



Gas Company ESG/Sustainability Quantitative Information

Parent Company: Puget Energy
Operating Company(s): Puget Sound Energy
Business Type(s): LDC with Storage Operations
State(s) of Operation: Washington State
Regulatory Environment: Regulated
Report Date: October 2021

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Last Year 2019	Current Year 2020	Next Year 2021	Definitions
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Natural Gas Distribution					
					<p><u>All methane leak sources per 98.232 (j) (1-6) are included for Distribution. Combustion sources are excluded. CO₂ is excluded.</u></p>
1	METHANE EMISSIONS AND MITIGATION FROM DISTRIBUTION MAINS				
1.1	Number of Gas Distribution Customers	847,000	856,000	0	
1.2	Distribution Mains in Service				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.
1.2.1	Plastic (miles)	8,825	8,887	0	
1.2.2	Cathodically Protected Steel - Bare & Coated (miles)	4,069	4,068	0	
1.2.3	Unprotected Steel - Bare & Coated (miles)	-	-	0	
1.2.4	Cast Iron / Wrought Iron - without upgrades (miles)	-	-	0	
1.3	Plan/Commitment to Replace / Upgrade Remaining Miles of Distribution Mains (# years to complete)				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.
1.3.1	Unprotected Steel (Bare & Coated) (# years to complete)	-	-	0	Optional: # yrs by pipe type.
1.3.2	Cast Iron / Wrought Iron (# years to complete)	-	-	0	Optional: # yrs by pipe type.
2	Distribution CO₂e Fugitive Emissions				
2.1	CO ₂ e Fugitive Methane Emissions from Gas Distribution Operations (metric tons)	61,333	61,745	0	Fugitive methane emissions (not CO ₂ combustion emissions) stated as CO ₂ e, as reported to EPA under 40 CFR 98, Subpart W, sections 98.236(q)(3)(ix)(D), 98.236(r)(1)(v), and 98.236(r)(2)(v)(B) - i.e., this is Subpart W methane emissions as input in row 2.2 below and converted to CO ₂ e here. 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. <u>Calculated value based on mt CH₄ input in the 2.2 (below).</u>
2.2	CH ₄ Fugitive Methane Emissions from Gas Distribution Operations (metric tons)	2,453	2,470	0	INPUT VALUE (total mt CH ₄) as explained in definition above. Subpart W input is CH ₄ (mt).
2.2.1	CH ₄ Fugitive Methane Emissions from Gas Distribution Operations (MMSCF/year)	128	129	0	
2.3	Annual Natural Gas Throughput from Gas Distribution Operations in thousands of standard cubic feet (Mscf/year)	117,882,896	112,300,559	0	This metric provides gas throughput from distribution (quantity of natural gas delivered to end users) reported under Subpart W, 40 C.F.R. 98.236(aa)(9)(iv), as reported on the Subpart W e-GRRR integrated reporting form in the "Facility Overview" worksheet Excel form, Quantity of natural gas delivered to end users (column 4).
2.3.1	Annual Methane Gas Throughput from Gas Distribution Operations in millions of standard cubic feet (MMscf/year)	111,989	106,686	0	
2.4	Fugitive Methane Emissions Rate (Percent MMscf of Methane Emissions per MMscf of Methane Throughput)	0.11%	0.12%	--	Calculated annual metric: (MMSFC methane emissions/MMSCF methane throughput)



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Natural Gas Transmission and Storage					
<p>All methane leak sources per 98.232 (e) (1-8), (f)(1-8), and (m) are included for Transmission and Storage. Combustion sources are excluded. CO₂ and N₂O are excluded.</p>					
2	Underground Natural Gas Storage Methane Emissions				<p><u>Fugitive Methane</u> emissions as defined in 40 CFR 98 Sub W Section 232 (f) (1-8), CO₂ and N₂O emissions are excluded from this section.</p>
2.1.1	Pneumatic Device Venting (metric tons/year)	12.0	12.1	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(b)(4)
2.1.2	Flare Stack Emissions (metric tons/year)	-	-	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(n)(11)
2.1.3	Centrifugal Compressor Venting (metric tons/year)	5.2	3.8	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(o)(2)(ii)(D)(2)
2.1.4	Reciprocating Compressor Venting (metric tons/year)	0.2	0.2	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(p)(2)(ii)(D)(2)
2.1.5	Equipment leaks from valves, connectors, open ended lines, pressure relief valves, and meters (metric tons/year)	52.4	52.6	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
2.1.6	Other Equipment Leaks (metric tons/year)	-	-	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
2.1.7	Equipment leaks from valves, connectors, open-ended lines, and pressure relief valves associated with storage wellheads (metric tons/year)	33.6	33.7	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
2.1.8	Other equipment leaks from components associated with storage wellheads (metric tons/year)	-	-	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 232(q)(2)(v)
2.2	Total Storage Compression Methane Emissions (metric tons/year)	103.4	102.3	0.0	
2.3	Total Storage Compression Methane Emissions (CO ₂ e/year)	2,585.2	2,557.2	0.0	
2.4	Total Storage Compression Methane Emissions (MSCF/year)	5,385.9	5,327.4	0.0	Density of Methane = 0.0192 kg/ft ³ per 40 CFR Sub W EQ. W-36
5	Summary and Metrics				
5.1	Total Transmission and Storage Methane Emissions (MMSCF/year)	5.4	5.3	0.0	
5.2	Annual Natural Gas Throughput from Gas Transmission and Storage Operations (MSCF/year)	47,503,946	59,961,693	0.0	EIA 176 throughput or other reference for other throughput selected
5.2.1	Annual Methane Gas Throughput from Gas Transmission and Storage Operations (MMSCF/year)	45,128.7	56,963.6	0.0	Methane content in natural gas equals 95% based on 40 CFR 98 Sub W 233(u)(2)(vii)
5.3	Methane Emissions Intensity Metric (Percent MMscf of Methane Emissions per MMscf of Methane Throughput)	0.012%	0.009%	--	

Additional Metrics (Optional)				
<p><i>Insert additional rows in this section as necessary.</i></p>				