Gas Company ESG/Sustainability Quantitative Information

Parent Company: NorthWestern Corp
Operating Company(s): NorthWestern Energy
Business Type(s): *>15% Vertically Integrated and remaining T&D only*
State(s) of Operation: Montana, South Dakota & Nebraska
Regulatory Environment: *Regulated*
Report Date: *6/1/23*

NorthWestern Energy - Total Company

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Baseline 2012	Calendar Year 2018	Calendar Year 2019	Calendar Year 2020	Calendar Year 2021	Calendar Year 2022	Definitions
	Natural Gas Distribution							
								All methane leak sources per 98.232 (i) (1-6) are included for Distribution. Combustion sources are excluded. CO_2 is excluded
1	**METHANE EMISSIONS AND MITIGATION FROM DISTRIBUTION MAINS**							
1.1	Number of Gas Distribution Customers	268,622	286,774	289,340	293,267	296,731	300,348	
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)*	4,477	4,842	4,912	4,995	5,088	5,287	
1.2.2	Cathodically Protected Steel - Bare & Coated *(miles)*	2,463	2,397	2,390	2,383	2,373	2,367	
1.2.3	Unprotected Steel - Bare & Coated *(miles)*	0	0	0	0	0	0	
1.2.4	Cast Iron / Wrought Iron - without upgrades *(miles)*	0	0	0	0	0	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 catholdically 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	0	0	0	0	0	Optional: # yrs by pipe type.
1.3.2	Cast Iron / Wrought Iron (*# years to complete*)	0	0	0	0	0	0	Optional: # yrs by pipe type.
2	Distribution CO2e Fugitive Emissions							
2.1	CO2e Fugitive Methane Emissions from Gas Distribution Operations *(metric tons)*	35,114	37,375	36,597	36,391	36,735	37,088	Fugitive methane emissions (not CO2 combustion emissions) stated as CO2e, 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 CO2e 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. Calculated value based on mt CH4 input in the 2.2 (below).
2.1.A	CO2e Fugitive Methane Emissions from Gas Distribution Operations/Customer *(metric tons/customers)*	0.1307	0.1303	0.1265	0.1241	0.1238	0.1235	
2.1.B	CO2e Fugitive Methane Emissions from Gas Distribution Operations/Line Mile *(metric tons/line mile)*	5.0593	5.1633	5.0116	4.9322	4.9235	4.8457	
2.2	CH4 Fugitive Methane Emissions from Gas Distribution Operations *(metric tons)*	1,405	1,495	1,464	1,456	1,469	1,482	
2.2.A	CH4 Fugitive Methane Emissions from Gas Distribution Operations/Customer *(metric tons/customers)*	0.0052	0.0052	0.0051	0.0050	0.0050	0.0049	
2.2.B	CH4 Fugitive Methane Emissions from Gas Distribution Operations/Line Mile *(metric tons/line mile)*	0.2024	0.2065	0.2005	0.1973	0.1969	0.1936	INPUT VALUE (total mt CH4) as explained in definition above. Subpart W input is CH4 (mt).
2.2.1	CH4 Fugitive Methane Emissions from Gas Distribution Operations (MMSCF/year)	73.15	77.86	76.24	75.81	76.50	77.18	
2.3	Annual Natural Gas Throughput from Gas Distribution Operations in thousands of standard cubic feet (*Mscf/year*)	73,633,770	88,635,813	90,923,715	86,058,464	87,798,021	89,300,281	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-GRRT 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)	69,952	84,204	86,378	81,756	83,408	84,835	
2.4	Fugitive Methane Emissions Rate (Percent *MMscf of Methane Emissions per MMscf of Methane Throughput*)	0.0032060	0.0030908	0.0026782	0.0028069	0.0028321	0.0029433	Calculated annual metric: (MMSFC methane emissions/MMSCF methane throughput)

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NorthWestern Energy - Total Company

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Baseline 2012	Calendar Year 2018	Calendar Year 2019	Calendar Year 2020	Calendar Year 2021	Calendar Year 2022	Definitions
	Natural Gas Transmission and Storage							
								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. CO_2 and N_2O are excluded.
0.1	Transmission Line Miles	Not Available	2,094.00	2,221.00	2,144.00	2,140.00	2,203.00	
1	**Onshore Natural Gas Transmission Compression Methane Emissions**							Fugitive Methane emissions as defined in 40 CFR 98 Sub W Section 232 (e) (1-8), CO2 and N2O emissions are excluded from this section.
1.1.1	Pneumatic Device Venting (metric tons/year)	Not Available	49.07	49.10	49.10	49.10	49.07	Value reported using calculation in 40 CFR 98 Sub W Section 236(b)(4)
1.1.2	Blowdown Vent Stacks (metric tons/year)	Not Available	62.00	63.50	29.96	47.80	28.64	Value reported using calculation in 40 CFR 98 Sub W Section 236(i)(1)(iii)
1.1.3	Transmission Storage Tanks (metric tons/year)	Not Available	47.20	47.20	47.20	47.20	47.19	Value reported using calculation in 40 CFR 98 Sub W Section 236(k)(2)(v)
1.1.4	Flare Stack Emissions (metric tons/year)	Not Available	-	-	-	-	-	Value reported using calculation in 40 CFR 98 Sub W Section 236(n)(11)
1.1.5	Centrifugal Compressor Venting (metric tons/year)	Not Available	13.50	13.50	13.50	13.50	13.50	Value reported using calculation in 40 CFR 98 Sub W Section 236(o)(2)(ii)(D)(2)
1.1.6	Reciprocating Compressor Venting (metric tons/year)	Not Available	30.70	30.70	30.70	30.70	30.66	Value reported using calculation in 40 CFR 98 Sub W Section 236(p)(2)(ii)(D)(2)
1.1.7	Equipment leaks from valves, connectors, open ended lines, pressure relief valves, and meters (metric tons/year)	Not Available	14.50	14.50	14.50	14.50	14.50	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
1.1.7.B	Equipment Leaks per Transmission Line Mile (metric tons / transmission line miles)	Not Available	0.01	0.01	0.01	0.01	0.01	
1.1.8	Other Leaks (metric tons/year)	-	-	-	-	-	-	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
1.1.8.B	Other leaks per Transmission Line Mile (metric tons / transmission line miles)	-	-	-	-	-	-	
1.1.9.B	Total Leaks per Transmission Line Mile (metric tons / transmission line miles)	Not Available	0.01	0.01	0.01	0.01	0.01	
1.2	Total Transmission Compression Methane Emissions (metric tons/year)	Not Available	216.97	218.50	184.96	202.80	183.56	
1.2.B	Total Transmission Compression Methane Emissions per Transmission Line Mile (metric tons / trans. line miles)	Not Available	0.10	0.10	0.09	0.09	0.08	
1.3	Total Transmission Compression Methane Emissions (CO2e/year)	Not Available	5,424	5,463	4,624	5,070	4,589	
1.4	Total Transmission Compression Methane Emissions (MSCF/year)	Not Available	11,301	11,380	9,633	10,563	9,560	Density of Methane = 0.0192 kg/ft3 per 40 CFR Sub W EQ. W-36
2	**Underground Natural Gas Storage Methane Emissions**							Fugitive Methane emissions as defined in 40 CFR 98 Sub W Section 232 (f) (1-8), CO2 and N2O emissions are excluded from this section.
2.1.1	Pneumatic Device Venting (metric tons/year)	Not Available	53.50	53.50	53.50	53.50	53.51	Value reported using calculation in 40 CFR 98 Sub W Section 236(b)(4)
2.1.2	Flare Stack Emissions (metric tons/year)	-	-	-	-	-	-	Value reported using calculation in 40 CFR 98 Sub W Section 236(n)(11)
2.1.3	Centrifugal Compressor Venting (metric tons/year)	Not Available	9.10	9.10	9.10	9.10	9.14	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)	Not Available	17.34	17.30	17.30	17.30	17.30	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)	Not Available	-	-	-	-	-	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
2.1.6	Other Equipment Leaks (metric tons/year)	-	-	-	-	-	-	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)	Not Available	471.90	471.90	471.90	471.90	471.90	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)	-	-	-	-	-	-	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)	Not Available	551.84	551.80	551.80	551.80	551.85	
2.3	Total Storage Compression Methane Emissions (CO2e/year)	Not Available	13,796	13,795	13,795	13,795	13,796	
2.4	Total Storage Compression Methane Emissions (MSCF/year)	Not Available	28,742	28,740	28,740	28,740	28,742	Density of Methane = 0.0192 kg/ft3 per 40 CFR Sub W EQ. W-36

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3	**Onshore Natural Gas Transmission Pipeline Blowdowns**							Blowdown vent stacks for onshore transmission pipeline as defined in 40 CFR 98 Sub W Section 232 (m), CO2 and N2O emissions are excluded from this section.
3.1	Transmission Pipeline Blowdown Vent Stacks (metric tons/year)	Not Available	119	193	178	230	27	Value reported using calculation in 40 CFR 98 Sub W Section 232(i)(3)(ii)
3.2	Transmission Pipeline Blowdown Vent Stacks (CO2e/year)	Not Available	2,970	4,837	4,462	5,750	687	
3.3	Transmission Pipeline Blowdown Vent Stacks (MSCF/year)	Not Available	6,186	10,078	9,296	11,979	1,430	
4	**Other Non-Sub W Emissions Data (OPTIONAL)**							(OPTIONAL) If desired, report additional sources required by ONE Future include dehydrator vents, storage station venting transmission pipeline leaks, and storage tank methane.
4.1	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (metric tons/year)	-	-	-	-	-	-	
4.2	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (CO2e/year)	-	-	-	-	-	-	
4.3	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (MSCF/year)	-	-	-	-	-	-	
5	**Summary and Metrics**							
5.1	Total Transmission and Storage Methane Emissions (MMSCF/year)	Not Available	46	50	48	51	40	
5.2	Annual Natural Gas Throughput from Gas Transmission and Storage Operations (MSCF/year)	Not Available	58,560,354	60,156,069	59,059,773	58,072,832	63,513,996	**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)	Not Available	55,632	57,148	56,107	55,169	60,338	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)	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	
	Natural Gas Gathering and Boosting							
1	METHANE EMISSIONS							
1.1	Gathering and Boosting Pipelines, Blow Down Volumes, and Emissions	Not Available	-	-	-	-	-	
1.1.1	Total Miles of Gathering Pipeline Operated by gas utility *(miles)*	Not Available	1,222.00	1,222.00	1,222.00	1,222.00	1,222.00	
1.1.2	Volume of Gathering Pipeline Blow Down Emissions *(scf)*	Not Available	414,061	1,535,249	660,299	1,365,597	54,000	This metric is collected to support calculations under EPA 40 CFR 98,
1.1.4	Gathering Pipeline Blow-Down Emissions outside storage and compression	Not Available	7.95	29.48	12.68	24.80	0.24	
2	CO2e COMBUSTION EMISSIONS FOR GATHERING & BOOSTING COMPRESSION							
2.1	CO2e Emissions for Gathering & Boosting Compression Stations *(metric tons)*	Not Available	7,318.00	7,552.00	7,569.00	7,046.00	6,656.00	CO2 combustion emissionsas reported to EPA under 40 CFR 98, Subpart C, as directed in Subpart W, 98.232(k).
3	CONVENTIONAL COMBUSTION EMISSIONS FROM GATHERING & BOOSTING COMPRESSION							
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 CO2e data reported includes all of these sources.
3.1.1	NOx *(metric tons per year)*	Not Available	24.27	25.05	25.12	23.35	22.07	
3.1.2	VOC *(metric tons per year)*	Not Available	55.73	54.24	54.79	54.82	52.55	

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Ref. No.	Refer to the "Definitions" column for more information on each metric.	Baseline 2012	Calendar Year 2018	Calendar Year 2019	Calendar Year 2020	Calendar Year 2021	Calendar Year 2022	Definitions
	Natural Gas Distribution							
								All methane leak sources per 98.232 (i) (1-6) are included for Distribution. Combustion sources are excluded. CO_2 is excluded.
1	**METHANE EMISSIONS AND MITIGATION FROM DISTRIBUTION MAINS**							
1.1	Number of Gas Distribution Customers	182,364	197,251	199,663	202,436	205,182	207,834	
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)*	3,335	3,596	3,643	3,695	3,760	3,937	
1.2.2	Cathodically Protected Steel - Bare & Coated *(miles)*	1,255	1,200	1,191	1,183	1,170	1,162	
1.2.3	Unprotected Steel - Bare & Coated *(miles)*	-	-	-	-	-	-	
1.2.4	Cast Iron / Wrought Iron - without upgrades *(miles)*	-	-	-	-	-	-	
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.
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							
2.1	CO2e Fugitive Methane Emissions from Gas Distribution Operations *(metric tons)*	24,511	24,887	25,326	25,179	25,494	26,050	Fugitive methane emissions (not CO2 combustion emissions) stated as CO2e, 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 CO2e 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. Calculated value based on mt CH4 input in the 2.2 (below).
2.1.A	CO2e Fugitive Methane Emissions from Gas Distribution Operations/Customer *(metric tons/customers)*	0.1344	0.1262	0.1268	0.1244	0.1242	0.1253	
2.1.B	CO2e Fugitive Methane Emissions from Gas Distribution Operations/Line Mile *(metric tons/line mile)*	5.3401	5.1890	5.2391	5.1618	5.1711	5.1088	
2.2	CH4 Fugitive Methane Emissions from Gas Distribution Operations *(metric tons)*	980	995	1,013	1,007	1,020	1,041	INPUT VALUE (total mt CH4) as explained in definition above. Subpart W input is CH4 (mt).
2.2.A	CH4 Fugitive Methane Emissions from Gas Distribution Operations/Customer *(metric tons/customers)*	0.0054	0.0050	0.0051	0.0050	0.0050	0.0050	
2.2.B	CH4 Fugitive Methane Emissions from Gas Distribution Operations/Line Mile *(metric tons/line mile)*	0.2136	0.2076	0.2096	0.2065	0.2068	0.2041	
2.2.1	CH4 Fugitive Methane Emissions from Gas Distribution Operations (MMSCF/year)	51.06	51.85	52.76	52.46	53.11	54.21	
2.3	Annual Natural Gas Throughput from Gas Distribution Operations in thousands of standard cubic feet (*Mscf/year*)	38,243,784	44,622,527	47,356,572	44,071,326	43,827,067	48,567,828	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-GRRT integrated reporting form in the "Facility Overview" worksheet, Excel form, Quantity of natural gas delivered to end users
2.3.1	Annual Methane Gas Throughput from Gas Distribution Operations in millions of standard cubic feet (MMscf/year)	36,332	42,391	44,989	41,868	41,636	46,139	
2.4	Fugitive Methane Emissions Rate (Percent *MMscf of Methane Emissions per MMscf of Methane Throughput*)	0%	0%	0%	0%	0%	0%	Calculated annual metric: (MMSFC methane emissions/MMSCF methane throughput)

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Ref. No.	Refer to the "Definitions" column for more information on each metric.	Baseline 2012	Calendar Year 2018	Calendar Year 2019	Calendar Year 2020	Calendar Year 2021	Calendar Year 2022	Definitions
	Natural Gas Transmission and Storage							
								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. CO_2 and N_2O are excluded.
0.1	Transmission Line Miles	-	2,094	2,221	2,144	2,140	2,203	
1	**Onshore Natural Gas Transmission Compression Methane Emissions**							Fugitive Methane emissions as defined in 40 CFR 98 Sub W Section 232 (e) (1-8), CO2 and N2O emissions are excluded from this section.
1.1.1	Pneumatic Device Venting (metric tons/year)	0.0	49.1	49.1	49.1	49.1	49.1	Value reported using calculation in 40 CFR 98 Sub W Section 236(b)(4)
1.1.2	Blowdown Vent Stacks (metric tons/year)	0.0	62.0	63.5	30.0	47.8	28.6	Value reported using calculation in 40 CFR 98 Sub W Section 236(i)(1)(iii)
1.1.3	Transmission Storage Tanks (metric tons/year)	0.0	47.2	47.2	47.2	47.2	47.2	Value reported using calculation in 40 CFR 98 Sub W Section 236(k)(2)(v)
1.1.4	Flare Stack Emissions (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(n)(11)
1.1.5	Centrifugal Compressor Venting (metric tons/year)	0.0	13.5	13.5	13.5	13.5	13.5	Value reported using calculation in 40 CFR 98 Sub W Section 236(o)(2)(ii)(D)(2)
1.1.6	Reciprocating Compressor Venting (metric tons/year)	0.0	30.7	30.7	30.7	30.7	30.7	Value reported using calculation in 40 CFR 98 Sub W Section 236(p)(2)(ii)(D)(2)
1.1.7	Equipment leaks from valves, connectors, open ended lines, pressure relief valves, and meters (metric tons/year)	0.0	14.5	14.5	14.5	14.5	14.5	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
1.1.7.B	Equipment Leaks per Transmission Line Mile (metric tons / transmission line miles)	0.0	0.0	0.0	0.0	0.0	0.0	
1.1.8	Other Leaks (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
1.1.8.B	Other leaks per Transmission Line Mile (metric tons / transmission line miles)	0.0	0.0	0.0	0.0	0.0	0.0	
1.1.9.B	Total Leaks per Transmission Line Mile (metric tons / transmission line miles)	0.0	0.0	0.0	0.0	0.0	0.0	
1.2	Total Transmission Compression Methane Emissions (metric tons/year)	0.0	217.0	218.5	185.0	202.8	183.6	
1.2.B	Total Transmission Compression Methane Emissions per Transmission Line Mile (metric tons / trans. line miles)	0.0	0.1	0.1	0.1	0.1	0.1	
1.3	Total Transmission Compression Methane Emissions (CO2e/year)	0.0	5,424.3	5,462.5	4,624.0	5,070.0	4,589.0	
1.4	Total Transmission Compression Methane Emissions (MSCF/year)	0.0	11,300.5	11,380.2	9,633.3	10,562.5	9,560.4	Density of Methane = 0.0192 kg/ft3 per 40 CFR Sub W EQ. W-36
2	**Underground Natural Gas Storage Methane Emissions**							Fugitive Methane emissions as defined in 40 CFR 98 Sub W Section 232 (f) (1-8), CO2 and N2O emissions are excluded from this section.
2.1.1	Pneumatic Device Venting (metric tons/year)	0.0	53.5	53.5	53.5	53.5	53.5	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	0.0	0.0	0.0	0.0	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)	0.0	9.1	9.1	9.1	9.1	9.1	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)	0.0	17.3	17.3	17.3	17.3	17.3	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)	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	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)	0.0	471.9	471.9	471.9	471.9	471.9	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	0.0	0.0	0.0	0.0	0.0	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)	0.0	551.8	551.8	551.8	551.8	551.9	
2.3	Total Storage Compression Methane Emissions (CO2e/year)	0.0	13,796.0	13,795.0	13,795.0	13,795.0	13,796.3	
2.4	Total Storage Compression Methane Emissions (MSCF/year)	0	28,742	28,740	28,740	28,740	28,742	Density of Methane = 0.0192 kg/ft3 per 40 CFR Sub W EQ. W-36
3	**Onshore Natural Gas Transmission Pipeline Blowdowns**							Blowdown vent stacks for onshore transmission pipeline as defined in 40 CFR 98 Sub W Section 232 (m), CO2 and N2O emissions are excluded from this section.
3.1	Transmission Pipeline Blowdown Vent Stacks (metric tons/year)	0.0	118.8	193.5	178.5	230.0	27.5	Value reported using calculation in 40 CFR 98 Sub W Section 232(i)(3)(ii)
3.2	Transmission Pipeline Blowdown Vent Stacks (CO2e/year)	0	2,970	4,837	4,462	5,750	687	
3.3	Transmission Pipeline Blowdown Vent Stacks (MSCF/year)	0	6,186	10,078	9,296	11,979	1,430	

Gas Company ESG/Sustainability Quantitative Information

Parent Company: NorthWestern Corp
Operating Company(s): NorthWestern Energy
Business Type(s): *>15% Vertically Integrated and remaining T&D only*
State(s) of Operation: Montana
Regulatory Environment: *Regulated*
Report Date: *6/1/23*

NorthWestern Energy - Montana only

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Baseline 2012	Calendar Year 2018	Calendar Year 2019	Calendar Year 2020	Calendar Year 2021	Calendar Year 2022	Definitions
4	**Other Non-Sub W Emissions Data (OPTIONAL)**							(OPTIONAL) If desired, report additional sources required by ONE Future include dehydrator vents, storage station venting transmission pipeline leaks, and storage tank methane.
4.1	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	
4.2	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (CO2e/year)	0.0	0.0	0.0	0.0	0.0	0.0	
4.3	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (MSCF/year)	0.0	0.0	0.0	0.0	0.0	0.0	
5	**Summary and Metrics**							
5.1	Total Transmission and Storage Methane Emissions (MMSCF/year)	0.0	46.2	50.2	47.7	51.3	39.7	
5.2	Annual Natural Gas Throughput from Gas Transmission and Storage Operations	0	58,560,354	60,156,069	59,059,773	58,072,832	63,513,996	**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)	0.0	55,632.3	57,148.3	56,106.8	55,169.2	60,338.3	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)	Missing Data	0%	0%	0%	0%	0%	
	Natural Gas Gathering and Boosting							
1	METHANE EMISSIONS							
1.1	Gathering and Boosting Pipelines, Blow Down Volumes, and Emissions							
1.1.1	Total Miles of Gathering Pipeline Operated by gas utility *(miles)*		1,222.0	1,222.0	1,222.0	1,222.0	1,222.0	
1.1.2	Volume of Gathering Pipeline Blow Down Emissions *(scf)*		414,061	1,535,249	660,299	1,365,597	54,000	This metric is collected to support calculations under EPA 40 CFR 98, Subpart W.
1.1.4	Gathering Pipeline Blow-Down Emissions outside storage and compression		8.0	29.5	12.7	24.8	0.2	
2	CO2e COMBUSTION EMISSIONS FOR GATHERING & BOOSTING COMPRESSION							
2.1	CO2e Emissions for Gathering & Boosting Compression Stations *(metric tons)*		7,318	7,552	7,569	7,046	6,656	CO2 combustion emissionsas reported to EPA under 40 CFR 98, Subpart C, as directed in Subpart W, 98.232(k).
3	CONVENTIONAL COMBUSTION EMISSIONS FROM GATHERING & BOOSTING COMPRESSION							
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 CO2e data reported includes all of these sources
3.1.1	NOx *(metric tons per year)*		24.3	25.1	25.1	23.4	22.1	
3.1.2	VOC *(metric tons per year)*		55.7	54.2	54.8	54.8	52.6	

Gas Company ESG/Sustainability Quantitative Information

Parent Company: NorthWestern Corp
Operating Company(s): NorthWestern Energy
Business Type(s): *>15% Vertically Integrated and remaining T&D only*
State(s) of Operation: South Dakota
Regulatory Environment: *Regulated*
Report Date: *6/1/23*

NorthWestern Energy - South Dakota only

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Baseline 2012	Calendar Year 2018	Calendar Year 2019	Calendar Year 2020	Calendar Year 2021	Calendar Year 2022	Definitions
	Natural Gas Distribution							
								All methane leak sources per 98.232 (i) (1-6) are included for Distribution. Combustion sources are excluded. CO_2 is excluded.
1	**METHANE EMISSIONS AND MITIGATION FROM DISTRIBUTION MAINS**							
1.1	Number of Gas Distribution Customers	44,584	46,997	47,010	48,055	48,647	49,401	
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)*	782.70	860.01	879.85	900.36	923.40	945.20	
1.2.2	Cathodically Protected Steel - Bare & Coated *(miles)*	795.08	788.24	791.00	789.78	789.02	788.40	
1.2.3	Unprotected Steel - Bare & Coated *(miles)*	-	-	-	-	-	-	
1.2.4	Cast Iron / Wrought Iron - without upgrades *(miles)*	-	-	-	-	-	-	
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.
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							
2.1	CO2e Fugitive Methane Emissions from Gas Distribution Operations *(metric tons)*	6,796	6,908	7,156	7,146	7,192	7,211	Fugitive methane emissions (not CO2 combustion emissions) stated as CO2e, 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 CO2e 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. Calculated value based on mt CH4 input in the 2.2 (below).
2.1.A	CO2e Fugitive Methane Emissions from Gas Distribution Operations/Customer *(metric tons/customers)*	0.1524	0.1470	0.1522	0.1487	0.1478	0.1460	
2.1.B	CO2e Fugitive Methane Emissions from Gas Distribution Operations/Line Mile *(metric tons/line mile)*	4.3075	4.1908	4.2827	4.2281	4.1996	4.1598	
2.2	CH4 Fugitive Methane Emissions from Gas Distribution Operations *(metric tons)*	271.85	276.30	286.23	285.84	287.31	288.11	INPUT VALUE (total mt CH4) as explained in definition above. Subpart W input is CH4 (mt).
2.2.A	CH4 Fugitive Methane Emissions from Gas Distribution Operations/Customer *(metric tons/customers)*	0.0061	0.0059	0.0061	0.0059	0.0059	0.0058	
2.2.B	CH4 Fugitive Methane Emissions from Gas Distribution Operations/Line Mile *(metric tons/line mile)*	0.1723	0.1676	0.1713	0.1691	0.1678	0.1662	
2.2.1	CH4 Fugitive Methane Emissions from Gas Distribution Operations (MMSCF/year)	14.16	14.39	14.91	14.89	14.96	15.01	
2.3	Annual Natural Gas Throughput from Gas Distribution Operations in thousands of standard cubic feet (*Mscf/year*)	28,891,086	35,522,366	35,032,176	33,811,445	36,046,928	34,325,300	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-GRRT 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)	27,447	33,746	33,281	32,121	34,245	32,609	
2.4	Fugitive Methane Emissions Rate (Percent *MMscf of Methane Emissions per MMscf of Methane Throughput*)	0%	0%	0%	0%	0%	0%	Calculated annual metric: (MMSFC methane emissions/MMSCF methane throughput)

Gas Company ESG/Sustainability Quantitative Information

Parent Company: NorthWestern Corp
Operating Company(s): NorthWestern Energy
Business Type(s): *>15% Vertically Integrated and remaining T&D only*
State(s) of Operation: South Dakota
Regulatory Environment: *Regulated*
Report Date: *6/1/23*

NorthWestern Energy - South Dakota only

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Baseline 2012	Calendar Year 2018	Calendar Year 2019	Calendar Year 2020	Calendar Year 2021	Calendar Year 2022	Definitions
	Natural Gas Transmission and Storage							
								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. CO_2 and N_2O are excluded.
0.1	Transmission Line Miles	0	0	0	0	0	0	
1	**Onshore Natural Gas Transmission Compression Methane Emissions**							Fugitive Methane emissions as defined in 40 CFR 98 Sub W Section 232 (e) (1-8), CO2 and N2O emissions are excluded from this section.
1.1.1	Pneumatic Device Venting (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(b)(4)
1.1.2	Blowdown Vent Stacks (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(i)(1)(iii)
1.1.3	Transmission Storage Tanks (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(k)(2)(v)
1.1.4	Flare Stack Emissions (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(n)(11)
1.1.5	Centrifugal Compressor Venting (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(o)(2)(ii)(D)(2)
1.1.6	Reciprocating Compressor Venting (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(p)(2)(ii)(D)(2)
1.1.7	Equipment leaks from valves, connectors, open ended lines, pressure relief valves, and meters (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
1.1.7.B	Equipment Leaks per Transmission Line Mile (metric tons / transmission line miles)	0.0	0.0	0.0	0.0	0.0	0.0	
1.1.8	Other Leaks (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
1.1.8.B	Other leaks per Transmission Line Mile (metric tons / transmission line miles)	0.0	0.0	0.0	0.0	0.0	0.0	
1.1.9.B	Total Leaks per Transmission Line Mile (metric tons / transmission line miles)	0.0	0.0	0.0	0.0	0.0	0.0	
1.2	Total Transmission Compression Methane Emissions (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	
1.2.B	Total Transmission Compression Methane Emissions per Transmission Line Mile (metric tons / trans. line miles)	0.0	0.0	0.0	0.0	0.0	0.0	
1.3	Total Transmission Compression Methane Emissions (CO2e/year)	0.0	0.0	0.0	0.0	0.0	0.0	
1.4	Total Transmission Compression Methane Emissions (MSCF/year)	0.0	0.0	0.0	0.0	0.0	0.0	Density of Methane = 0.0192 kg/ft3 per 40 CFR Sub W EQ. W-36
2	**Underground Natural Gas Storage Methane Emissions**							Fugitive Methane emissions as defined in 40 CFR 98 Sub W Section 232 (f) (1-8), CO2 and N2O emissions are excluded from this section.
2.1.1	Pneumatic Device Venting (metric tons/year)	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	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)	0.0	0.0	0.0	0.0	0.0	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)	0.0	0.0	0.0	0.0	0.0	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)	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	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)	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	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)	0.0	0.0	0.0	0.0	0.0	0.0	
2.3	Total Storage Compression Methane Emissions (CO2e/year)	0.0	0.0	0.0	0.0	0.0	0.0	
2.4	Total Storage Compression Methane Emissions (MSCF/year)	0.0	0.0	0.0	0.0	0.0	0.0	Density of Methane = 0.0192 kg/ft3 per 40 CFR Sub W EQ. W-36

Gas Company ESG/Sustainability Quantitative Information

Parent Company: NorthWestern Corp
Operating Company(s): NorthWestern Energy
Business Type(s): *>15% Vertically Integrated and remaining T&D only*
State(s) of Operation: South Dakota
Regulatory Environment: *Regulated*
Report Date: *6/1/23*

NorthWestern Energy - South Dakota only

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Baseline 2012	Calendar Year 2018	Calendar Year 2019	Calendar Year 2020	Calendar Year 2021	Calendar Year 2022	Definitions
3	**Onshore Natural Gas Transmission Pipeline Blowdowns**							Blowdown vent stacks for onshore transmission pipeline as defined in 40 CFR 98 Sub W Section 232 (m), CO2 and N2O emissions are excluded from this section.
3.1	Transmission Pipeline Blowdown Vent Stacks (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 232(i)(3)(ii)
3.2	Transmission Pipeline Blowdown Vent Stacks (CO2e/year)	0.0	0.0	0.0	0.0	0.0	0.0	
3.3	Transmission Pipeline Blowdown Vent Stacks (MSCF/year)	0.0	0.0	0.0	0.0	0.0	0.0	
4	**Other Non-Sub W Emissions Data (OPTIONAL)**							(OPTIONAL) If desired, report additional sources required by ONE Future include dehydrator vents, storage station venting transmission pipeline leaks, and storage tank methane.
4.1	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	
4.2	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (CO2e/year)	0.0	0.0	0.0	0.0	0.0	0.0	
4.3	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (MSCF/year)	0.0	0.0	0.0	0.0	0.0	0.0	
5	**Summary and Metrics**							
5.1	Total Transmission and Storage Methane Emissions (MMSCF/year)	0.0	0.0	0.0	0.0	0.0	0.0	
5.2	Annual Natural Gas Throughput from Gas Transmission and Storage Operations (MSCF/year)	0.0	0.0	0.0	0.0	0.0	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)	0.0	0.0	0.0	0.0	0.0	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)	Missing Data	Missing Data	Missing Data	Missing Data	Missing Data	Missing Data	
	Natural Gas Gathering and Boosting							
1	METHANE EMISSIONS							
1.1	Gathering and Boosting Pipelines, Blow Down Volumes, and Emissions							
1.1.1	Total Miles of Gathering Pipeline Operated by gas utility *(miles)*							
1.1.2	Volume of Gathering Pipeline Blow Down Emissions *(scf)*							This metric is collected to support calculations under EPA 40 CFR 98, Subpart
1.1.4	Gathering Pipeline Blow-Down Emissions outside storage and compression							
2	CO2e COMBUSTION EMISSIONS FOR GATHERING & BOOSTING COMPRESSIO							
2.1	CO2e Emissions for Gathering & Boosting Compression Stations *(metric tons)*							CO2 combustion emissionsas reported to EPA under 40 CFR 98, Subpart C, as directed in Subpart W, 98.232(k).
3	CONVENTIONAL COMBUSTION EMISSIONS FROM GATHERING & BOOSTING COMPRESSION							
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 CO2e data reported includes all of these sources.
3.1.1	NOx *(metric tons per year)*							
3.1.2	VOC *(metric tons per year)*							

Gas Company ESG/Sustainability Quantitative Information

Parent Company: NorthWestern Corp
Operating Company(s): NorthWestern Energy
Business Type(s): *>15% Vertically Integrated and remaining T&D only*
State(s) of Operation: Nebraska
Regulatory Environment: *Regulated*
Report Date: *6/1/23*

NorthWestern Energy - Nebraska only

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Baseline 2012	Calendar Year 2018	Calendar Year 2019	Calendar Year 2020	Calendar Year 2021	Calendar Year 2022	Definitions
	Natural Gas Distribution							
								All methane leak sources per 98.232 (i) (1-6) are included for Distribution. Combustion sources are excluded. CO_2 is excluded.
1	**METHANE EMISSIONS AND MITIGATION FROM DISTRIBUTION MAINS**							
1.1	Number of Gas Distribution Customers	41,674	42,526	42,667	42,776	42,902	43,113	
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)*	359.70	385.62	389.34	399.84	404.42	405.20	
1.2.2	Cathodically Protected Steel - Bare & Coated *(miles)*	413.10	408.56	408.28	410.23	414.33	416.10	
1.2.3	Unprotected Steel - Bare & Coated *(miles)*	-	-	-	-	-	-	
1.2.4	Cast Iron / Wrought Iron - without upgrades *(miles)*	-	-	-	-	-	-	
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.
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							
2.1	CO2e Fugitive Methane Emissions from Gas Distribution Operations *(metric tons)*	3,807	5,581	4,116	4,066	4,050	3,827	Fugitive methane emissions (not CO2 combustion emissions) stated as CO2e, 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 CO2e 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. Calculated value based on mt CH4 input in the 2.2 (below).
2.1.A	CO2e Fugitive Methane Emissions from Gas Distribution Operations/Customer *(metric tons/customers)*	0.0914	0.1312	0.0965	0.0950	0.0944	0.0888	
2.1.B	CO2e Fugitive Methane Emissions from Gas Distribution Operations/Line Mile *(metric tons/line mile)*	4.9262	7.0267	5.1597	5.0187	4.9467	4.6596	
2.2	CH4 Fugitive Methane Emissions from Gas Distribution Operations *(metric tons)*	152.28	223.22	164.62	162.62	161.81	152.89	
2.2.A	CH4 Fugitive Methane Emissions from Gas Distribution Operations/Customer *(metric tons/customers)*	0.0037	0.0052	0.0039	0.0038	0.0038	0.0035	INPUT VALUE (total mt CH4) as explained in definition above. Subpart W input is CH4 (mt).
2.2.B	CH4 Fugitive Methane Emissions from Gas Distribution Operations/Line Mile *(metric tons/line mile)*	0.1970	0.2811	0.2064	0.2007	0.1976	0.1862	
2.2.1	CH4 Fugitive Methane Emissions from Gas Distribution Operations (MMSCF/year)	7.93	11.63	8.57	8.47	8.43	7.96	
2.3	Annual Natural Gas Throughput from Gas Distribution Operations in thousands of standard cubic feet (*Mscf/year*)	6,498,900	8,490,920	8,534,967	8,175,693	7,924,026	6,407,153	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-GRRT 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)	6,174	8,066	8,108	7,767	7,528	6,087	
2.4	Fugitive Methane Emissions Rate (Percent *MMscf of Methane Emissions per MMscf of Methane Throughput*)	0%	0%	0%	0%	0%	0%	Calculated annual metric: (MMSFC methane emissions/MMSCF methane throughput)

Gas Company ESG/Sustainability Quantitative Information

Parent Company: NorthWestern Corp
Operating Company(s): NorthWestern Energy
Business Type(s): *>15% Vertically Integrated and remaining T&D only*
State(s) of Operation: Nebraska
Regulatory Environment: *Regulated*
Report Date: *6/1/23*

NorthWestern Energy - Nebraska only

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Baseline 2012	Calendar Year 2018	Calendar Year 2019	Calendar Year 2020	Calendar Year 2021	Calendar Year 2022	Definitions
	Natural Gas Transmission and Storage							
								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. CO_2 and N_2O are excluded.
0.1	Transmission Line Miles	0	0	0	0	0	0	
1	**Onshore Natural Gas Transmission Compression Methane Emissions**							Fugitive Methane emissions as defined in 40 CFR 98 Sub W Section 232 (e) (1-8), CO2 and N2O emissions are excluded from this section.
1.1.1	Pneumatic Device Venting (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(b)(4)
1.1.2	Blowdown Vent Stacks (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(i)(1)(iii)
1.1.3	Transmission Storage Tanks (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(k)(2)(v)
1.1.4	Flare Stack Emissions (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(n)(11)
1.1.5	Centrifugal Compressor Venting (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(o)(2)(ii)(D)(2)
1.1.6	Reciprocating Compressor Venting (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(p)(2)(ii)(D)(2)
1.1.7	Equipment leaks from valves, connectors, open ended lines, pressure relief valves, and meters (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
1.1.7.B	Equipment Leaks per Transmission Line Mile (metric tons / transmission line miles)	0.0	0.0	0.0	0.0	0.0	0.0	
1.1.8	Other Leaks (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
1.1.8.B	Other leaks per Transmission Line Mile (metric tons / transmission line miles)	0.0	0.0	0.0	0.0	0.0	0.0	
1.1.9.B	Total Leaks per Transmission Line Mile (metric tons / transmission line miles)	0.0	0.0	0.0	0.0	0.0	0.0	
1.2	Total Transmission Compression Methane Emissions (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	
1.2.B	Total Transmission Compression Methane Emissions per Transmission Line Mile (metric tons / trans. line miles)	0.0	0.0	0.0	0.0	0.0	0.0	
1.3	Total Transmission Compression Methane Emissions (CO2e/year)	0.0	0.0	0.0	0.0	0.0	0.0	
1.4	Total Transmission Compression Methane Emissions (MSCF/year)	0.0	0.0	0.0	0.0	0.0	0.0	Density of Methane = 0.0192 kg/ft3 per 40 CFR Sub W EQ. W-36
2	**Underground Natural Gas Storage Methane Emissions**							Fugitive Methane emissions as defined in 40 CFR 98 Sub W Section 232 (f) (1-8), CO2 and N2O emissions are excluded from this section.
2.1.1	Pneumatic Device Venting (metric tons/year)	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	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)	0.0	0.0	0.0	0.0	0.0	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)	0.0	0.0	0.0	0.0	0.0	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)	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	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)	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	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)	0.0	0.0	0.0	0.0	0.0	0.0	
2.3	Total Storage Compression Methane Emissions (CO2e/year)	0.0	0.0	0.0	0.0	0.0	0.0	
2.4	Total Storage Compression Methane Emissions (MSCF/year)	0.0	0.0	0.0	0.0	0.0	0.0	Density of Methane = 0.0192 kg/ft3 per 40 CFR Sub W EQ. W-36
3	**Onshore Natural Gas Transmission Pipeline Blowdowns**							Blowdown vent stacks for onshore transmission pipeline as defined in 40 CFR 98 Sub W Section 232 (m), CO2 and N2O emissions are excluded from this section.
3.1	Transmission Pipeline Blowdown Vent Stacks (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	Value reported using calculation in 40 CFR 98 Sub W Section 232(i)(3)(ii)
3.2	Transmission Pipeline Blowdown Vent Stacks (CO2e/year)	0.0	0.0	0.0	0.0	0.0	0.0	
3.3	Transmission Pipeline Blowdown Vent Stacks (MSCF/year)	0.0	0.0	0.0	0.0	0.0	0.0	

Gas Company ESG/Sustainability Quantitative Information

Parent Company: NorthWestern Corp
Operating Company(s): NorthWestern Energy
Business Type(s): *>15% Vertically Integrated and remaining T&D only*
State(s) of Operation: Nebraska
Regulatory Environment: *Regulated*
Report Date: *6/1/23*

NorthWestern Energy - Nebraska only

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Baseline 2012	Calendar Year 2018	Calendar Year 2019	Calendar Year 2020	Calendar Year 2021	Calendar Year 2022	Definitions
4	**Other Non-Sub W Emissions Data (OPTIONAL)**							(OPTIONAL) If desired, report additional sources required by ONE Future include dehydrator vents, storage station venting transmission pipeline leaks, and storage tank methane.
4.1	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (metric tons/year)	0.0	0.0	0.0	0.0	0.0	0.0	
4.2	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (CO2e/year)	0.0	0.0	0.0	0.0	0.0	0.0	
4.3	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (MSCF/year)	0.0	0.0	0.0	0.0	0.0	0.0	
5	**Summary and Metrics**							
5.1	Total Transmission and Storage Methane Emissions (MMSCF/year)	0.0	0.0	0.0	0.0	0.0	0.0	
5.2	Annual Natural Gas Throughput from Gas Transmission and Storage	0.0	0.0	0.0	0.0	0.0	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)	0.0	0.0	0.0	0.0	0.0	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)	Missing Data	Missing Data	Missing Data	Missing Data	Missing Data	Missing Data	
	Natural Gas Gathering and Boosting							
1	METHANE EMISSIONS							
1.1	Gathering and Boosting Pipelines, Blow Down Volumes, and Emissions							
1.1.1	Total Miles of Gathering Pipeline Operated by gas utility *(miles)*							
1.1.2	Volume of Gathering Pipeline Blow Down Emissions *(scf)*							This metric is collected to support calculations under EPA 40 CFR 98, Subpart W.
1.1.4	Gathering Pipeline Blow-Down Emissions outside storage and compression							
2	CO2e COMBUSTION EMISSIONS FOR GATHERING & BOOSTING COMPRESSION							
2.1	CO2e Emissions for Gathering & Boosting Compression Stations *(metric tons)*							CO2 combustion emissionsas reported to EPA under 40 CFR 98, Subpart C, as directed in Subpart W, 98.232(k).
3	CONVENTIONAL COMBUSTION EMISSIONS FROM GATHERING & BOOSTING COMPRESSION							
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 CO2e data reported includes all of these sources.
3.1.1	NOx *(metric tons per year)*							
3.1.2	VOC *(metric tons per year)*							