

Corporate Responsibility and ESG at FirstEnergy

The pillars of our [company strategy](#) are supported by our environmental, social and governance (ESG) priorities and aligned with our commitment to corporate responsibility. Because of this strategic integration, improving our ESG performance advances our strategy and helps us become a more innovative, diverse, sustainable and industry-leading company.

ESG Strategic Priorities:

Staying true to our Mission and Core Values means executing our corporate responsibility approach to pursue objectives and initiatives that positively impact our stakeholders, advance our company strategy and help fulfill our vision for a more sustainable, forward-thinking and industry-leading FirstEnergy.

ENVIRONMENTAL: Protect the environment by minimizing our impact, improving the sustainability of our operations, executing our Climate Strategy and finding opportunities to enhance the ecosystems we interact with

SOCIAL: Support the development of an inclusive, equitable, rewarding and safe workplace while empowering our diverse and innovative team to make our customers' lives brighter and our communities stronger

GOVERNANCE: Maintain oversight of significant company issues and strengthen risk management; build a strong, centralized corporate compliance program and culture of ethics and integrity; continue stakeholder engagement efforts and provide consistent, transparent disclosures on ESG topics

Integrated within the ESG priorities noted above, FirstEnergy's 2022 Materiality Assessment helped us identify material topics and focus our efforts on issues most important to our company and stakeholders including reducing greenhouse gas (GHG) emissions and enabling the clean energy transition.

Reducing GHG Emissions

As part of our Climate Strategy, we aim to reduce our companywide greenhouse gas (GHG) emissions within our direct operational control (Scope 1) by 30% by 2030 (from our 2019 baseline), as we work toward carbon neutrality by 2050. Key steps in reducing our emissions and improving the sustainability of our operations include:

- *Replacing Aging Equipment:* We're responsibly replacing aging equipment on our transmission system that contains sulfur hexafluoride (SF₆), a greenhouse gas commonly used in electric utility equipment.
- *Electrifying our Vehicle Fleet:* We're targeting 30% electrification of our light-duty and aerial truck fleet by 2030 and 100% electrification by 2050. To reach our electrification goal, we've committed to 100% electric or hybrid vehicle purchases for our light-duty and aerial truck fleet moving forward, beginning with the first hybrid electric vehicle additions to the fleet in 2021.
- *Using Generation Efficiencies and Flexibility:* We're utilizing operational flexibilities, such as heat rate improvements through equipment upgrades, operational monitoring systems and auxiliary power reductions at our generation facilities that will enable us to reach our interim 2030 goal of a 30% GHG reduction from 2019 levels, while continuing to provide customers with safe and reliable electricity.

- *Transitioning Away from Coal Generation:* We expect to thoughtfully transition away from our regulated coal generation fleet no later than 2050 and in 2021, FirstEnergy sought approval to construct a solar generation source of at least 50 Mw in West Virginia. Also in 2021, FirstEnergy filed plans with the West Virginia Public Service Commission to comply with the U.S. Environmental Protection Agency’s effluent limitation guideline rules that would keep the generation plants responsible operating beyond 2028, however, intends to begin a broad stakeholder dialogue regarding planned operational end dates of 2035 and 2040 for our two coal generation facilities.

Enabling the Clean Energy Transition

We have a responsibility to our stakeholders to proactively mitigate the company’s climate change risks and capitalize on emerging opportunities in a carbon-neutral economy — all while meeting the changing energy needs of our diverse customer base. Our five-year investment plan, which now totals \$17 billion from 2021 to 2025, supports our continued work to strengthen and enhance the reliability of our transmission and distribution systems and drive the transition to a decarbonized economy. Over \$10 billion of our plan is focused on investments to support a more resilient grid while placing an emphasis on emerging technologies, grid modernization, electric vehicle (EV) infrastructure and solutions to help customers manage their energy use.

Transmission: Across our service area, we’re modernizing FirstEnergy’s transmission assets by replacing or rebuilding existing lines and substations and adding new facilities to meet anticipated load growth and other operational challenges. These significant transmission investments also support our Climate Strategy by hardening the grid against increasingly violent storms and providing the flexibility needed to incorporate more renewable energy resources.

Distribution: We’re also working toward a reduced carbon future in which the distribution system supports economy-wide electrification, increased distributed energy resources, smart cities and more. We’re strengthening our system with smart technologies, machine-learning and advanced automation to enhance our customers’ experience by reducing the frequency and duration of power outages. In addition, by deploying smart meters and providing access to our online Home Energy Analyzer tool, we’re empowering customers to make more informed, real-time decisions about their energy use.

Generation: We also continue to evaluate opportunities to support renewable energy across our service territory. Mon Power and Potomac Edison have filed with the Commission for approval to build five utility-scale solar energy projects throughout the companies’ West Virginia service territory. Together, the facilities would generate 50 megawatts of renewable energy, helping to advance more sustainable energy options for customers and make West Virginia more attractive for business development. In addition, JCP&L has submitted a proposal to connect clean energy generated by New Jersey’s offshore wind farms to the power grid. The proposal, which supports significant investments in clean energy driven by the New Jersey Energy Master Plan, is designed to connect future offshore wind farms with the grid through existing transmission infrastructure and rights-of-way.

Our commitment to enabling a clean energy future where our customers can thrive is a significant component of FirstEnergy’s overarching strategy. As we develop new customer-focused ESG initiatives that advance the transition to a reduced carbon economy, we must consider a range of issues including emerging federal and state decarbonization goals; physical risks of climate change; industry trends and technology advancements; and more sustainable alternatives in transportation, manufacturing and industrial processes.

Corporate Responsibility Oversight and ESG Governance

FirstEnergy is committed to providing our stakeholders with comprehensive information on our strategies regarding environmental, social and governance (ESG) issues. Strong board and executive-level oversight ensures the transparency, accountability and relevancy of our ESG initiatives.

- **Corporate Governance and Corporate Responsibility Board Committee** — Comprising independent directors, this Committee provides oversight of the company’s corporate responsibility approach and supporting ESG initiatives. The Committee meets five times per year to discuss, among other things, updates on a broad range of ESG issues, and company management provides regular updates on ESG progress throughout the year.
- **Corporate Responsibility Executive-Level Steering Committee** — This cross-functional, executive-level steering committee oversees our company’s corporate responsibility approach and supporting ESG initiatives. Members of this group include senior leadership from the company’s five organizational pillars – Finance & Strategy, Customer, Operations, Legal, and Human Resources & Corporate Services. The Committee receives quarterly reports on ESG progress from the Corporate Responsibility Manager and Corporate Responsibility team.
- **Manager, Corporate Responsibility** — The Manager leads the Corporate Responsibility team responsible for the execution of our corporate responsibility approach and the development of our ESG initiatives. This person reports to the Director of Investor Relations and Corporate Responsibility and regularly updates the executive-level Corporate Responsibility Steering Committee and the Corporate Governance and Corporate Responsibility Board Committee on evolving considerations for our company and our ESG progress. The position is also responsible for educating employees on the importance of corporate responsibility efforts and improving ESG focus and performance across business areas.

Climate Risk Oversight and Accountability

Oversight, accountability and risk mitigation of our Climate Strategy and greenhouse gas reduction goals occur at the highest levels of our company, where our Board of Directors, Corporate Governance and Corporate Responsibility Board Committee, executive-level steering committee and business unit leadership guide our efforts. Additionally, employees throughout the company participate in executing our Climate Strategy and play a key role in helping us to meet our objectives.

We encourage you to read more about our corporate responsibility and ESG initiatives, our Climate Report, climate story, Task Force on Climate-Related Financial Disclosures (TCFD) Report, Strategic Plan and more on our [Corporate Responsibility website](#).

This report contains forward-looking statements based on information available to the company. For more information, including our full forward-looking statement, please visit our [Shareholder Engagement](#) page.

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Climate Story	Climate Story - FirstEnergy Corporate Responsibility
Company Goals	Strategic Goals for the Future
ESG Reports and Resources	ESG Reports and Resources - FirstEnergy Corporate Responsibility



Electric Company ESG/Sustainability Quantitative Information

Parent Company: FirstEnergy Corp.
Operating Company(s): Ohio Edison, The Illuminating Company, Toledo Edison, Penn Power, West Penn Power, Penelec, Met-Ed, JCP&L, Mon Power and Potomac Edison
Business Type(s): Vertically integrated
State(s) of Operation: Maryland, New Jersey, New York, Ohio, Pennsylvania, West Virginia
State(s) with RPS Programs: Maryland, New Jersey, New York, Ohio, Pennsylvania
Regulatory Environment: Regulated
Report Date: 4/22/2022

Ref No.	Refer to the 'EEI Definitions' tab for more information on each metric	2020	2021	Additional Information
Portfolio				
1	Owned Nameplate Generation Capacity at end of year (MW)			Net demonstrated capacity as reported in FE's 10-K Filing
1.1	Coal	3,082	3,082	
1.2	Natural Gas	0	0	
1.3	Nuclear	0	0	
1.4	Petroleum	0	0	
1.5	Total Renewable Energy Resources			
1.5.1	Biomass/Biogas	0	0	
1.5.2	Geothermal	0	0	
1.5.3	Hydroelectric	697	487	
1.5.4	Solar	0	0	
1.5.5	Wind	0	0	
1.6	Other	0	0	

Ref No.	Refer to the 'EEI Definitions' tab for more information on each metric	2020	2021	Comments, Links, Additional Information, and Notes
Portfolio				
2	Net Generation for the data year (MWh)	61,496,572	64,214,391	
2.1	Coal			
2.2	Natural Gas			
2.3	Nuclear			
2.4	Petroleum			
2.5	Total Renewable Energy Resources			
2.5.1	Biomass/Biogas			
2.5.2	Geothermal			
2.5.3	Hydroelectric			
2.5.4	Solar			
2.5.5	Wind			
2.6	Other			
2.i	Owned Net Generation for the data year (MWh)			Net generation data as reported on EIA's Form 923, and FE's internal numbers
2.1.i	Coal	15,953,647	16,702,649	
2.2.i	Natural Gas	0	0	
2.3.i	Nuclear	0	0	
2.4.i	Petroleum	0	0	
2.5.i	Total Renewable Energy Resources			
2.5.1.i	Biomass/Biogas	0	0	
2.5.2.i	Geothermal	0	0	
2.5.3.i	Hydroelectric	-91,795	-15,326	
2.5.4.i	Solar	0	0	
2.5.5.i	Wind	0	0	
2.6.i	Other	0	0	

Ref No.	Refer to the 'EEI Definitions' tab for more information on each metric	2020	2021	Comments, Links, Additional Information, and Notes
Portfolio				
2.ii	Purchased Net Generation for the data year (MWh)	45,634,720	47,527,068	
2.1.ii	Coal			
2.2.ii	Natural Gas			
2.3.ii	Nuclear			
2.4.ii	Petroleum			
2.5.ii	Total Renewable Energy Resources			
2.5.1.ii	Biomass/Biogas			
2.5.2.ii	Geothermal			
2.5.3.ii	Hydroelectric			
2.5.4.ii	Solar			
2.5.5.ii	Wind			
2.6.ii	Other			
3	Capital Expenditures and Energy Efficiency (EE)			
3.1	Total Annual Capital Expenditures (nominal dollars)	\$ 2,986,000,000	\$ 2,874,000,000	
3.2	Incremental Annual Electricity Savings from EE Measures (MWh)	1,013,955	391,284	
3.3	Incremental Annual Investment in Electric EE Programs (nominal dollars)	\$ 125,000,000	\$ 71,000,000	
4	Retail Electric Customer Count (at end of year)			
4.1	Commercial	737,197	741,701	Includes streetlight customers
4.2	Industrial	23,004	22,268	
4.3	Residential	5,407,958	5,428,121	

Ref No.	Refer to the 'EEI Definitions' tab for more information on each metric	2020	2021	Comments, Links, Additional Information, and Notes
Emissions				
5	GHG Emissions: Carbon Dioxide (CO ₂) and Carbon Dioxide Equivalent (CO ₂ e) <i>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.</i>			
5.1	Owned Generation (1) (2) (3)			GHG emissions for 2020 and 2021 as reported for EPA's GHG MRR
5.1.1	Carbon Dioxide (CO ₂)			
5.1.1.1	Total Owned Generation CO ₂ Emissions (MT)	14,441,433	15,700,740	
5.1.1.2	Total Owned Generation CO ₂ Emissions Intensity (MT/Net MWh)	0.910	0.941	
5.1.2	Carbon Dioxide Equivalent (CO ₂ e)			
5.1.2.1	Total Owned Generation CO ₂ e Emissions (MT)	14,519,279	15,785,373	
5.1.2.2	Total Owned Generation CO ₂ e Emissions Intensity (MT/Net MWh)	0.915	0.946	
5.2	Purchased Power (4)			
5.2.1	Carbon Dioxide (CO ₂)			
5.2.1.1	Total Purchased Generation CO ₂ Emissions (MT)			Unable to calculate CO ₂ alone
5.2.1.2	Total Purchased Generation CO ₂ Emissions Intensity (MT/Net MWh)			
5.2.2	Carbon Dioxide Equivalent (CO ₂ e)			
5.2.2.1	Total Purchased Generation CO ₂ e Emissions (MT)	28,230,946	30,262,689	
5.2.2.2	Total Purchased Generation CO ₂ e Emissions Intensity (MT/Net MWh)	0.619	0.637	
5.3	Owned Generation + Purchased Power			
5.3.1	Carbon Dioxide (CO ₂)			
5.3.1.1	Total Owned + Purchased Generation CO ₂ Emissions (MT)			Blank due to no data on 5.2.1.1
5.3.1.2	Total Owned + Purchased Generation CO ₂ Emissions Intensity (MT/Net MWh)			
5.3.2	Carbon Dioxide Equivalent (CO ₂ e)			
5.3.2.1	Total Owned + Purchased Generation CO ₂ e Emissions (MT)	32,992,310	46,048,062	
5.3.2.2	Total Owned + Purchased Generation CO ₂ e Emissions Intensity (MT/Net MWh)	0.536	0.717	
5.4	Non-Generation CO ₂ e Emissions of Sulfur Hexafluoride (SF ₆) (5)			
5.4.1	Total CO ₂ e emissions of SF ₆ (MT)	134,518	81,702	
5.4.2	Leak rate of CO ₂ e emissions of SF ₆ (MT/Net MWh)			

Ref No.	Refer to the 'EEI Definitions' tab for more information on each metric	2020	2021	Comments, Links, Additional Information, and Notes
6	Nitrogen Oxide (NOx), Sulfur Dioxide (SO ₂), Mercury (Hg)			
6.1	Generation basis for calculation (6)			Total System Generation
6.2	Nitrogen Oxide (NOx)			
6.2.1	Total NOx Emissions (MT)	9,676	10,217	
6.2.2	Total NOx Emissions Intensity (MT/Net MWh)	0.000610	0.000612	
6.3	Sulfur Dioxide (SO ₂)			
6.3.1	Total SO ₂ Emissions (MT)	11,335	11,442	
6.3.2	Total SO ₂ Emissions Intensity (MT/Net MWh)	0.000715	0.000686	
6.4	Mercury (Hg)			
6.4.1	Total Hg Emissions (kg)	34.0	34.0	
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	0.000002	0.000002	
Resources				
7	Human Resources			
7.1	Total Number of Employees	11,990	11,949	Number of employees excludes employees on Long Term Disabilities, Student and Temporary employees
7.2	Percentage of Women in Total Workforce	22%	22%	
7.3	Percentage of Minorities in Total Workforce	10%	10%	
7.4	Total Number on Board of Directors/Trustees	10	16	
7.5	Percentage of Women on Board of Directors/Trustees	30%	19%	
7.6	Percentage of Minorities on Board of Directors/Trustees	30%	31%	
7.7	Employee Safety Metrics			
7.7.1	Recordable Incident Rate	0.70	0.93	
7.7.2	Lost-time Case Rate	0.17	0.30	
7.7.3	Days Away, Restricted, and Transfer (DART) Rate	0.36	0.56	
7.7.4	Work-related Fatalities	0.00	0.00	
8	Fresh Water Resources used in Thermal Power Generation Activities			
8.1	Water Withdrawals - Consumptive (Millions of Gallons)	3,976.00	4,068.00	
8.2	Water Withdrawals - Non-Consumptive (Millions of Gallons)	9,648.00	9,506.00	
8.3	Water Withdrawals - Consumptive Rate (Millions of Gallons/Net MWh)	0.00016	0.00024	
8.4	Water Withdrawals - Non-Consumptive Rate (Millions of Gallons/Net MWh)	0.00061	0.00057	

Ref No.	Refer to the 'EEI Definitions' tab for more information on each metric	2020	2021	Comments, Links, Additional Information, and Notes
9	Waste Products			
9.1	Amount of Hazardous Waste Manifested for Disposal (MT)	14	12	
9.2	Percent of Coal Combustion Products Beneficially Used	21%	20%	
Additional Metrics (Optional)				
	Insert additional rows in this section as necessary.			

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