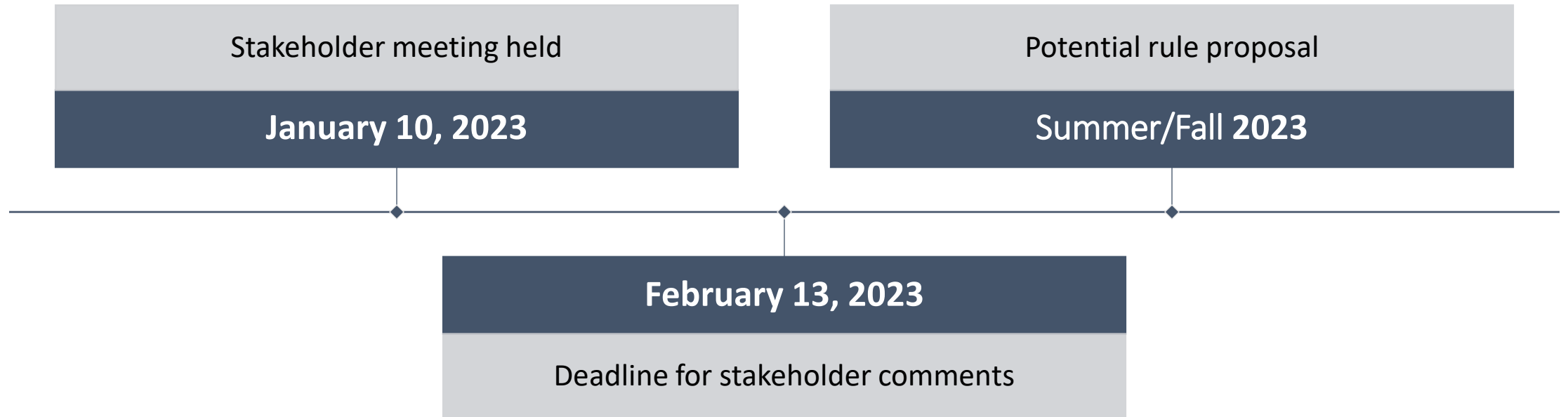
Disclaimer: Information presented is for discussion purposes only and does not reflect any final agency decision.

What else is the
Department doing?

Appliance and equipment efficiency standards

- Rulemaking to implement P.L. 2021, c. 464, which establishes minimum efficiency standards for certain new products:
 - sold, offered for sale, or leased in the State, or
 - installed for compensation in the State
- Effective Jan. 18, 2023.
- The Department, in consultation with BPU and DCA, is also directed to conduct a study to evaluate whether to add additional products and whether to adopt more stringent standards. This study is to be completed within 3 years.

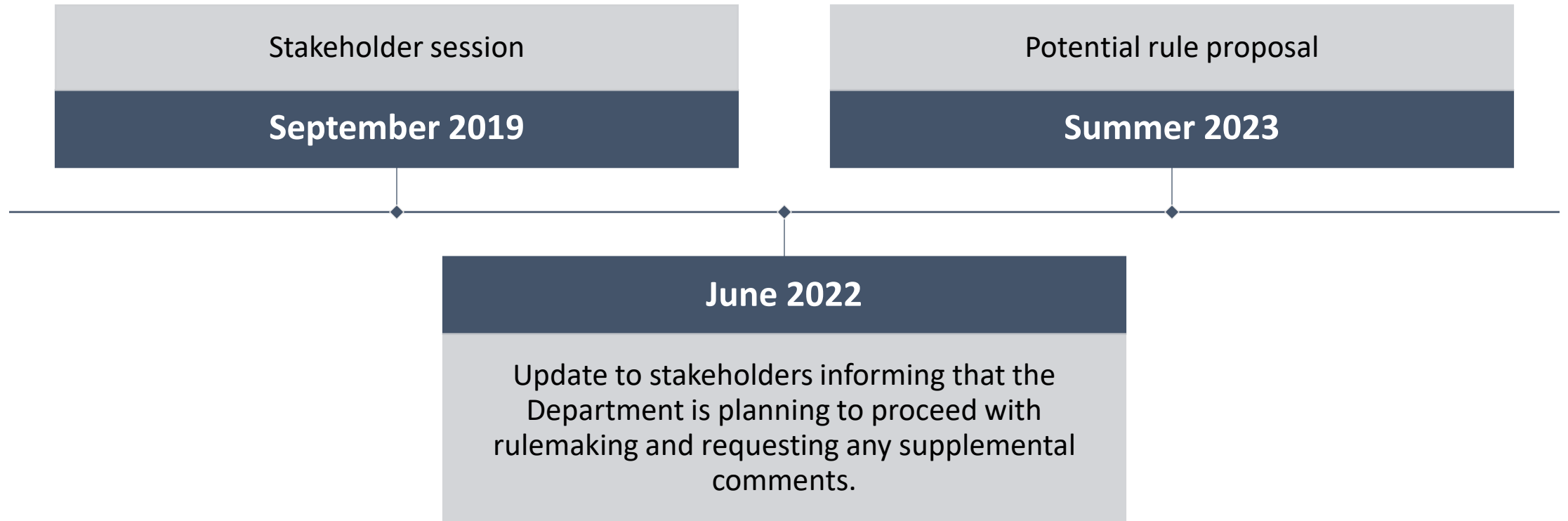
Efficiency standards schedule



Consumer products and architectural and industrial maintenance coatings (Consumer products rule)

- Consumer Products and Architectural Coatings represent the largest source of volatile organic compound (VOC) emissions in the State's air emission inventory, compared to mobile, industrial and commercial sources.
- VOCs are precursors to ozone formation and secondary fine particulate matter formation.
- The existing rules control the emissions of VOCs from consumer products and coatings by setting limits on the VOC content of products sold in the State for use in the State.
- Rulemaking would update the Department's rules to reduce VOC emissions from consumer products and coatings.

Consumer products schedule



GWRA 80x50 Progress Report

- The Department is working on a report that will mark the progress of the various recommendations included in the 80x50 Report
- Anticipated release in fall/winter 2023

RGGI Strategic Funding Plan for 2023 through 2025: coming soon

- Stakeholder meetings on the next RGGI Strategic Funding Plan
- Scoping document

Lead by Example: Department initiative

The Department will:

- Focus on Department buildings and lands
- Evaluate greenhouse gas emissions and reduction strategies, including heating and hot water applications, renewable energy systems, and vehicle fleets.

Which will allow the Department to

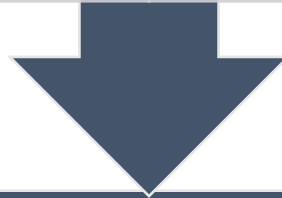
- Gain greater familiarity with the most efficient tools available on the market and the technical and economic limitations to retrofitting older buildings.
- Show energy and environmental leadership
- Reduce greenhouse gas emissions
- Raise public awareness of the benefits of clean energy technologies
- Model for State to take a whole-of-government approach in addressing climate change and to inform future regulatory actions

Additional potential follow-up

Reporting requirements

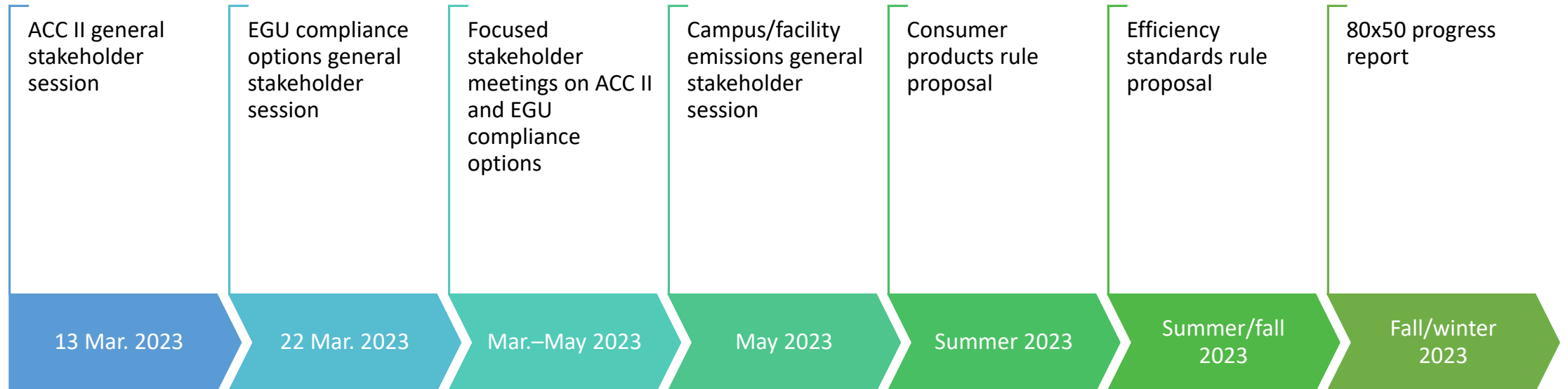
The greenhouse gas monitoring and reporting rule requires natural gas distribution companies to report each blowdown event in excess of 50 standard cubic feet.

The ACT fleet reporting rule requires fleet owners/operators to submit information about in-State operation of fleets of vehicles over 8,500 GVWR.



The Department will evaluate the information reported and determine if additional rulemaking is warranted.

Summary of upcoming stakeholder schedule and potential rule proposals



Updates will be posted on the NJPACT website at [NJDEP|NJ PACT: Protecting Against Climate Threats | Home](#)

Events will also be added to DEP calendar events page at [Upcoming Events | New Jersey Department of Environmental Protection \(nj.gov\)](#)

Questions?

Disclaimer: Information presented is for discussion purposes only and does not reflect any final agency decision.

If we could not get to your question, please contact the following:

For ACC II, please email njairrulesmobile@dep.nj.gov, or attend the first general meeting on March 13, 2023.

For EGUs, please email njclimate@dep.nj.gov or attend the first general meeting on March 22, 2023.

For facility/campus decarbonization, please email njclimate@dep.nj.gov and stay tuned for the general stakeholder meeting to be scheduled in May 2023.

For general questions, please use the Department's contact form at [NJDEP | New Jersey Department of Environmental Protection | Contact Form](#)

Thank you for attending