Southwest Gas AGA Voluntary Sustainability Metrics: Quantitative Information (2018)

Disclaimer: All information below is being provided on a voluntary basis, and as such, companies may elect to include or exclude any of the topics outlined below and customize the template to their specific needs. The decision to include data for historical and future years is at the discretion of each company and the specific years (e.g., historical baseline) should be chosen as appropriate for each company.

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Parent Company:

Operating Company(s):

Business Type(s):

Southwest Gas Corporation

Investor-Owned LDC/Utility

State(s) of Operation:

Arizona, California, Nevada

Regulatory Environment: Regulated

Note: Data from from operating companies is rolled up to the corporate level.

Report Date: Reporting Year 2018

	Reporting rear 2010	Voor		
Ref. No.	Refer to the "Definitions" column for more information on each metric.	Year 2018	Definitions	Comments, Additional Information
NATURA	AL GAS DISTRIBUTION			
1	METHANE EMISSIONS AND MITIGATION FROM DISTRIBUTION MAINS			
1.1	Number of Gas Distribution Customers	2,047,000		2018 Southwest Gas Holdings Annual Report
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)	24,976.5		Department of Transportation (DOT) Annual Report for RY2018
1.2.2	Cathodically Protected Steel - Bare & Coated (miles)	6,519.1		Department of Transportation (DOT) Annual Report for RY2018
1.2.3	Unprotected Steel - Bare & Coated (miles)	-		Department of Transportation (DOT) Annual Report for RY2018
1.2.4	Cast Iron / Wrought Iron - without upgrades (miles)	-		Department of Transportation (DOT) Annual Report for RY2018
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 catholdically unprotected steel mains, and cast iron/wrought iron mains, consistent with applicable state utility commission authorizations.	No cast iron or bare steel pipe. Southwest Gas has several pipe replacement programs throughout our service territory. Please see 2019 Sustainability Report.
1.3.1	Unprotected Steel (Bare & Coated) (# years to complete)	-	Optional: # yrs by pipe type.	
1.3.2	Cast Iron / Wrought Iron (# years to complete)	-	Optional: # yrs by pipe type.	
2	Distribution CO2e Fugitive Emissions		5 ": 4	USERA CREEK RYSSAS AT CANNA
2.2	CO2e Fugitive Methane Emissions from Gas Distribution Operations (metric tons) Natural Gas Throughput from Gas Distribution Operations in thousands of scf	147,432.0 214,609,693.0	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. 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	USEPA e-GRRT for RY 2018 for AZ, CA, NV. USEPA e-GRRT for RY 2018 for AZ, CA, NV.
2.3	CO2e Fugitive Methane Emissions Rate (metric tons per thousands scf of Throughput)	0.000687	e-GRRT report provided in template instructions. 2.1 divided by 2.2	

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Parent Company: Southwest Gas Holdings, Inc. Operating Company(s): **Southwest Gas Corporation** Business Type(s): Investor-Owned LDC/Utility State(s) of Operation: Arizona, California, Nevada

Regulatory Environment: Regulated

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Report D	Report Date: Reporting Year 2018					
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NATURAL GAS TRANSMISSION & STORAGE						
1.2	Transmission Pipelines, Blow Down Volumes, and Fugitive Emissions					
1.2.1	Total Miles of Transmission Pipeline Operated by gas utility (miles)	1458.4				
1.2.2	Volume of Transmission Pipeline Blow Down Emissions - outside storage and compression facilities:	-	As reported to EPA under 40 CFR 98, Subpart W.	Below reporting threshold		
1.2.2.1	scf natural gas	-		Below reporting threshold		
1.2.2.3	metric tons CO2e	-		Below reporting threshold		
1.3	Underground Natural Gas Storage Emissions	No Underground Storage				
1.3.2	Storage Compressor Station Emissions (metric tons CO2e)	-	As reported to EPA under 40 CFR 98, Subpart W.	Total station minus wellhead emissions		
1.3.3	Storage Facility Wellhead Component Fugitive Emissions (metric tons of CO2e)	-	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 (q, r)]" tab.			