EPA GREENHOUSE GAS INITIATIVES

IOGCC

OCTOBER 17, 2023

Methane Emissions Reduction Program

Inflation Reduction Act provides new authorities under Clean Air Act Section 136 to reduce methane emissions from oil and gas operations

There are three aspects to the Methane Emissions Reduction Program

1. **Financial and Technical Assistance**
2. **Greenhouse Gas Reporting Program Subpart W Revisions**
3. **Waste Emissions Charge**

Financial and Technical Assistance

Financial and Technical Assistance

The Inflation Reduction Act allocates over $1 billion to reduce methane emissions through financial assistance and technical assistance.

Congress specified that use of funds can include:

- Preparing and submitting greenhouse gas reports.
- Monitoring methane emissions.
- Reducing methane and other greenhouse gas emissions (e.g., deploying equipment to reduce emissions, supporting innovation, permanently shutting in and plugging wells, mitigating health effects in low-income and disadvantaged communities, improving climate resiliency, and supporting environmental restoration).

Financial and Technical Assistance

- EPA, Department of Energy (DOE) and DOE's National Energy Technology Laboratory (NETL) are partnering to provide more than $1 billion in:
  - **Financial assistance** for methane monitoring and to reduce methane emissions from the oil and gas sector.
  - **Technical assistance** to help states, industry, and other partners implement solutions that reduce methane emissions.

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Financial Assistance: First Funding Opportunity Released

On August 30th, EPA, DOE, and NETL announced the first in a series of funding opportunities, titled *Mitigating Emissions from Marginal Conventional Wells*.

- Provides up to **$350 million** in formula grant funding to eligible states to assist industry to voluntarily identify and permanently reduce methane emissions from leaks and daily operations of low-producing conventional wells.
- Funding formula based on the State's proportion of the total national marginal conventional wells (MCWs) located on non-Federal land.
  - Allocations may be adjusted by the number of States applying to participate.

Financial Assistance Next Steps

- Application period closes October 20, 2023
- Awards expected in December 2023

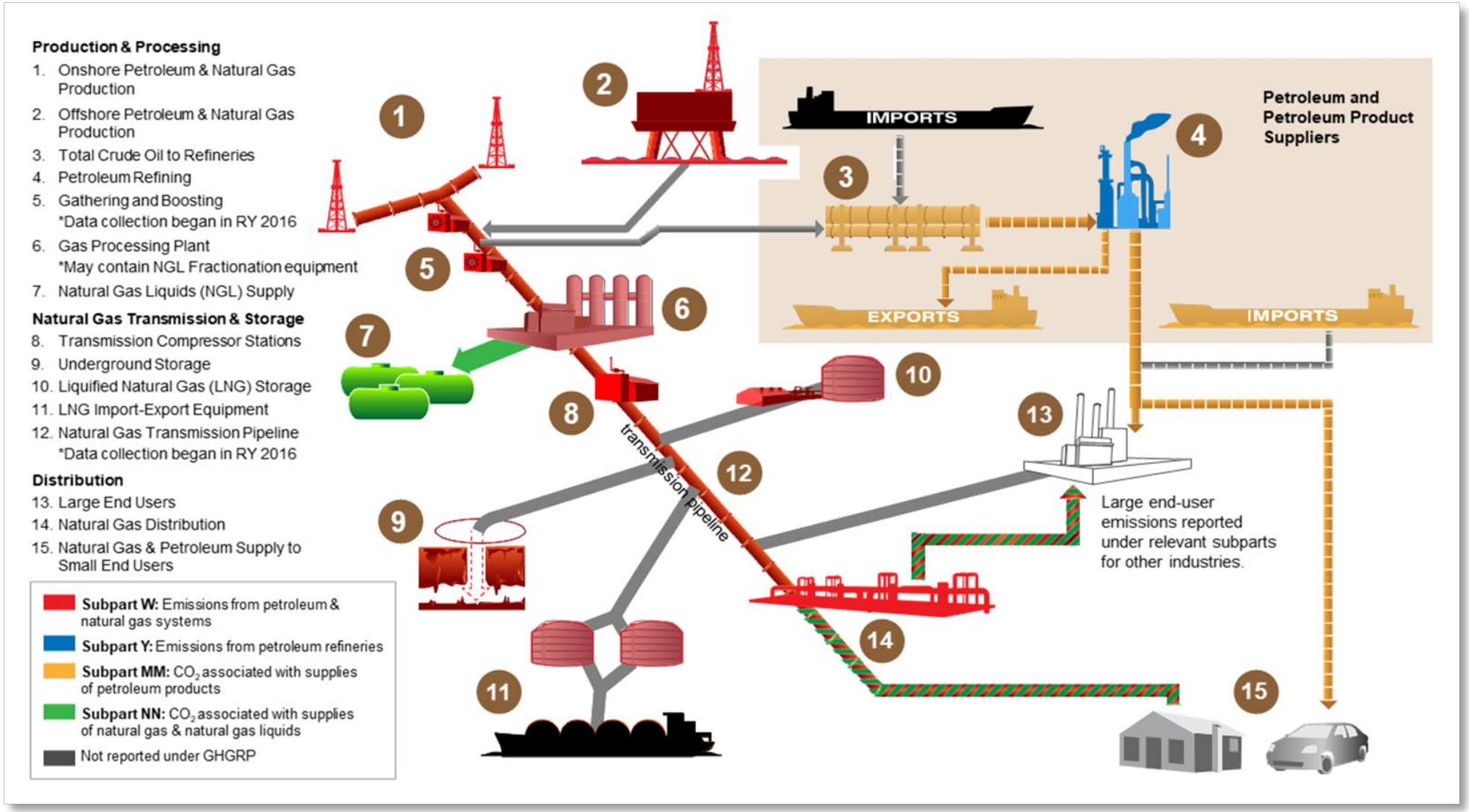
Following this non-competitive solicitation, EPA and DOE intend to offer one or more additional competitive solicitations to monitor and mitigate emissions from the oil and gas sector, which will be available to a broader range of applicants.

Greenhouse Gas Reporting Program (GHGRP) Subpart W Revisions

Background on Greenhouse Gas Reporting Program (GHGRP)

- Launched in response to Fiscal Year 2008 Consolidated Appropriations Act under Clean Air Act authority and codified at 40 CFR Part 98
- Annual reporting of greenhouse gas (GHG) data by 41 source categories
  - Covers a subset of oil and gas facilities; for example, about half of onshore oil and gas producing wells are subject to GHGRP
- Most facilities compare emissions for the facility to a 25,000 metric tons CO_2 equivalent (CO_2e) threshold to determine applicability
- Direct reporting to EPA electronically via EPA electronic GHG Reporting Tool (e-GGRT)
- EPA verification of GHG data

GHGRP Subpart W: Petroleum and Natural Gas Systems



GHGRP Subpart W Proposed Revisions

- The Inflation Reduction Act **directs EPA to revise requirements in Subpart W**
- Under Subpart W of the GHGRP, facilities that contain petroleum and natural gas systems and emit 25,000 metric tons CO2 equivalent or more report GHG data to EPA
- EPA is proposing to revise Subpart W consistent with the authority and directives set forth in the Inflation Reduction Act and Clean Air Act
  - Ensure that emissions reporting under subpart W is **based on empirical data** and allow owners and operators to submit appropriate empirical data to demonstrate the extent to which a charge is owed
  - **Add emission sources** to ensure that subpart W **reflects total methane emissions** from the applicable facilities
  - Improve data verification and **transparency**
- The comment period closed on October 2, 2023

Waste Emissions Charge

Waste Emissions Charge

- The Inflation Reduction Act also **establishes a waste emissions charge** for methane emissions from applicable oil and gas facilities that report more than 25,000 metric tons CO_2e per year to GHGRP subpart W and that exceed statutorily-specified waste emissions thresholds for individual industry segments:

Industry Segment	Industry Segment-Specific Methane Intensity
Onshore petroleum and natural gas production	0.20 percent of natural gas sent to sale from facility; or 10 metric tons of methane per million barrels of oil sent to sale from facility, if facility sends no natural gas to sale
Offshore petroleum and natural gas production	
Onshore petroleum and natural gas gathering and boosting	0.05 percent of natural gas sent to sale from or through facility
Onshore natural gas processing	
Onshore natural gas transmission compression	0.11 percent of natural gas sent to sale from or through facility
Onshore natural gas transmission pipeline	
Underground natural gas storage	
LNG import and export equipment	0.05 percent of natural gas sent to sale from or through facility
LNG storage	

- Waste emissions charge starts at $900 per metric ton for 2024 emissions and increases to $1,200 for 2025 and $1,500 for 2026 and thereafter. The charge only applies to the subset of facility methane emissions that exceed the waste emissions threshold (i.e., not total facility methane emissions).

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Waste Emissions Charge

The statutory text includes provisions that provide flexibility.

- **Netting.** Facilities under common ownership or control can net emissions from facilities exceeding the waste emissions threshold with emissions from facilities below the waste emissions threshold to reduce and potentially eliminate their total waste emissions charge
- **Exemptions.** Congress created three exemptions applicable to the waste emissions charge program:
  - Emissions from production facilities attributable to unreasonable delay in permitting may be subtracted from total methane subject to the waste emissions charge
  - Facilities in compliance with the methane requirements pursuant to CAA section 111(b) and (d) are exempt from the waste emissions charge
  - Emissions associated with plugged wells may be subtracted from total methane subject to the waste emissions charge

EPA expects to release a proposed rulemaking for the waste emissions charge in fall 2023.

Proposed Oil and Gas Rules

Over the past two years, EPA has issued two proposals to reduce methane and smog-forming volatile organic compound emissions from the oil and natural gas industry

- November 2021 proposal to:
  - Update and strengthen methane and VOC standards on the books for new, modified and reconstructed sources
  - Add standards for currently unregulated new, modified and reconstructed sources
  - Establish first nationwide Emissions Guidelines for states to regulate existing sources
- November 2022 supplemental proposal to:
  - Make proposed standards more comprehensive
  - Promote use of innovative technologies
  - Modify and refine proposed standards based on public input
  - Provide implementation details for states
  - Provide regulatory text

Crude Oil and Natural Gas Operations:

Where EPA's Proposed Methane Rules Would Apply

Production & Processing

EPA's methane proposal covers equipment & processes at:

1. Onshore well sites
2. Storage tank batteries
3. Gathering & boosting compressor stations
4. Natural gas processing plants

Natural Gas Transmission & Storage

EPA's methane proposal covers equipment & processes at:

5. Compressor stations
6. Storage tank batteries

Distribution

(not covered by EPA rules)

7. Distribution mains/services
8. City gate
9. Regulators and meters for customers

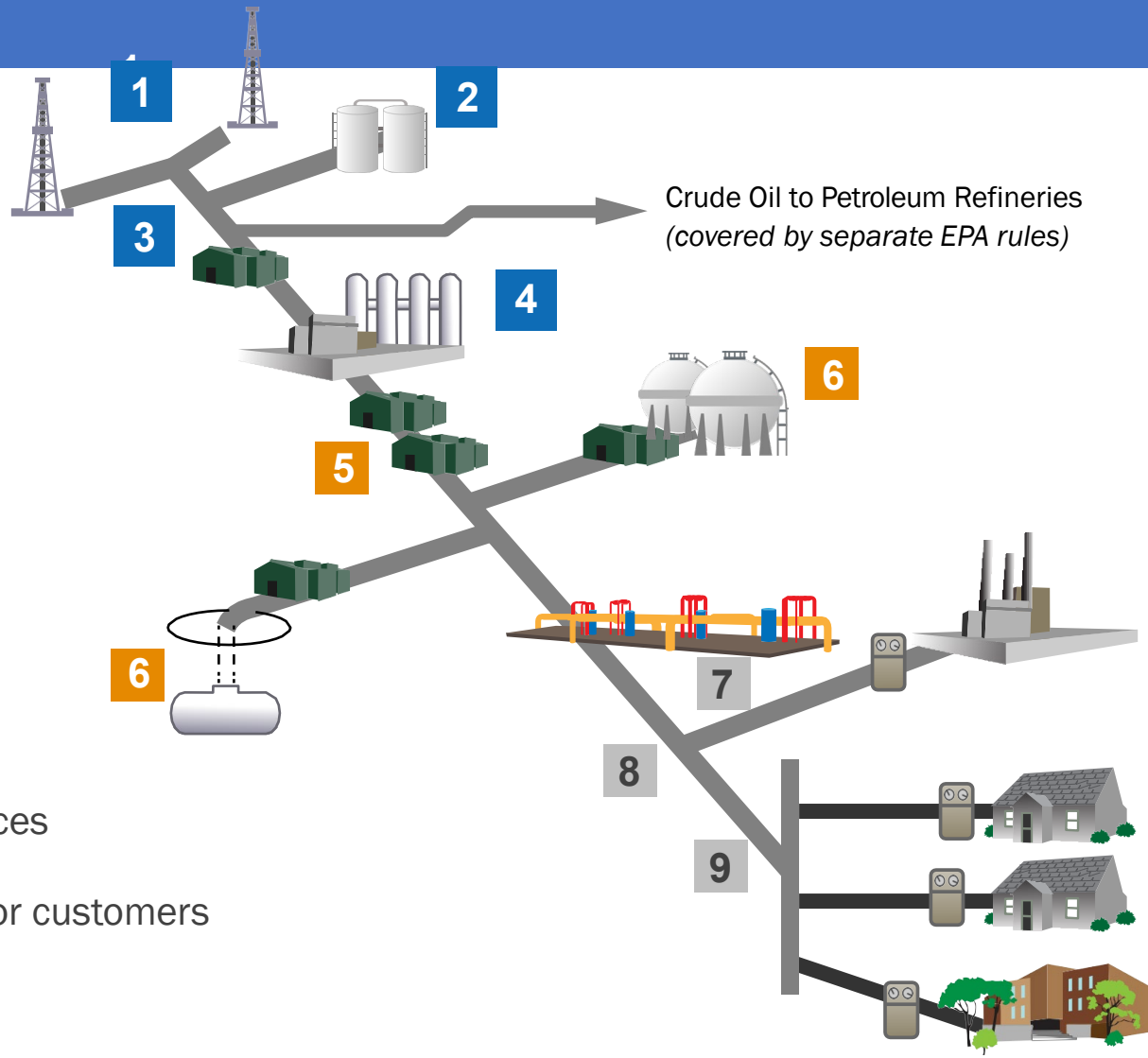

Figure: Adapted from American Gas Association and EPA Natural Gas STAR Program

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Supplemental Proposal Refresher

The supplemental proposal would:

Fugitive Emissions from Well Sites

- Ensure that all well sites are monitored for leaks, with requirements based on the type and amount of equipment
- Allow the use of continuous monitoring technologies to check for leaks

Abandoned and Unplugged Wells

- Prevent leaks from abandoned and unplugged wells by requiring documentation that well sites are properly closed and plugged before monitoring is allowed to end

Advanced Methane Detection Technologies

- Allow an alternative periodic screening approach that ties the frequency of required monitoring surveys to the detection ability of the technology used
- Allow owners and operators the option of using continuous monitoring technologies to check for methane leaks
- Streamline approval process for use of advanced methane measurement technologies

Super Emitter Program

- Identify super-emitter events for prompt mitigation

The supplemental proposal also would:

Flares

- Require flares to be properly operated to reduce emissions
- Require owners/operators of oil wells to evaluate broader range of alternatives to flaring associated gas

Pneumatic Pumps

- Set a zero-emissions standard for pneumatic pumps at affected facilities in all segments of the industry

Dry Seal Centrifugal Compressors

- Set standards for these previously unregulated sources

Pneumatic Controllers

- Update definition of affected facility
- Remove exemption for: natural gas-drive controllers with emissions that are routed to a process; self-contained controllers

Emission Guidelines for Existing Sources

- Provides information on plans for existing sources, including state program equivalency, remaining useful life and other factors, meaningful engagement, and timelines

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Proposal Status

- EPA considered the comments in preparing a draft final rule
  - The Agency held public hearings on both proposals and received nearly 1 million comments on the proposals combined
- Draft final rule is at the Office of Management and Budget for Interagency Review
- EPA expects to issue a final rule later this year

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Climate Pollution Reduction Grants (CPRG) Program

2022 Inflation Reduction Act authorized creation of two-phase $5 billion program:

- **Planning grants** to develop strong climate pollution reduction strategies ($250 M)
  - Program guidance for noncompetitive grants issued March 1, 2023
- **Implementation grants** to help put plans into action ($4.6 B)
  - Two competitions announced September 20, 2023
    - $4.3 billion general competition for all eligible applicants; applications due April 1, 2024
    - $300 million competition for tribes and territories; applications due May 1, 2024

CPRG Program Objectives

Implement ambitious measures that will achieve significant cumulative greenhouse gas (GHG) reductions by 2030 and beyond

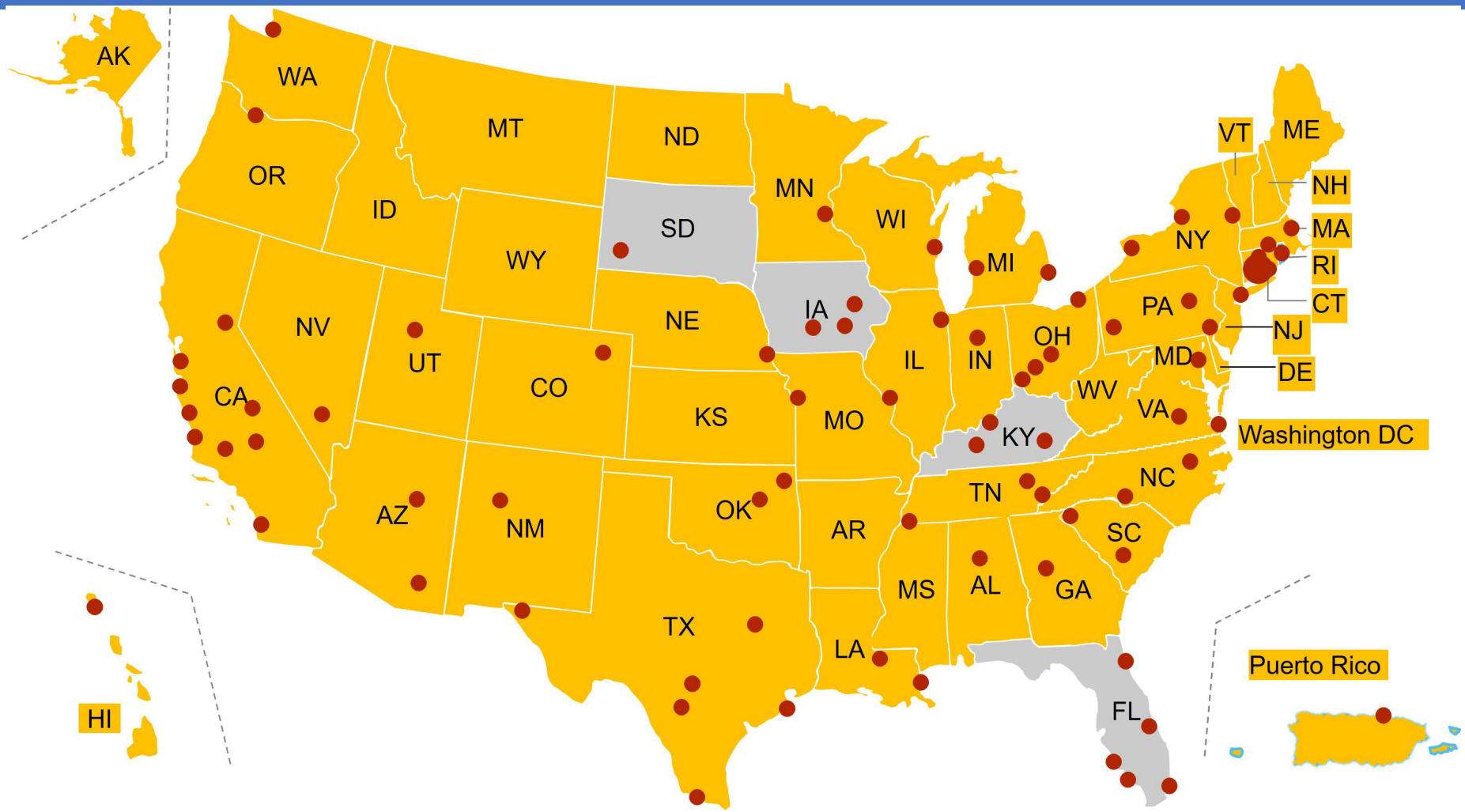
Achieve substantial community benefits (such as reduction of criteria and hazardous air pollutants), particularly in low-income and disadvantaged communities

Complement other funding sources to maximize these GHG reductions and community benefits

Pursue innovative policies and programs that are replicable and can be “scaled up” across multiple jurisdictions

CPRG Planning Grantees

Eligible applicants can review a complete list of CPRG planning grantees



- States (+ DC, PR)
- Metropolitan Statistical Areas (MSAs)
- *States that did not opt in*

Additional Planning Grantees

- 4 territories
- 90 tribes and tribal consortia (covering ~225 tribes)

Implementation Grants Competitions

Timeline for General Competition

Sept 20, 2023	Feb 1, 2024	March 1, 2024	April 1, 2024	July 2024*	October 2024*
Notice of Funding Opportunity (NOFO) released	Optional Notice of Intent to Apply deadline	Priority Climate Action Plans due	Application deadline	Notification of Awards	Funds Awarded

Parallel Timeline for Tribes and Territories Competition

September 20, 2023	*March 1, 2024*	*April 1, 2024*	*May 1, 2024*	*September 2024**	*December 2024**

*Anticipated Dates

THANK YOU

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