EEI and AGA

ESG/Sustainability Template

AVANGRID

Committed to: SDG

July 2021

Electric Company ESG/Sustainability Quantitative Information

Parent Company: AVANGRID, INC.
Operating Company(s): AVANGRID RENEWABLES, CENTRAL MAINE POWER, NEW YORK STATE ELECTRIC & GAS, ROCHESTER GAS & ELECTRIC, UNITED ILLUMINATING
Business Type(s): *(e.g., vertically integrated, T&D only, competitive integrated)*
State(s) of Operation:
State(s) with RPS Programs:
Regulatory Environment: *(e.g., deregulated, regulated, both)*
Report Date: *Jul-21*

Ref. No.	Refer to the 'EEI Definitions' tab for more information on each metric	Baseline 2015	Last Year 2019	Current Year 2020	Next Year 2021	Future Year	Comments, Links, Additional Information, and Notes
	Portfolio						
1	**Owned Nameplate Generation Capacity at end of year (MW)**	6,458	8,359	8,822			AGR 2020 Operational data
1.1	Coal						
1.2	Natural Gas	645	840	840			
1.3	Nuclear						
1.4	Petroleum						
1.5	Total Renewable Energy Resources	5,813	7,506	7,969			
1.5.1	Biomass/Biogas						
1.5.2	Geothermal						
1.5.3	Hydroelectric	118	118	118			
1.5.4	Solar	50	129	130			
1.5.5	Wind	5,645	7,259	7,721			
1.6	Other (fuel cells)		13	13			
	Use the data organizer on the left (i.e., the plus/minus symbol) to open/close the alternative generation reporting options						
2	**Net Generation for the data year (MWh)**	17,417,000	20,960,000	22,142,000			AGR 2020 Operational data
2.1	Coal						
2.2	Natural Gas	2,790,000	3,481,000	2,751,000			
2.3	Nuclear						
2.4	Petroleum						
2.5	Total Renewable Energy Resources	14,627,000	17,403,000	19,317,000			
2.5.1	Biomass/Biogas						
2.5.2	Geothermal						
2.5.3	Hydroelectric	366,000	179,000	121,000			
2.5.4	Solar	126,000	272,000	248,000			
2.5.5	Wind	14,135,000	16,952,000	18,948,000			
2.6	Other		76,000	73,000			
	Use the data organizer on the left (i.e., the plus/minus symbol) to open/close the alternative generation reporting options						
3	**Capital Expenditures and Energy Efficiency (EE)**						
3.1	Total Annual Capital Expenditures (nominal dollars)	$ 1,168,000,000	$ 2,981,000,000	$ 2,808,000,000			AVANGRID Sustainability Report, page 68
3.2	Incremental Annual Electricity Savings from EE Measures (MWh)	204,254	192,861	186,911			Avangrid Sustainability Report 2020
3.3	Incremental Annual Investment in Electric EE Programs (nominal dollars)	$ 66,553,179	$ 50,400,000	$ 55,000,000			
4	**Retail Electric Customer Count (at end of year)**						
4.1	Commercial	2,208,195	2,261,180	2,281,348			AVANGRID 10-k report
4.2	Industrial						
4.3	Residential						

Electric Company ESG/Sustainability Quantitative Information

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Business Type(s): *(e.g., vertically integrated, T&D only, competitive integrated)*
State(s) of Operation:
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Ref. No.	Refer to the 'EEI Definitions' tab for more information on each metric	Baseline 2015	Last Year 2019	Current Year 2020	Next Year 2021	Future Year	Comments, Links, Additional Information, and Notes
	Emissions						
5	**GHG Emissions: Carbon Dioxide (CO2) and Carbon Dioxide Equivalent (CO2e)**						*Consider including carbon reduction targets in qualitative discussion*
	Note: The alternatives available below are intended to provide flexibility in reporting GHG emissions, and should be used to the extent appropriate for each company.						
5.1	**Owned Generation (1) (2) (3)**						
5.1.1	Carbon Dioxide (CO2)						
5.1.1.1	Total Owned Generation CO2 Emissions (MT)	1,117,597	1,541,422	1,173,419			*The main source of CO2 emissions is Klamath Cogeneration power plant. Other generation emissions from peaking plants and fuel cells.*
5.1.1.2	Total Owned Generation CO2 Emissions Intensity (MT/Net MWh)	0.064	0.074	0.053			
5.1.2	Carbon Dioxide Equivalent (CO2e)						
5.1.2.1	Total Owned Generation CO2e Emissions (MT)	1,118,734	1,542,983	1,174,617			
5.1.2.2	Total Owned Generation CO2e Emissions Intensity (MT/Net MWh)	0.064	0.074	0.053			
5.4	**Non-Generation CO2e Emissions of Sulfur Hexafluoride (SF6) (5)**						*RG&E is the only AVANGRID OpCo reproting under GHG Reporting Program (40 CFR Part 98, Subpart DD).*
5.4.1	Total CO2e emissions of SF6 (lbs)	n/a	4,238	1,323			*Including other OpCo that are not considered large emitters (NYSEG, UI, CMP) and from subtations associated to wind farms,AVANGRID total SF6 emissions is 31,776 mt. Iberdrola Group GHG emissions, page 11.*
5.4.2	Leak rate of CO2e emissions of SF6 (lbs/Net MWh)	n/a	n/a	n/a			Iberdrola Group GHG 2020 report
6	**Nitrogen Oxide (NOx), Sulfur Dioxide (SO2), Mercury (Hg)**						
6.1	Generation basis for calculation (6)						
6.2	**Nitrogen Oxide (NOx)**						Avangrid Sustainability Report 2020
6.2.1	Total NOx Emissions (MT)	146	183	149			
6.2.2	Total NOx Emissions Intensity (MT/Net MWh)	0.00001	0.00001	0.00001			
6.3	**Sulfur Dioxide (SO2)**						
6.3.1	Total SO2 Emissions (MT)	5	7	6			Avangrid Sustainability Report 2020
6.3.2	Total SO2 Emissions Intensity (MT/Net MWh)	0.00000	0.00000	0.00000			
6.4	**Mercury (Hg)**						
6.4.1	Total Hg Emissions (kg)	0.0	0.0	0.0			
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	0.00000	0.00000	0.00000			

Use the data organizer on the left (i.e., the plus/minus symbol) to open/close the Emissions section notes

Electric Company ESG/Sustainability Quantitative Information

Parent Company: AVANGRID, INC.
Operating Company(s): AVANGRID RENEWABLES, CENTRAL MAINE POWER, NEW YORK STATE ELECTRIC & GAS, ROCHESTER GAS & ELECTRIC, UNITED ILLUMINATING
Business Type(s): *(e.g., vertically integrated, T&D only, competitive integrated)*
State(s) of Operation:
State(s) with RPS Programs:
Regulatory Environment: *(e.g., deregulated, regulated, both)*
Report Date: *Jul-21*

Ref. No.	Refer to the 'EEI Definitions' tab for more information on each metric	Baseline 2015	Last Year 2019	Current Year 2020	Next Year 2021	Future Year	Comments, Links, Additional Information, and Notes
	Resources						
7	**Human Resources**						
7.1	Total Number of Employees	6,809	6,597	7,031			Metrics for Avangrid Group. Avangrid Sustainability Report, proxy materials
7.2	Percentage of Women in Total Workforce	n/a	28%	28%			
7.3	Percentage of Minorities in Total Workforce	n/a	n/a	16%			
7.4	Total Number on Board of Directors/Trustees	12	14	14			
7.5	Percentage of Women on Board of Directors/Trustees	8%	29%	21%			
7.6	Percentage of Minorities on Board of Directors/Trustees	0%	0%	7%			
7.7	Employee Safety Metrics						
7.7.1	Recordable Incident Rate	2.41	3.57	2.47			
7.7.2	Lost-time Case Rate	0.75	0.52	0.60			
7.7.3	Days Away, Restricted, and Transfer (DART) Rate	n/a	1.98	1.71			
7.7.4	Work-related Fatalities	0.00	1.00	0.00			
8	**Fresh Water Resources used in Thermal Power Generation Activities**						Avangrid Sustainability Report 2020
8.1	Water Withdrawals - Consumptive (Millions of Gallons)	9	12	10			98% of the water used for generation is treated wastewater
8.2	Water Withdrawals - Non-Consumptive (Millions of Gallons)	8	8	8			
8.3	Water Withdrawals - Consumptive Rate (Millions of Gallons/Net MWh)	0.000	0.000	0.000			
8.4	Water Withdrawals - Non-Consumptive Rate (Millions of Gallons/Net MWh)	0.000					
9	**Waste Products**						Avangrid Sustainability Report 2020
9.1	Amount of Hazardous Waste Manifested for Disposal (metric tons)	141	676	606			unit: metric tons
9.2	Percent of Coal Combustion Products Beneficially Used (metric tons)	0%	0%	0%			
	Additional Metrics (Optional)						
	Insert additional rows in this section as necessary.						

Gas Company ESG/Sustainability Quantitative Information

Parent Company: AVANGRID, INC.
Operating Company(s): CONNECTICUT NATURAL GAS, SOUTHERN CONNECTICUT GAS, NEW YORK STATE ELECTRIC & GAS, ROCHESTER GAS & ELECTRIC.
BERKSHIRE GAS CO & MAINE NATURAL GAS are below the LDC Facility reporting threshold for EPA's 40 C.F.R. 98, Subpart W reporting rule.
Business Type(s): *(e.g., vertically integrated, T&D only, competitive integrated)*
State(s) of Operation:
Regulatory Environment: *(e.g., deregulated, regulated, both)*
Report Date: *Jul-21*

Ref. No.	Refer to the "Definitions" column for more information on each metric.	Baseline	Last Year 2019	Current Year 2020	Next Year 2021	Future Year	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	984167	1016737	1025321	0	0	It includes all LDCs held by AVANGRID
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)*	6293.776	6927.911	7061	0	0	
1.2.2	Cathodically Protected Steel - Bare & Coated *(miles)*	6267.791	6279.238	6245	0	0	
1.2.3	Unprotected Steel - Bare & Coated *(miles)*	572.607	268.758	264	0	0	
1.2.4	Cast Iron / Wrought Iron - without upgrades *(miles)*	1068.777	896.603	875	0	0	
1.3	Plan/Commitment to Replace / Upgrade Remaining Miles of Distribution Mains *(# years to complete)*			CT ~17 years NY ~3 years			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	Optional: # yrs by pipe type.
1.3.2	Cast Iron / Wrought Iron (*# years to complete*)	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)*	256350	227900	213950	0	0	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).
2.2	CH4 Fugitive Methane Emissions from Gas Distribution Operations *(metric tons)*	10254	9116	8558	0	0	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)	534.0625	474.7917	445.7291667	0	0	
2.3	Annual Natural Gas Throughput from Gas Distribution Operations in thousands of standard cubic feet (*Mscf/year*)	2.28E+08	2.54E+08	239587046	0	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-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)	216419.3	241007	227607.6937	0	0	
2.4	Fugitive Methane Emissions Rate (Percent *MMscf of Methane Emissions per MMscf of Methane Throughput*)	0%	0%	0%	Missing Data	Missing Data	Calculated annual metric: (MMSFC methane emissions/MMSCF methane throughput)
	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.
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	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	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	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	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	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	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	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)
1.1.8	Other Leaks (metric tons/year)	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)
1.2	Total Transmission Compression Methane Emissions (metric tons/year)	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	
1.4	Total Transmission Compression Methane Emissions (MSCF/year)	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	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	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	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	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	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	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	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	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	
2.3	Total Storage Compression Methane Emissions (CO2e/year)	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	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	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	
3.3	Transmission Pipeline Blowdown Vent Stacks (MSCF/year)	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	
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	
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	
5	**Summary and Metrics**						
5.1	Total Transmission and Storage Methane Emissions (MMSCF/year)	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	**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	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	

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 facilities *(metric tons CO2e)*	
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)*	

Human Resources

1.1	Total Number of Employees	Refer to Section 7 Human Resources in EEI tab.
1.2	Percentage of Women in Total Workforce	
1.3	Percentage of Minorities in Total Workforce	
2.1	Total Number on Board of Directors/Trustees	
2.2	Percentage of Women on Board of Directors/Trustees	
2.3	Percentage of Minorities on Board of Directors/Trustees	
3	Employee Safety Metrics	
3.1	Recordable Incident Rate	
3.2	Lost-time Case Rate	
3.3	Days Away, Restricted, and Transfer (DART) Rate	
3.4	Work-related Fatalities	

Additional Metrics (Optional)

Insert additional rows in this section as necessary.

Goal Applicability	Baseline Year	Target Year	Reduction Goal Description (Short)	Source (URL)
AVANGRID	2015	2025	35% decrease in Scope 1 greenhouse emissions intensity (measured in grams of CO2 per kilowatt-hour of energy produced) by 2025 compared with 2015	Avangrid 2020 Sustainability Report
AVANGRID	2015	2035	Scope 1 carbon neutral by 2035	Avangrid 2020 Sustainability Report