

## AGA Voluntary Sustainability Metrics: Quantitative Information - Washington Gas CY 2017

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**Parent Company:** AltaGas  
**Operating Company(s):** Washington Gas  
**Business Type(s):** Local Distribution Company  
**State(s) of Operation:** Maryland; Virginia; Washington, DC  
**Regulatory Environment:** Regulated  
**Note: Data from from operating companies i:**  
**Report Date:** Jan-19

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Year 2017	Definitions	Comments, Additional Information
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### NATURAL GAS DISTRIBUTION

<b>1 METHANE EMISSIONS AND MITIGATION FROM DISTRIBUTION MAINS</b>				
<b>1.1</b>	<b>Number of Gas Distribution Customers</b>		1,177,976	
<b>1.2</b>	<b>Distribution Mains in Service</b>			
			<i>These metrics should include all local distribution companies (LDCs) held by the Parent Company that are above the LDC Facility reporting threshold for EPA's 40 C.F.R. 98, Subpart W reporting rule.</i>	
1.2.1	Plastic (miles)		8,187.20	
1.2.2	Cathodically Protected Steel - Bare & Coated (miles)		4,433.93	
1.2.3	Unprotected Steel - Bare & Coated (miles)		476	
1.2.4	Cast Iron / Wrought Iron - without upgrades (miles)		481	
<b>1.3</b>	<b>Plan/Commitment to Replace / Upgrade Remaining Miles of Distribution Mains (# years to complete)</b>			
			<i>These metrics should provide the number of years remaining to take out of service, replace or upgrade cathodically unprotected steel mains, and cast iron/wrought iron mains, consistent with applicable state utility commission authorizations.</i>	<a href="#">For more information about our Accelerated Pipeline Replacement Programs, please see our Sustainability Report</a>
1.3.1	Unprotected Steel (Bare & Coated)			
1.3.2	Cast Iron / Wrought Iron			
<b>2 Distribution CO2e Fugitive Emissions</b>				
<b>2.1</b>	<b>CO2e Fugitive Methane Emissions from Gas Distribution Operations (metric tons)</b>			
			<i>Fugitive methane emissions (not CO2 combustion emissions) stated as CO2e, as reported to EPA under 40 CFR 98, Subpart W, sections 98.236(a)(3)(ix)(C) and (D), 98.236(r)(1)(iv) and (v), and 98.236(r)(2)(v)(A) and (B). This metric should include fugitive methane emissions above the reporting threshold for all natural gas local distribution companies (LDCs) held by the Parent Company that are above the LDC Facility reporting threshold for EPA's 40 C.F.R. 98, Subpart W reporting rule.</i>	<a href="#">For more information about our Accelerated Pipeline Replacement Programs, please see our Sustainability Report</a>
2.2	Natural Gas Throughput from Gas Distribution Operations in thousands of scf		174,344.00	Reported separately
			<i>This metric provides gas distribution throughput reported under Subpart W, 40 C.F.R. 98.236(aa)(9)(i) through (iii), as reported on the Subpart W e-GRRT integrated reporting form in the "Facility Overview" worksheet Excel form, gas received (column 1) plus the gas withdrawn (column 2) minus the gas injected into storage (column 3). See screenshot of e-GRRT report provided in template instructions.</i>	
2.3	CO2e Fugitive Methane Emissions Rate (metric tons per thousandssc of Throughput)		151,772,764.64	
			2.1 divided by 2.2	
			0.00115	

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### NATURAL GAS TRANSMISSION & STORAGE

<b>1.2</b>	<b>Transmission Pipelines, Blow Down Volumes, and Fugitive Emissions</b>			
1.2.1	Total Miles of Transmission Pipeline Operated by gas utility ( <i>miles</i> )		577	
1.2.2	Volume of Transmission Pipeline Blow Down Emissions - outside storage and compression facilities:		<i>As reported to EPA under 40 CFR 98, Subpart W.</i>	
1.2.2.1	scf natural gas			
1.2.2.3	metric tons CO <sub>2</sub> e			
<b>1.3</b>	<b>Underground Natural Gas Storage Emissions</b>			
1.3.2	Storage Compressor Station Emissions ( <i>metric tons CO<sub>2</sub>e</i> )		<i>As reported to EPA under 40 CFR 98, Subpart W.</i>	<i>Does not meet the reporting threshold.</i>
1.3.3	Storage Facility Wellhead Component Fugitive Emissions ( <i>metric tons of CO<sub>2</sub>e</i> )		<i>Utilizing EPA emissions factors, as reported to EPA under Subpart W, 40 CFR 98.236, on the e-GRRT integrated reporting form, "Equipment Leaks Surveys and Population Counts [98.236 (a, r)]" tab.</i>	<i>Does not meet the reporting threshold.</i>
<b>2</b>	<b>CO<sub>2</sub>e EMISSIONS FOR TRANSMISSION AND STORAGE COMPRESSION</b>			
2.1	CO <sub>2</sub> e Emissions for Transmission Pipelines ( <i>metric tons</i> )		<i>CO<sub>2</sub> combustion emissions as reported to EPA under 40 CFR 98, Subpart C and methane emissions stated as CO<sub>2</sub>e as reported under Subpart W</i>	<i>Does not meet the reporting threshold.</i>
2.2	CO <sub>2</sub> e Emissions for Storage Facilities ( <i>metric tons</i> )		<i>CO<sub>2</sub> combustion emissions as reported to EPA under 40 CFR 98, Subpart C and methane emissions stated as CO<sub>2</sub>e as reported under Subpart W</i>	<i>Does not meet the reporting threshold.</i>
<b>3</b>	<b>CONVENTIONAL AIR EMISSIONS FROM TRANSMISSION AND STORAGE COMPRESSION</b>			
3.1	Emissions reported for all permitted sources (minor or major)		The number of permitted sources for conventional emissions may not be the same number of sources reporting under the EPA GHG reporting rule. Companies may wish to describe which, or how many, sources are included in the conventional pollutants data and whether the CO <sub>2</sub> e data reported includes all of these sources.	<i>Does not meet the reporting threshold.</i>
3.1.1	NO <sub>x</sub> ( <i>metric tons per year</i> )			
3.1.2	VOC ( <i>metric tons per year</i> )			

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		2017		

### NATURAL GAS GATHERING & BOOSTING

<b>1</b>	<b>METHANE EMISSIONS</b>			
1.1	Gathering and Boosting Pipelines, Blow Down Volumes, and Emissions			
1.1.1	Total Miles of Gathering Pipeline Operated by gas utility (miles)		18.1	
1.1.2	Volume of Gathering Pipeline Blow Down Emissions (scf)		<i>This metric is collected to support calculations under EPA 40 CFR 98, Subpart W.</i>	
1.1.4	Gathering Pipeline Blow-Down Emissions outside storage and compression facilities (metric tons CO <sub>2</sub> e)			
<b>2</b>	<b>CO<sub>2</sub>e COMBUSTION EMISSIONS FOR GATHERING &amp; BOOSTING COMPRESSION</b>			
2.1	CO <sub>2</sub> e Emissions for Gathering & Boosting Compression Stations (metric tons)		<i>CO<sub>2</sub> combustion emissions reported to EPA under 40 CFR 98, Subpart C, as directed in Subpart W. 98.232(k).</i>	<i>Does not meet the reporting threshold.</i>
<b>3</b>	<b>CONVENTIONAL COMBUSTION EMISSIONS FROM GATHERING &amp; BOOSTING COMPRESSION</b>			
3.1	Emissions reported for all permitted sources (minor or major)		<i>The number of permitted sources for conventional emissions may not be the same number of sources reporting under the EPA GHG reporting rule. Companies may wish to describe which, or how many, sources are included in the conventional pollutants data and whether the CO<sub>2</sub>e data reported includes all of these sources.</i>	<i>Does not meet the reporting threshold.</i>
3.1.1	NO <sub>x</sub> (metric tons per year)			
3.1.2	VOC (metric tons per year)			