



Natural Gas STAR Methane Challenge Program Implementation Plan

Partner Name

Current as of (date)

Partner Implementation Manager

Name: _____

Title: _____

Address: _____

City/State/Zip: _____

Telephone/Fax: _____

E-mail: _____

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Natural Gas STAR Methane Challenge Program Implementation Plan

Partner Methane Challenge Commitments¹

BMP Commitment Option

	Source	Start Date	Achievement Year
Onshore Production			
<input type="checkbox"/>	Pneumatic Controllers		
<input type="checkbox"/>	Fixed Roof, Atmospheric Pressure Hydrocarbon Liquid Storage Tanks		
Gathering and Boosting			
<input type="checkbox"/>	Pneumatic Controllers		
<input type="checkbox"/>	Fixed Roof, Atmospheric Pressure Hydrocarbon Liquid Storage Tanks		
<input type="checkbox"/>	Reciprocating Compressors - Rod Packing Vent		
<input type="checkbox"/>	Centrifugal Compressors - Venting		
Natural Gas (NG) Processing			
<input type="checkbox"/>	Reciprocating Compressors - Rod Packing Vent		
<input type="checkbox"/>	Centrifugal Compressors - Venting		
NG Transmission & Underground Storage			
<input type="checkbox"/>	Reciprocating Compressors - Rod Packing Vent		
<input type="checkbox"/>	Centrifugal Compressors - Venting		
<input type="checkbox"/>	Transmission Pipeline Blowdowns between Compressor Stations		
<input type="checkbox"/>	Pneumatic Controllers		
NG Distribution			
<input type="checkbox"/>	Mains – Cast Iron and Unprotected Steel (<i>Commitment Rate:</i>)		
<input type="checkbox"/>	Services – Cast Iron and Unprotected Steel		
<input type="checkbox"/>	Distribution Pipeline Blowdowns (<i>Commitment Rate:</i>)		
<input type="checkbox"/>	Excavation Damages		

Partner Methane Challenge Commitments

ONE Future Emissions Intensity Commitment Option

Segment:		Intensity Target:		Target Year:	
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¹ Partners may delete unused rows within the table, and may duplicate rows and add relevant details as needed (e.g., a corporate parent partner that has different commitments for each LDC can duplicate relevant rows to list the commitments for each LDC).



ONE Future Coalition Implementation Plan for Natural Gas STAR Methane Challenge Program

Methane Challenge commitments and projected timeframe for meeting commitments (as specified in the Partnership Agreement)
 [Provide information on steps for achieving commitments such as anticipated rate of progress, key milestones, or other context.]

Kinder Morgan Inc. (hereinafter referred to as Kinder Morgan) is a charter member of Our Nation's Energy Future (ONE Future) coalition. ONE Future is focused on demonstrating an innovative, performance-based approach to the management of methane emissions directed toward a concrete goal: to achieve an average rate of methane emissions across the entire natural gas value chain that is one percent or less of total natural gas gross production. The ONE Future Commitment entails a Partner commitment to segment-specific intensity targets which represent emissions per volume produced or volume of throughput and add up to a 1% or less "leakage rate" along the value chain by 2025. Kinder Morgan's ONE Future emissions intensity commitment is:

ONE Future Emissions Intensity Commitment Segment: Transmission and Storage

Intensity Target: 0.31% Target Year: 2025

Emission Source Category	Start Date	Annual Reporting Deadline to Methane Challenge	Progress Report	Target Commitment Achievement Year	Comments
Equipment Leaks/Fugitive Emissions	1/1/2017	30-Jun	Annual	CY 2025	The CY2025 annual report would be submitted by June 30, 2026. The annual progress report will be provided to ONE Future by each participating company and ONE Future will provide an industry-wide progress report summary to EPA's Methane Challenge group.
Pipeline Segment Blowdowns	1/1/2017	30-Jun	Annual	CY 2025	The CY2025 annual report would be submitted by June 30, 2026. The annual progress report will be provided to ONE Future by each participating company and ONE Future will provide an industry-wide progress report summary to EPA's Methane Challenge group.
Other Reduction Technologies & Work Practices	1/1/2017	30-Jun	Annual	CY 2025	The CY2025 annual report would be submitted by June 30, 2026. The annual progress report will be provided to ONE Future by each participating company and ONE Future will provide an industry-wide progress report summary to EPA's Methane Challenge group.

Plans (if any) for actions to be evaluated and implemented

[For example, further expansion of Methane Challenge commitments]

Kinder Morgan will implement the following management practices across its Transmission and Storage operations to achieve the target emissions intensity commitment.

A. Leak Inspection and Maintenance at Compressor Stations

Kinder Morgan will implement leak inspections at its Transmission and Storage compressor stations over a five-year period commencing in 2017. The leak inspections will include compressor stations subject to U.S. Environmental Protection Agency's greenhouse gas reporting program (GHGRP, 40 CFR Part 98). An incremental 20% of facilities not subject to the GHGRP or other regulatory programs will be added annually over five years, 2017-2021. As of 2021, all Transmission and Storage compressor stations will be inspected annually. The leak inspections will be conducted using optical gas imaging cameras, or other EPA approved technologies. The methane emission surveys will be conducted with the components operating in the as found condition.

Leaks identified during the inspections will be evaluated and repaired as appropriate. If the repair or replacement is technically infeasible, would require a vent blowdown, a compressor station shutdown, a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit, the repair or replacement will be completed during the next scheduled compressor station shutdown for maintenance, well shutdown, well shut-in. Delay of repair will be allowed beyond the next scheduled compressor station shutdown for maintenance if (a) replacement parts cannot be acquired before the next scheduled shutdown for maintenance or (b) the delay is attributable to other good cause. The repair or replacement will be performed when parts and crews are available during a scheduled maintenance shutdown, but no longer than 2 years from discovery unless the shutdown will cause a greater release of natural gas than would be reduced by the repairs.

B. Transmission Pipeline Segment Blowdowns Between Compressor Stations

Kinder Morgan will use maintenance methods not requiring pipeline blowdowns to the degree possible required to maintain pipeline integrity. When blowdowns are required, Kinder Morgan will follow a process to minimize blowdown emissions. As time and conditions permit, existing KM compression, customer delivers and/or temporary compression will be used to reduce pipeline pressures prior to conducting blowdowns. Pipeline segment blowdowns will be reduced to the extent feasible while maintaining pipeline safety and minimizing adverse customer impacts.

C. Other Methane Emission Reduction Technologies and Work Practices

Kinder Morgan will evaluate and implement other methane emission reduction technologies or work practices on a case-by-case basis. Other specific technologies or work practices that are implemented will be reported to ONE Future and EPA in the annual reports.

Additional Information/Context (optional)

[Provide other information about historical actions in advance of joining Methane Challenge, or other information on how the Program will be implemented.]

V. EPA Natural Gas STAR Program Historical Participation and Methane Emission Reductions

Kinder Morgan's natural gas transmission pipelines have participated in EPA's Natural Gas STAR Program since 1993. Since 1993, Kinder Morgan's natural gas transmission pipelines have achieved greater than 85.9 billion cubic feet of natural gas (primarily methane) emissions reductions. These reductions have been achieved through implementation of directed inspection and maintenance programs at compressor stations and other surface facilities, using existing or temporary compression to reduce pipeline segment blowdowns, replacing reciprocating compressor rod packings, replacing high-bleed pneumatic devices, installing vapor recovery systems on liquid storage tanks, installation of gas turbine and electric motor driven compression, and implementation of other methane reduction technologies or work practices.

Name or ID	Participating Company Operation/Assets								Calendar Year(s) of Implementation**	Comments	
	Prod	G&B	Proc	T&S	Segment*						
					Trans PL Company			LNG Stor	LNG I/E	Distr	
Kinder Morgan, Inc.				yes	El Paso Natural Gas Company, L.L.C.						2017
Kinder Morgan, Inc.				yes	Tennessee Gas Pipeline Company, L.L.C.						2017
Kinder Morgan, Inc.				yes	Southern Natural Gas Company, L.L.C.						2017
Kinder Morgan, Inc.				yes	Natural Gas Pipeline Company of America LLC						2017
Kinder Morgan, Inc.				yes	Colorado Interstate Gas Company, L.L.C.						2017
Kinder Morgan, Inc.				yes	Cheyenne Plains Gas Pipeline Company, L.L.C.						2017
Kinder Morgan, Inc.				yes	Ruby Pipeline, L.L.C.						2017
Kinder Morgan, Inc.				yes	Mojave Pipeline Company, L.L.C.						2017
Kinder Morgan, Inc.				yes	TransColorado Gas Transmission Company LLC						2017
Kinder Morgan, Inc.				yes	Midcontinent Express Pipeline, LLC						2017
Kinder Morgan, Inc.				yes	Wyoming Interstate Company, L.L.C.						2017
Kinder Morgan, Inc.				yes	Kinder Morgan Louisiana Pipeline LLC						2017
Kinder Morgan, Inc.				yes	Kinder Morgan Tejas Pipeline LLC						2017
Kinder Morgan, Inc.				yes	Kinder Morgan Texas Pipeline LLC						2017
Kinder Morgan, Inc.				yes	Sierrita Gas Pipeline LLC						2017

<i>Kinder Morgan, Inc.</i>				yes	Kinder Morgan North Texas Pipeline LLC					2017
<i>Kinder Morgan, Inc.</i>				yes	Elba Express Company, L.L.C.					2017
<i>Kinder Morgan, Inc.</i>				yes	Horizon Pipeline Company, L.L.C.					2017
<i>Kinder Morgan, Inc.</i>				yes	Kinder Morgan Illinois Pipeline LLC					2017
<i>Kinder Morgan, Inc.</i>				yes	Kinder Morgan Border Pipeline LLC					2017
<i>Kinder Morgan, Inc.</i>				yes	Bear Creek Storage Company, L.L.C.					2017
<i>Kinder Morgan, Inc.</i>				yes	Young Gas Storage Company, Ltd.					2017