RNG Commitment Option

Methane Challenge Continuous Improvement Proposal

Methane Challenge Webinar
October 14, 2020

Methane Challenge Overview

- Program launched in 2016
- Partners make *specific, transparent, voluntary commitments* to reduce methane emissions
- Companies track and report voluntary actions annually
- Program leverages Greenhouse Gas Reporting Program data and electronic reporting system
- Publicly recognizes natural gas company Partners as voluntary-action leaders
- New Partners can join at any time
- Thanks to our 69 partner companies across the value chain!

Methane Challenge Commitment Options

- **Best Management Practice (BMP) Commitment Option:**
  - Commit to mitigate emissions from one or more of ten key emission sources using specific technologies, practices
  - Company-wide implementation of best practices within five years
  - Track and report activities annually
- **ONE Future Commitment Option**
  - Commit to an emissions intensity rate across their operations, separately through ONE Future organization
  - Performance-based approach: provides flexibility in achieving goals
  - Report methane emission and reduction data across operations
  - EPA collects and publishes data annually

Methane Challenge Continuous Improvement

- "Continuous Improvement" was built into the Methane Challenge Program
  - Partners or EPA propose changes or updates to program
  - Partners and the public provide feedback on proposed change
  - Process can be used for updates in either commitment option
- Updates to the program may include (but are not limited to):
  - Adding a new emission source
  - Adding a new BMP to an existing emission source
  - Revising reporting methodologies and/or data elements

Continuous Improvement Process

Step 1	Partner submits written proposal to EPA *(Note: a proposal can be initiated by a program Partner or EPA)*
Step 2	EPA reviews proposal (using evaluation criteria) to assess completeness, relevance, feasibility, and program's capabilities
Step 3	EPA communicates results of initial review to Partner; if appropriate, EPA works with Partner to develop a Program technical document
Step 4	EPA shares draft technical document with Methane Challenge partners (and public via website); stakeholders have ~ one month to provide feedback
Step 5	EPA revises technical document as needed
Step 6	EPA implements change (as resources allow)

Learn more about the process: https://www.epa.gov/natural-gas-star-program/methane-challenge-program-continuous-improvement-fact-sheet

Proposed RNG Commitment
Overview

- **Commitment goal**: share data on RNG supply through natural gas systems to develop a more robust understanding of the extent and nature of RNG distributed and used through natural gas systems
- **Definitions**
  - ***Biogas***: gas resulting from the decomposition of organic matter under anaerobic conditions. The principle constituents are methane and carbon dioxide. Raw biogas has a methane content between 45 and 65 percent, depending on the source of the feedstock, and must go through a series of steps to be converted into RNG.
  - ***Renewable Natural Gas (RNG)*:*** Biogas that has been upgraded for use in place of fossil natural gas.

**RNG is a "term of art" and there is not at present a standard definition. This description has been developed by EPA's voluntary programs.*

Proposed RNG Commitment
Details

- **Scope of commitment**: receipt and supply of RNG through **natural gas transmission and distribution systems**
  - *The program recognizes there is broad stakeholder interest in hydrogen (i.e., hydrogen produced by electrolysis using renewable electricity) and would welcome specific proposals and/or suggestions for a future program update that could possibly include hydrogen. At this time however, the Program is looking to finalize this commitment focused on RNG from biogas.*
- **What:** Partners would commit to report as many data elements as possible by end of commitment
- **Who:** Active BMP and ONE Future partners in Transmission & Storage and Distribution segments
- **Proposed requirements for this commitment:**
  - Be directly receiving (i.e., via pipeline interconnect or virtual pipeline) RNG generated by a biogas project
  - Have at least one other Methane Challenge commitment that directly addresses mitigation of methane emissions from Partner's operations
- **Data will be published on profile pages**
  - At this time, do not anticipate tracking a 'progress metric'

Reporting
Overview

- Reporting would encompass information about:
  - The biogas project(s) from which the RNG was sourced,
  - The interconnect(s) through which the RNG was injected into the partner's system,
  - The designated end use(s) for the gas, and
  - Company-specific goals or strategies for supply of RNG (e.g., percent of natural gas supply to be RNG by a certain year; convert vehicle fleet to run on natural gas and use RNG for fuel)
- EPA recognizes that transmission and distribution companies may not be privy to all information being requested, particularly about the end use of the RNG in their systems

Reporting
Biogas Project

For each project from which the Partner is receiving RNG:

- What is the feedstock for the biogas? *[to be selected from a list]*
- Name the specific municipal solid waste landfill or digester (i.e., at water resource recovery facilities (wastewater treatment plants), livestock farms, food production facilities or organic waste management operations) from which the RNG was generated
- What upgrading technology was used? *[to be selected from a list]*

Reporting
Interconnect/Gas Quality

For each interconnect:

- Volume of gas received this year?
- What are the pipeline gas quality specifications?
  - Nitrogen; Oxygen; Water content; CO_2;Hydrogen Sulfide; Siloxanes; Heating value
- How far is the interconnect from the feedstock source?
- Is there a virtual pipeline?
  - If yes, details about the virtual pipeline

Reporting
End Use

For each end use:

- What is the intended destination for the RNG (city/state/facility) [*if known]*?
- What is the designated end use? (Thermal applications; Electricity generation; Vehicle fuel; Bio-product feedstock; Other (specify); Unknown)
- Volume of RNG going to this end use, this year [*if known*]
- For Distribution Partners – does your company offer a ‘green gas’ option to residential customers?

Reporting
Additional Information

- Company-specific goals or strategies for supply of RNG
  - e.g., percent of natural gas supply to be RNG by a certain year; convert vehicle fleet to run on natural gas and use RNG for fuel; etc.
- Information about the Partner's system (mileage of pipeline)
- Text boxes will also be available in the Biogas Project, Interconnect, and End Use sections to provide additional qualitative information

Questions for Feedback

The Program **welcomes feedback on any aspect of the proposal** but is particularly interested in feedback on:

- The proposed commitment is focused on reporting. Would more specific goals (e.g., commit to certain percentage of throughput being RNG) be of interest?
- Whether the proposed data elements are sufficient to understand a company's use/supply of RNG.
- Whether the proposed data elements would complement data collection/reporting Partners may be doing for other programs (e.g., third party certifications).
- For the data elements regarding pipeline gas quality specifications - whether any additional key constituents should be added to the list.
- Whether reporting the data at the 'interconnect level' provides the best level of granularity to understand how RNG is supplied by natural gas companies.

Next Steps

- Submit feedback on proposal to GasSTAR@epa.gov by **October 30**
- EPA will review feedback and revise proposal if appropriate
- EPA will then decide if the new commitment option will be finalized and share details with stakeholders
- If finalized, Partners would be able to commit to this new commitment option after the Program's "Information Collection Request" renewal is approved in 2021

Questions

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epa.gov/natural-gas-star-program

Appendix

EPA Voluntary Methane Partnership Programs

AgSTAR

Agriculture Sector

www.epa.gov/agstar

Landfill Methane Outreach Program

Landfill & LFG Energy Sector

www.epa.gov/lmop

Methane Challenge and Natural Gas STAR

Oil and Natural Gas Sector

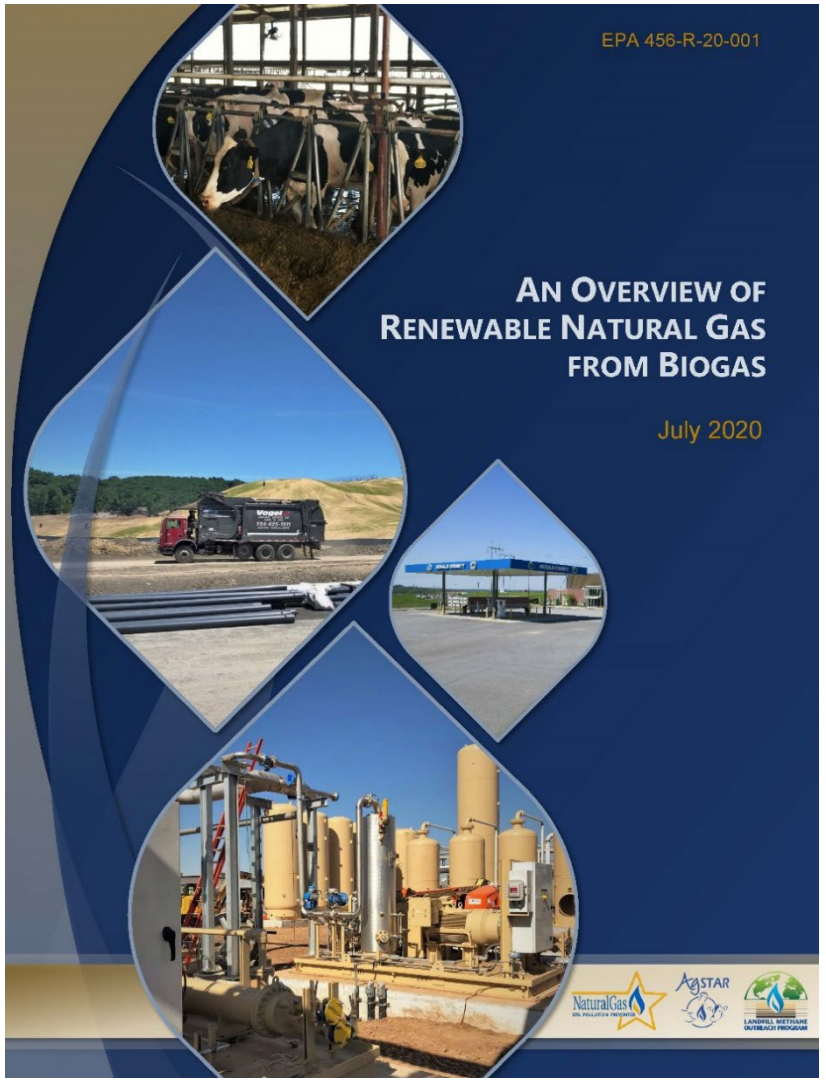
www.epa.gov/gasstar

EPA RNG Resources

- **Resource paper** intended to promote and potentially assist in the development of RNG projects
  - Developed by AgSTAR, LMOP, & Natural Gas STAR
  - Includes appendix of NG companies that have accepted RNG interconnections
- **Webinars and presentations**
- **Project maps**

Available at:

https://www.epa.gov/lmop/renewable-natural-gas



EPA RNG Resources
Biogas Toolkit

www.epa.gov/biogastoolkit

- A web-based toolkit with over 30 tools and resources to facilitate biogas project development
- Roadmap for planning and implementing biogas projects and quantifying economic and environmental impacts
- Audience: Project implementers, developers, financiers, and policymakers