

W0. Introduction

W0.1

**(W0.1) Give a general description of and introduction to your organization.**

Headquartered in Akron, Ohio, FirstEnergy is a fully regulated electric utility with over 12,000 employees dedicated to integrity, safety, reliability and operational excellence. Our subsidiaries are involved in the transmission, distribution and regulated generation of electricity. Our 10 electric distribution companies form one of the nation's largest investor-owned electric systems, based on serving more than 6 million customers in Ohio, Pennsylvania, New Jersey, West Virginia, Maryland and New York. The company's transmission subsidiaries operate approximately 24,000 miles of transmission lines connecting the Midwest and Mid-Atlantic regions. FirstEnergy's Mon Power subsidiary controls 3,580 megawatts of generating capacity from two regulated coal plants and one pumped-storage hydro facility.

For the purposes of this CDP report, all financial and emissions information is based on FirstEnergy's 2021 year-end portfolio.

This report contains forward looking statements based on information available to the company. For more information, including our full forward-looking statement please visit: <https://www.firstenergycorp.com/content/fecorp/investor/engagement.html>.

\*As of 3/12/21, Jersey Central Power & Light (JCP&L) completed the sale of its interest in the Yards Creek pumped-storage hydro plant to Yards Creek Energy, LLC.

W-EU0.1a

**(W-EU0.1a) Which activities in the electric utilities sector does your organization engage in?**

- Electricity generation
- Transmission
- Distribution

W-EU0.1b

**(W-EU0.1b) For your electricity generation activities, provide details of your nameplate capacity and the generation for each technology.**

|   | Nameplate capacity (MW) | % of total nameplate capacity | Gross electricity generation (GWh) |
|---|-------------------------|-------------------------------|------------------------------------|
| Coal – hard   | 3082                    | 86.4                          | 18073459                           |
| Lignite   |                         |                               |                                    |
| Oil   |                         |                               |                                    |
| Gas   |                         |                               |                                    |
| Biomass   |                         |                               |                                    |
| Waste (non-biomass)                                       |                         |                               |                                    |
| Nuclear   |                         |                               |                                    |
| Fossil-fuel plants fitted with carbon capture and storage |                         |                               |                                    |
| Geothermal  |                         |                               |                                    |
| Hydropower  | 486                     | 13.6                          | 50010                              |
| Wind  |                         |                               |                                    |
| Solar   |                         |                               |                                    |
| Marine  |                         |                               |                                    |
| Other renewable   |                         |                               |                                    |
| Other non-renewable                                       |                         |                               |                                    |
| Total   | 3568                    | 100                           | 18123469                           |

W0.2

**(W0.2) State the start and end date of the year for which you are reporting data.**

|                | Start date     | End date         |
|----------------|----------------|------------------|
| Reporting year | January 1 2021 | December 31 2021 |

W0.3

**(W0.3) Select the countries/areas in which you operate.**

United States of America

**W0.4**

**(W0.4) Select the currency used for all financial information disclosed throughout your response.**

USD

**W0.5**

**(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.**

Companies, entities or groups over which operational control is exercised

**W0.6**

**(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?**

Yes

**W0.6a**

**(W0.6a) Please report the exclusions.**

| Exclusion   | Please explain  |
|-------------|---|
| Yards Creek | Jersey Central Power & Light Company, a regulated utility and subsidiary of FirstEnergy Corp., sold its 50% undivided interest in the Yards Creek Pumped Storage Hydroelectric Facility (the "Yards Creek Facility") to Yards Creek Energy LLC ("LS Power"), a subsidiary of LS Power Development, LLC. 210 MW, on March 5, 2021. |

**W0.7**

**(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?**

| Indicate whether you are able to provide a unique identifier for your organization. | Provide your unique identifier |
|---|--------------------------------|
| Yes, an ISIN code   | US3379321074                   |

**W1. Current state**

**W1.1**

**(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.**

|  | Direct use importance rating | Indirect use importance rating | Please explain  |
|--|------------------------------|--------------------------------|---|
| Sufficient amounts of good quality freshwater available for use                  | Vital                        | Important                      | Direct: Water is essential to FirstEnergy's ability to generate electricity. All of our plants use water for steam production, material delivery, and plant cooling purposes. This is evidenced by our total withdrawal averaging almost 105 megaliters of water per day. Indirect: Municipal Water supply is important to support many of our WASH operations for our employees. |
| Sufficient amounts of recycled, brackish and/or produced water available for use | Important                    | Neutral                        | Of the three generation and synchronous condenser facilities operated by FirstEnergy in 2020, two of them (Harrison Power Station and Fort Martin Power Station) recycle their non-contact cooling water; however, FirstEnergy facilities are not located in areas that require use of recycled, brackish and/or produced water due to supply constraints.                        |

**W1.2**

**(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?**

|  | % of sites/facilities/operations | Please explain  |
|--|----------------------------------|---|
| Water withdrawals – total volumes  | 100%                             | Total water withdrawals are measured and/or monitored at all FirstEnergy generation and synchronous condenser facilities, as required by NPDES permit and state water withdrawal permit/license requirements. |
| Water withdrawals – volumes by source  | 100%                             | Water withdrawals by source are measured and/or monitored at all FirstEnergy generation and synchronous condenser facilities.   |
| Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector] | <Not Applicable>                 | <Not Applicable>  |
| Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]              | <Not Applicable>                 | <Not Applicable>  |
| Water withdrawals quality  | 100%                             | Total water withdrawal quality is measured and/or monitored at all FirstEnergy generation and synchronous condenser facilities, as required by NPDES permit requirements.                                     |
| Water discharges – total volumes   | 100%                             | Water discharges (total volume) are measured and monitored at all FirstEnergy generation and synchronous condenser facilities   |
| Water discharges – volumes by destination  | 100%                             | Water discharge (volumes by destination) are measured and monitored at all FirstEnergy generation and synchronous condenser facilities.   |
| Water discharges – volumes by treatment method   | 100%                             | Water discharge (volumes by treatment method) are measured and monitored at all FirstEnergy generation and synchronous condenser facilities.  |
| Water discharge quality – by standard effluent parameters  | 100%                             | Water discharge quality data (by standard effluent parameters) are measured and monitored at all FirstEnergy generation and synchronous condenser facilities.   |
| Water discharge quality – temperature  | 100%                             | Water discharge quality data, including temperature, are measured and monitored at all FirstEnergy generation and synchronous condenser facilities.   |
| Water consumption – total volume   | 100%                             | Water consumption (total volume) at all FirstEnergy generation and synchronous condenser facilities is calculated using engineering estimates.  |
| Water recycled/reused  | 100%                             | Water recycling for non-contact cooling water is measured/estimated at all FirstEnergy generation and synchronous condenser facilities with recycling capabilities.   |
| The provision of fully-functioning, safely managed WASH services to all workers  | 100%                             | Facilities providing fully functioning WASH services for all workers are measured.  |

**W-EU1.2a**

**(W-EU1.2a) For your hydropower operations, what proportion of the following water aspects are regularly measured and monitored?**

|   | % of sites/facilities/operations measured and monitored | Please explain  |
|---|---|---|
| Fulfillment of downstream environmental flows | Not relevant  | In CDP, we only report information in our direct operational control. FirstEnergy does not operationally control Bath County Pumped Storage Station but owns a 40% stake. |
| Sediment loading                              | Not relevant  | In CDP, we only report information in our direct operational control. FirstEnergy does not operationally control Bath County Pumped Storage Station but owns a 40% stake. |
| Other, please specify                         | Not relevant  | In CDP, we only report information in our direct operational control. FirstEnergy does not operationally control Bath County Pumped Storage Station but owns a 40% stake. |

**W1.2b**

**(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?**

|                   | Volume (megaliters/year) | Comparison with previous reporting year | Please explain |
|-------------------|--------------------------|---|----------------|
| Total withdrawals | 66798                    | About the same                          |                |
| Total discharges  | 50481                    | About the same                          |                |
| Total consumption | 16317                    | About the same                          |                |

**W1.2d**

**(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.**

|       | Withdrawals are from areas with water stress | % withdrawn from areas with water stress | Comparison with previous reporting year | Identification tool | Please explain  |
|-------|--|--|---|---------------------|---|
| Row 1 | No   | <Not Applicable>                         | <Not Applicable>                        | WRI Aqueduct        | WRI Aqueduct was used on multiple scales. Whether reviewing overall water risk or water stress, none of the areas where our generation or synchronous condensers are located constitute a high risk or above. |

**W1.2h**

**(W1.2h) Provide total water withdrawal data by source.**

|  | Relevance    | Volume (megaliters/year) | Comparison with previous reporting year | Please explain   |
|--|--------------|--------------------------|---|--|
| Fresh surface water, including rainwater, water from wetlands, rivers, and lakes | Relevant     | 66798                    | About the same                          |  |
| Brackish surface water/Seawater  | Not relevant | <Not Applicable>         | <Not Applicable>                        | Brackish surface water/seawater is not withdrawn as part of our operations.  |
| Groundwater – renewable  | Not relevant | <Not Applicable>         | <Not Applicable>                        | Groundwater - renewable as a source of withdrawal is not accounted for as part of our operations.  |
| Groundwater – non-renewable  | Not relevant | <Not Applicable>         | <Not Applicable>                        | Groundwater - non-renewable as a source of withdrawal is not accounted for as part of our operations.  |
| Produced/Entrained water   | Not relevant | <Not Applicable>         | <Not Applicable>                        | Produced/entrained water as a source of withdrawal is not accounted for as part of our operations.   |
| Third party sources  | Not relevant | <Not Applicable>         | <Not Applicable>                        | While third party sources as a source of withdrawal do occur during operation of our facilities, they are not a material part of our operations. |

**W1.2i**

**(W1.2i) Provide total water discharge data by destination.**

|                                 | Relevance    | Volume (megaliters/year) | Comparison with previous reporting year | Please explain   |
|---------------------------------|--------------|--------------------------|---|--|
| Fresh surface water             | Relevant     | 50481                    | About the same                          |  |
| Brackish surface water/seawater | Not relevant | <Not Applicable>         | <Not Applicable>                        | Discharge to brackish surface water/seawater is not part of our operations.  |
| Groundwater                     | Not relevant | <Not Applicable>         | <Not Applicable>                        | Discharge to groundwater is not part of our operations.  |
| Third-party destinations        | Not relevant | <Not Applicable>         | <Not Applicable>                        | While FirstEnergy may utilize third party sources for employee sanitation purposes, the discharge to third party destinations is not material to our operations. |

**W1.2j**

**(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.**

|  | Relevance of treatment level to discharge | Volume (megaliters/year) | Comparison of treated volume with previous reporting year | % of your sites/facilities/operations this volume applies to | Please explain   |
|--|---|--------------------------|---|--|--|
| Tertiary treatment                                     | Not relevant                              | <Not Applicable>         | <Not Applicable>  | <Not Applicable>   | We are installing the tertiary treatment as required by the 2020 ELG Rule. Although we are seeking cost recovery through the WV PSC, the installation of the treatment is not subject to PSC approval.                     |
| Secondary treatment                                    | Relevant but volume unknown               | <Not Applicable>         | <Not Applicable>  | <Not Applicable>   | Fort Martin - Outlet 003 and 102 receive secondary treatment<br>Harrison - Outlet 001 and 002 (plant water) receive secondary treatment<br>Eastlake Synchronous Condenser - Outlet 002 and 003 receive secondary treatment |
| Primary treatment only                                 | Relevant but volume unknown               | <Not Applicable>         | <Not Applicable>  | <Not Applicable>   | Some Fort Martin and Harrison stormwater receive primary treatment.  |
| Discharge to the natural environment without treatment | Relevant but volume unknown               | <Not Applicable>         | <Not Applicable>  | <Not Applicable>   | Fort Martin - Outlet 002 and some stormwater receive primary treatment<br>Harrison- Outlet 001 and 002 cooling towers and some stormwater receive primary treatment  |
| Discharge to a third party without treatment           | Relevant but volume unknown               | <Not Applicable>         | <Not Applicable>  | <Not Applicable>   | Eastlake Synchronous Condenser sewage discharge  |
| Other  | Not relevant                              | <Not Applicable>         | <Not Applicable>  | <Not Applicable>   |  |

**W1.3**

**(W1.3) Provide a figure for your organization's total water withdrawal efficiency.**

|       | Revenue    | Total water withdrawal volume (megaliters) | Total water withdrawal efficiency | Anticipated forward trend  |
|-------|------------|--|-----------------------------------|--|
| Row 1 | 1113200000 | 66798                                      | 166651.696158568                  | We are targeting a 20% reduction in water consumption at our two regulated coal plants by 2030 from our 2019 baseline. |

**W-EU1.3**

**(W-EU1.3) Do you calculate water intensity for your electricity generation activities?**

Yes

**W-EU1.3a**

(W-EU1.3a) Provide the following intensity information associated with your electricity generation activities.

| Water intensity value (m3) | Numerator: water aspect | Denominator | Comparison with previous reporting year | Please explain   |
|----------------------------|-------------------------|-------------|---|--|
| 0.9                        | Total water consumption | MWh         | This is our first year of measurement   | Both of our regulated coal plants – Harrison and Fort Martin – function with 100% closed-cycle cooling systems (with cooling towers), which use approximately 90% less water compared to once-through, open-cycle cooling systems. This has helped our regulated generation fleet avoid about 90 billion gallons in water withdrawals every year, reducing our use of this important natural resource. We also run additional reuse processes at Harrison and Fort Martin to further minimize water use at the plants. |

W1.4

(W1.4) Do you engage with your value chain on water-related issues?

Yes, our suppliers

Yes, our customers or other value chain partners

W1.4a

(W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?

Row 1

% of suppliers by number

76-100

% of total procurement spend

76-100

Rationale for this coverage

FirstEnergy has all suppliers comply with our Supplier Code of Conduct. The Supplier Code of Conduct specifies that suppliers will "safeguard the environment" and "minimize the use of materials of concern", which includes water. We have made a commitment to environmental stewardship and want to ensure that the businesses we work with comply with our values and expectations with regards to water and other environmental topics. In addition, Supply Chain's 2020 mission includes further improvement and prioritization of environmental, social, and governance (ESG) topics in our supply chain strategy. Also, we partner with suppliers who embrace sustainable business practices.

Impact of the engagement and measures of success

FirstEnergy does not knowingly engage in business relationships with suppliers that cannot adhere to our Supplier Code of Conduct. One measure of success in this area is the number of environmental enforcement actions occur within FirstEnergy. Another key approach of our supply chain is that our suppliers strive to meet or exceed industry standards for ESG issues, including those related to water.

Comment

W1.4b

(W1.4b) Provide details of any other water-related supplier engagement activity.

Type of engagement

Onboarding & compliance

Details of engagement

Inclusion of water stewardship and risk management in supplier selection mechanism  
Requirement to adhere to our code of conduct regarding water stewardship and management

% of suppliers by number

76-100

% of total procurement spend

76-100

Rationale for the coverage of your engagement

FirstEnergy has all suppliers comply with our Supplier Code of Conduct. The Supplier Code of Conduct specifies that suppliers will "safeguard the environment" and "minimize the use of materials of concern", which includes water. We have made a commitment to environmental stewardship and want to ensure that the businesses we work with comply with our values and expectations with regards to water and other environmental topics. In addition, Supply Chain's 2020 mission includes further improvement and prioritization of environmental, social, and governance (ESG) topics in our supply chain strategy. Also, we partner with suppliers who embrace sustainable business practices.

Impact of the engagement and measures of success

FirstEnergy does not knowingly engage in business relationships with suppliers that cannot adhere to our Supplier Code of Conduct. One measure of success in this area is the number of environmental enforcement actions occur within FirstEnergy. Overall, this approach to supplier relationships will help build a more sustainable supply chain in alignment with our Supply Chain Mission.

Comment

## W1.4c

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### (W1.4c) What is your organization's rationale and strategy for prioritizing engagements with customers or other partners in its value chain?

FirstEnergy is committed to making our customers' lives brighter and communities stronger. As part of this commitment, FirstEnergy strives to be a responsible member by encouraging partners in our value chain to meet and exceed environmental laws, where appropriate. Our Environmental Policy specifies that we use our natural resources wisely, and we expect the same from our suppliers. FirstEnergy also created a goal in 2020 to reduce water consumption at our two coal generation plants by 20% by 2030, based on 2019 levels.

## W2. Business impacts

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### W2.1

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#### (W2.1) Has your organization experienced any detrimental water-related impacts?

Yes

### W2.1a

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#### (W2.1a) Describe the water-related detrimental impacts experienced by your organization, your response, and the total financial impact.

##### Country/Area & River basin

|                          |                   |
|--------------------------|-------------------|
| United States of America | Mississippi River |
|--------------------------|-------------------|

##### Type of impact driver & Primary impact driver

|            |   |
|------------|---|
| Regulatory | Regulation of discharge quality/volumes |
|------------|---|

##### Primary impact

Impact on company assets

##### Description of impact

On August 31, 2020, USEPA finalized a rule that revised the regulations for the Steam Electric Power Generating category. The rule sets strict limits on the discharge of pollutants in flue gas desulfurization wastewater and also limits the discharge of coal ash transport water. The new requirements directly affect FirstEnergy generation facilities and compliance costs will be in the millions of dollars.

##### Primary response

Comply with local regulatory requirements

##### Total financial impact

135000000

##### Description of response

FirstEnergy has engaged with various stakeholders regarding the regulations and pending permits. FirstEnergy actively works with stakeholders to promote mutually beneficial outcomes where possible. FirstEnergy will comply with all requirements from the outcome of the final implemental rules.

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### W2.2

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#### (W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

Yes, fines, enforcement orders or other penalties but none that are considered as significant

### W2.2a

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**(W2.2a) Provide the total number and financial value of all water-related fines.**

**Row 1**

**Total number of fines**

1

**Total value of fines**

250

**% of total facilities/operations associated**

4

**Number of fines compared to previous reporting year**

Lower

**Comment**

**W3. Procedures**

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**W-EU3.1**

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**(W-EU3.1) How does your organization identify and classify potential water pollutants associated with your business activities in the electric utilities sector that could have a detrimental impact on water ecosystems or human health?**

FirstEnergy generation facilities are regulated under various federal, state, and local water quality regulations, the majority of which result from the Clean Water Act and its amendments.

FirstEnergy monitors, identifies, and classifies potential pollutant by compliance with those water quality regulations.

**W-EU3.1a**

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**(W-EU3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants associated with your activities in the electric utilities sector on water ecosystems or human health.**

| Potential water pollutant | Description of water pollutant and potential impacts  | Management procedures  | Please explain  |
|---------------------------|---|--|---|
| Coal combustion residuals | In April 2015, EPA finalized regulations for CCRs. Along with the CCR regulations, the EPA has published potential water pollutants and operational impacts from CCRs.  | Compliance with effluent quality standards<br>Community/stakeholder engagement<br>Emergency preparedness | While certain provisions of the April 2015 CCR rule are under reconsideration, FirstEnergy intends to comply with the CCR rule, as appropriate.   |
| Thermal pollution         | In 2021, FirstEnergy owned and operated 2 thermal electric power plants (Harrison Power Station and Fort Martin Power Station). Non-contact cooling water is used at these plants and is inherent to the thermal electric production process. | Compliance with effluent quality standards<br>Community/stakeholder engagement                           | The potential environmental impacts have been reviewed and studied in the NPDES permit supporting documentation. The results of the supporting documentation and studies are permit limits, which the facilities comply with. |

**W3.3**

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**(W3.3) Does your organization undertake a water-related risk assessment?**

Yes, water-related risks are assessed

**W3.3a**

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**(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.**

**Value chain stage**

Direct operations

**Coverage**

Full

**Risk assessment procedure**

Water risks are assessed as part of an established enterprise risk management framework

**Frequency of assessment**

More than once a year

**How far into the future are risks considered?**

3 to 6 years

**Type of tools and methods used**

Tools on the market  
Enterprise risk management  
International methodologies and standards  
Databases

**Tools and methods used**

WRI Aqueduct  
Other, please specify (PENTOXSD, Cormix, as appropriate)

**Contextual issues considered**

Stakeholder conflicts concerning water resources at a basin/catchment level  
Water regulatory frameworks  
Status of ecosystems and habitats

**Stakeholders considered**

Customers  
Local communities

**Comment**

FirstEnergy has a formal, comprehensive Enterprise-Wide Risk Management (EWRM) program in place to evaluate water risks on an as-needed basis. Plant water quality is frequently assessed under National Pollutant Discharge Elimination System (NPDES) permit conditions and development. FirstEnergy proactively analyzes and mitigates risks through stakeholder participation, various tools and available resources.

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**Value chain stage**

Supply chain

**Coverage**

Full

**Risk assessment procedure**

Water risks are assessed in an environmental risk assessment

**Frequency of assessment**

Not defined

**How far into the future are risks considered?**

Unknown

**Type of tools and methods used**

Other

**Tools and methods used**

Internal company methods

**Contextual issues considered**

Implications of water on your key commodities/raw materials

**Stakeholders considered**

Suppliers

**Comment**

FirstEnergy utilizes a strategic sourcing model. As part of that model, we may assess suppliers' environmental commitments and risks, including those related to water. FirstEnergy's Supply Chain group also collaborates with suppliers on ESG initiatives, which could include water, to achieve mutually beneficial solutions.

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**Value chain stage**

Other stages of the value chain

**Coverage**

Partial

**Risk assessment procedure**

Water risks are assessed in an environmental risk assessment

**Frequency of assessment**

Annually

**How far into the future are risks considered?**

3 to 6 years

**Type of tools and methods used**

Databases  
Other

**Tools and methods used**

Regional government databases  
Internal company methods

**Contextual issues considered**

Stakeholder conflicts concerning water resources at a basin/catchment level

**Stakeholders considered**

Customers  
Local communities

**Comment**



FirstEnergy has developed an extensive internal emergency response organization. As such, an incident command structure is employed and drills are conducted at least annually. We participate in working groups, training opportunities, and conferences at all levels of the public and private sectors to ensure readiness, build relationships, and stay abreast of technological advances.

### W3.3b

**(W3.3b) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.**

A formal, comprehensive Enterprise-Wide Risk Management (EWRM) program is in place to ensure FirstEnergy thoroughly assesses and addresses risks and opportunities that could impact its electric system, including those posed by changes in the climate. These risks are assessed on short (0-1 year), medium (1-3 years), and long term (3-5 years and beyond) basis, with emphasis on long-term planning for potential climate-related issues. The EWRM's framework identifies individual risks at the enterprise, business unit, or project level and groups them into four main categories (strategic, operational, compliance, and financial), all of which have potential ties to climate.

## W4. Risks and opportunities

### W4.1

**(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes, both in direct operations and the rest of our value chain

#### W4.1a

**(W4.1a) How does your organization define substantive financial or strategic impact on your business?**

Other than the ever-present potential for regulatory change, or the unlikely disruption of water sources, FirstEnergy has not identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on its business.

#### W4.1b

**(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?**

|       | Total number of facilities exposed to water risk | % company-wide facilities this represents | Comment  |
|-------|--|---|--|
| Row 1 | 3  | 100                                       | FirstEnergy has two electric generating facilities and one synchronous condenser that represent the entirety of FirstEnergy fossil generating capacity.<br>Harrison Power Station<br>Fort Martin Power Station<br>Eastlake Synchronous Condenser |

#### W4.1c

(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive financial or strategic impact on your business, and what is the potential business impact associated with those facilities?

**Country/Area & River basin**

|                          |                   |
|--------------------------|-------------------|
| United States of America | Mississippi River |
|--------------------------|-------------------|

**Number of facilities exposed to water risk**

2

**% company-wide facilities this represents**

51-75

**Production value for the metals & mining activities associated with these facilities**

<Not Applicable>

**% company's annual electricity generation that could be affected by these facilities**

100%

**% company's global oil & gas production volume that could be affected by these facilities**

<Not Applicable>

**% company's total global revenue that could be affected**

Unknown

**Comment**

FirstEnergy has two fossil fuel electric generating facilities within the Mississippi River Basin: Harrison and Fort Martin. This represents all of FirstEnergy's fossil fuel generating capacity.

**Country/Area & River basin**

|                          |              |
|--------------------------|--------------|
| United States of America | St. Lawrence |
|--------------------------|--------------|

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

26-50

**Production value for the metals & mining activities associated with these facilities**

<Not Applicable>

**% company's annual electricity generation that could be affected by these facilities**

Not applicable

**% company's global oil & gas production volume that could be affected by these facilities**

<Not Applicable>

**% company's total global revenue that could be affected**

Unknown

**Comment**

FirstEnergy has one synchronous condenser facility within the St. Lawrence River basin, Eastlake Synchronous Condenser. Synchronous condensers along with static VAR compensators regulate reactive power to help ensure grid stability but do not generate electricity. This represents none of FirstEnergy's generating capacity.

**W4.2**

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

**Country/Area & River basin**

|                          |                   |
|--------------------------|-------------------|
| United States of America | Mississippi River |
|--------------------------|-------------------|

**Type of risk & Primary risk driver**

|                |  |
|----------------|--|
| Acute physical | Flood (coastal, fluvial, pluvial, groundwater) |
|----------------|--|

**Primary potential impact**

Reduction or disruption in production capacity

**Company-specific description**

Flooding could impact FE's operations and/or cause costs to be incurred.

**Timeframe**

Current up to one year

**Magnitude of potential impact**

Low

**Likelihood**

Unknown

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

<Not Applicable>

**Potential financial impact figure - maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

Unknown, but potentially high (millions of dollars).

**Primary response to risk**

Develop flood emergency plans

**Description of response**

Both of our regulated coal plants – Harrison and Fort Martin – function with 100% closed-cycle cooling systems (with cooling towers), which use approximately 90% less water compared to once-through, open-cycle cooling systems. This has helped our regulated generation fleet avoid about 90 billion gallons in water withdrawals every year, reducing our use of this important natural resource.

We also run additional reuse processes at Harrison and Fort Martin to further minimize water use at the plants. At Harrison, we collect landfill water runoff – called leachate – and recycle 50% for use in the scrubber, while carefully treating the rest before release to the West Fork River. This process reduces the amount of water we withdraw from the river for use in the scrubber by about 100 gallons per minute, or approximately 52.5 million gallons annually. At Fort Martin, we run a similar recycling project to return leachate for use in the cooling tower, which reduces the amount of water we withdraw from the local river by about 88,200 gallons per day, or approximately 32 million gallons annually.

As we continue our focus on these environmental stewardship efforts, we have set a goal for a 20% reduction in water consumption at our two regulated coal plants by 2030 from our 2019 baseline

**Cost of response**

**Explanation of cost of response**

Unknown, but FirstEnergy has installed closed cycle cooling on 67 percent of our plants.

**Country/Area & River basin**

|                          |                   |
|--------------------------|-------------------|
| United States of America | Mississippi River |
|--------------------------|-------------------|

**Type of risk & Primary risk driver**

|                |         |
|----------------|---------|
| Acute physical | Drought |
|----------------|---------|

**Primary potential impact**

Reduction or disruption in production capacity

**Company-specific description**

Stream level variability could impact FE's operations and /or cause costs to be incurred.

**Timeframe**

Current up to one year

**Magnitude of potential impact**

Low

**Likelihood**

Unknown

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

<Not Applicable>

**Potential financial impact figure - maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

Unknown, but potentially high (millions of dollars).

**Primary response to risk**

Adopt water efficiency, water reuse, recycling and conservation practices

**Description of response**

Both of our regulated coal plants – Harrison and Fort Martin – function with 100% closed-cycle cooling systems (with cooling towers), which use approximately 90% less water compared to once-through, open-cycle cooling systems. This has helped our regulated generation fleet avoid about 90 billion gallons in water withdrawals every year, reducing our use of this important natural resource.

We also run additional reuse processes at Harrison and Fort Martin to further minimize water use at the plants. At Harrison, we collect landfill water runoff – called leachate – and recycle 50% for use in the scrubber, while carefully treating the rest before release to the West Fork River. This process reduces the amount of water we withdraw from the river for use in the scrubber by about 100 gallons per minute, or approximately 52.5 million gallons annually. At Fort Martin, we run a similar recycling project to

return leachate for use in the cooling tower, which reduces the amount of water we withdraw from the local river by about 88,200 gallons per day, or approximately 32 million gallons annually.

As we continue our focus on these environmental stewardship efforts, we have set a goal for a 20% reduction in water consumption at our two regulated coal plants by 2030 from our 2019 baseline

#### Cost of response

#### Explanation of cost of response

Unknown, but FirstEnergy has installed closed cycle cooling on 67 percent of our plants.

---

#### Country/Area & River basin

|                          |                   |
|--------------------------|-------------------|
| United States of America | Mississippi River |
|--------------------------|-------------------|

#### Type of risk & Primary risk driver

|            |  |
|------------|--|
| Regulatory | Mandatory water efficiency, conservation, recycling or process standards |
|------------|--|

#### Primary potential impact

Reduction or disruption in production capacity

#### Company-specific description

Regulatory changes could impact FE's operations and/or cause costs to be incurred.

#### Timeframe

Current up to one year

#### Magnitude of potential impact

Low

#### Likelihood

Unknown

#### Are you able to provide a potential financial impact figure?

No, we do not have this figure

#### Potential financial impact figure (currency)

<Not Applicable>

#### Potential financial impact figure - minimum (currency)

<Not Applicable>

#### Potential financial impact figure - maximum (currency)

<Not Applicable>

#### Explanation of financial impact

Unknown, but potentially high (millions of dollars).

#### Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

#### Description of response

Both of our regulated coal plants – Harrison and Fort Martin – function with 100% closed-cycle cooling systems (with cooling towers), which use approximately 90% less water compared to once-through, open-cycle cooling systems. This has helped our regulated generation fleet avoid about 90 billion gallons in water withdrawals every year, reducing our use of this important natural resource.

We also run additional reuse processes at Harrison and Fort Martin to further minimize water use at the plants. At Harrison, we collect landfill water runoff – called leachate – and recycle 50% for use in the scrubber, while carefully treating the rest before release to the West Fork River. This process reduces the amount of water we withdraw from the river for use in the scrubber by about 100 gallons per minute, or approximately 52.5 million gallons annually. At Fort Martin, we run a similar recycling project to return leachate for use in the cooling tower, which reduces the amount of water we withdraw from the local river by about 88,200 gallons per day, or approximately 32 million gallons annually.

As we continue our focus on these environmental stewardship efforts, we have set a goal for a 20% reduction in water consumption at our two regulated coal plants by 2030 from our 2019 baseline

#### Cost of response

#### Explanation of cost of response

Unknown, but FirstEnergy has installed closed cycle cooling on 67 percent of our plants.

---

#### Country/Area & River basin

|                          |                   |
|--------------------------|-------------------|
| United States of America | Mississippi River |
|--------------------------|-------------------|

#### Type of risk & Primary risk driver

|            |   |
|------------|---|
| Regulatory | Regulation of discharge quality/volumes |
|------------|---|

#### Primary potential impact

Increased compliance costs

#### Company-specific description

Regulatory changes could impact FE's operations and/or cause costs to be incurred.

**Timeframe**

Current up to one year

**Magnitude of potential impact**

Low

**Likelihood**

Unknown

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure - minimum (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure - maximum (currency)**

&lt;Not Applicable&gt;

**Explanation of financial impact**

Unknown, but potentially high (millions of dollars).

**Primary response to risk**

Adopt water efficiency, water reuse, recycling and conservation practices

**Description of response**

Both of our regulated coal plants – Harrison and Fort Martin – function with 100% closed-cycle cooling systems (with cooling towers), which use approximately 90% less water compared to once-through, open-cycle cooling systems. This has helped our regulated generation fleet avoid about 90 billion gallons in water withdrawals every year, reducing our use of this important natural resource.

We also run additional reuse processes at Harrison and Fort Martin to further minimize water use at the plants. At Harrison, we collect landfill water runoff – called leachate – and recycle 50% for use in the scrubber, while carefully treating the rest before release to the West Fork River. This process reduces the amount of water we withdraw from the river for use in the scrubber by about 100 gallons per minute, or approximately 52.5 million gallons annually. At Fort Martin, we run a similar recycling project to return leachate for use in the cooling tower, which reduces the amount of water we withdraw from the local river by about 88,200 gallons per day, or approximately 32 million gallons annually.

As we continue our focus on these environmental stewardship efforts, we have set a goal for a 20% reduction in water consumption at our two regulated coal plants by 2030 from our 2019 baseline

**Cost of response****Explanation of cost of response**

Unknown, but FirstEnergy has installed closed cycle cooling on 67 percent of our plants.

**Country/Area & River basin**

|                          |                   |
|--------------------------|-------------------|
| United States of America | Mississippi River |
|--------------------------|-------------------|

**Type of risk & Primary risk driver**

|            |                        |
|------------|------------------------|
| Regulatory | Regulatory uncertainty |
|------------|------------------------|

**Primary potential impact**

Increased compliance costs

**Company-specific description**

Regulatory changes could impact FE's operations and/or cause costs to be incurred.

**Timeframe**

Current up to one year

**Magnitude of potential impact**

Low

**Likelihood**

Unknown

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure - minimum (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure - maximum (currency)**

&lt;Not Applicable&gt;

**Explanation of financial impact**

Unknown, but potentially high (millions of dollars).

**Primary response to risk**

Adopt water efficiency, water reuse, recycling and conservation practices

**Description of response**

Both of our regulated coal plants – Harrison and Fort Martin – function with 100% closed-cycle cooling systems (with cooling towers), which use approximately 90% less

water compared to once-through, open-cycle cooling systems. This has helped our regulated generation fleet avoid about 90 billion gallons in water withdrawals every year, reducing our use of this important natural resource.

We also run additional reuse processes at Harrison and Fort Martin to further minimize water use at the plants. At Harrison, we collect landfill water runoff – called leachate – and recycle 50% for use in the scrubber, while carefully treating the rest before release to the West Fork River. This process reduces the amount of water we withdraw from the river for use in the scrubber by about 100 gallons per minute, or approximately 52.5 million gallons annually. At Fort Martin, we run a similar recycling project to return leachate for use in the cooling tower, which reduces the amount of water we withdraw from the local river by about 88,200 gallons per day, or approximately 32 million gallons annually.

As we continue our focus on these environmental stewardship efforts, we have set a goal for a 20% reduction in water consumption at our two regulated coal plants by 2030 from our 2019 baseline

#### Cost of response

##### Explanation of cost of response

Unknown, but FirstEnergy has installed closed cycle cooling on 67 percent of our plants.

---

#### Country/Area & River basin

|                          |              |
|--------------------------|--------------|
| United States of America | St. Lawrence |
|--------------------------|--------------|

#### Type of risk & Primary risk driver

|                |  |
|----------------|--|
| Acute physical | Flood (coastal, fluvial, pluvial, groundwater) |
|----------------|--|

##### Primary potential impact

Reduction or disruption in production capacity

##### Company-specific description

Flooding could impact FE's operations and/or cause costs to be incurred.

##### Timeframe

Current up to one year

##### Magnitude of potential impact

Low

##### Likelihood

Unknown

##### Are you able to provide a potential financial impact figure?

No, we do not have this figure

##### Potential financial impact figure (currency)

<Not Applicable>

##### Potential financial impact figure - minimum (currency)

<Not Applicable>

##### Potential financial impact figure - maximum (currency)

<Not Applicable>

##### Explanation of financial impact

##### Primary response to risk

Develop flood emergency plans

##### Description of response

Both of our regulated coal plants – Harrison and Fort Martin – function with 100% closed-cycle cooling systems (with cooling towers), which use approximately 90% less water compared to once-through, open-cycle cooling systems. This has helped our regulated generation fleet avoid about 90 billion gallons in water withdrawals every year, reducing our use of this important natural resource.

We also run additional reuse processes at Harrison and Fort Martin to further minimize water use at the plants. At Harrison, we collect landfill water runoff – called leachate – and recycle 50% for use in the scrubber, while carefully treating the rest before release to the West Fork River. This process reduces the amount of water we withdraw from the river for use in the scrubber by about 100 gallons per minute, or approximately 52.5 million gallons annually. At Fort Martin, we run a similar recycling project to return leachate for use in the cooling tower, which reduces the amount of water we withdraw from the local river by about 88,200 gallons per day, or approximately 32 million gallons annually.

As we continue our focus on these environmental stewardship efforts, we have set a goal for a 20% reduction in water consumption at our two regulated coal plants by 2030 from our 2019 baseline

#### Cost of response

##### Explanation of cost of response

Unknown, but FirstEnergy has installed closed cycle cooling on 67 percent of our plants.

---

#### Country/Area & River basin

|                          |              |
|--------------------------|--------------|
| United States of America | St. Lawrence |
|--------------------------|--------------|

#### Type of risk & Primary risk driver

Please select

##### Primary potential impact

Reduction or disruption in production capacity

##### Company-specific description

Stream level variability could impact FE's operations and /or cause costs to be incurred.

**Timeframe**

Current up to one year

**Magnitude of potential impact**

Low

**Likelihood**

Unknown

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

<Not Applicable>

**Potential financial impact figure - maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

Unknown, but potentially high (millions of dollars).

**Primary response to risk**

Adopt water efficiency, water reuse, recycling and conservation practices

**Description of response**

Both of our regulated coal plants – Harrison and Fort Martin – function with 100% closed-cycle cooling systems (with cooling towers), which use approximately 90% less water compared to once-through, open-cycle cooling systems. This has helped our regulated generation fleet avoid about 90 billion gallons in water withdrawals every year, reducing our use of this important natural resource.

We also run additional reuse processes at Harrison and Fort Martin to further minimize water use at the plants. At Harrison, we collect landfill water runoff – called leachate – and recycle 50% for use in the scrubber, while carefully treating the rest before release to the West Fork River. This process reduces the amount of water we withdraw from the river for use in the scrubber by about 100 gallons per minute, or approximately 52.5 million gallons annually. At Fort Martin, we run a similar recycling project to return leachate for use in the cooling tower, which reduces the amount of water we withdraw from the local river by about 88,200 gallons per day, or approximately 32 million gallons annually.

As we continue our focus on these environmental stewardship efforts, we have set a goal for a 20% reduction in water consumption at our two regulated coal plants by 2030 from our 2019 baseline

**Cost of response**

**Explanation of cost of response**

Unknown, but FirstEnergy has installed closed cycle cooling on 67 percent of our plants.

---

**Country/Area & River basin**

|                          |              |
|--------------------------|--------------|
| United States of America | St. Lawrence |
|--------------------------|--------------|

**Type of risk & Primary risk driver**

|            |                        |
|------------|------------------------|
| Regulatory | Regulatory uncertainty |
|------------|------------------------|

**Primary potential impact**

Increased compliance costs

**Company-specific description**

Regulatory changes could impact FE's operations and/or cause costs to be incurred.

**Timeframe**

Current up to one year

**Magnitude of potential impact**

Low

**Likelihood**

Unknown

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

<Not Applicable>

**Potential financial impact figure - maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

Unknown, but potentially high (millions of dollars).

**Primary response to risk**

Adopt water efficiency, water reuse, recycling and conservation practices

**Description of response**

Both of our regulated coal plants – Harrison and Fort Martin – function with 100% closed-cycle cooling systems (with cooling towers), which use approximately 90% less water compared to once-through, open-cycle cooling systems. This has helped our regulated generation fleet avoid about 90 billion gallons in water withdrawals every year, reducing our use of this important natural resource.

We also run additional reuse processes at Harrison and Fort Martin to further minimize water use at the plants. At Harrison, we collect landfill water runoff – called leachate – and recycle 50% for use in the scrubber, while carefully treating the rest before release to the West Fork River. This process reduces the amount of water we withdraw from the river for use in the scrubber by about 100 gallons per minute, or approximately 52.5 million gallons annually. At Fort Martin, we run a similar recycling project to return leachate for use in the cooling tower, which reduces the amount of water we withdraw from the local river by about 88,200 gallons per day, or approximately 32 million gallons annually.

As we continue our focus on these environmental stewardship efforts, we have set a goal for a 20% reduction in water consumption at our two regulated coal plants by 2030 from our 2019 baseline

**Cost of response**

**Explanation of cost of response**

Unknown, but FirstEnergy has installed closed cycle cooling on 67 percent of our plants.

**W4.2a**

**(W4.2a) Provide details of risks identified within your value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.**

**Country/Area & River basin**

|                          |   |
|--------------------------|---|
| United States of America | Other, please specify (Mississippi, Chesapeake, St. Lawrence) |
|--------------------------|---|

**Stage of value chain**

Use phase

**Type of risk & Primary risk driver**

|                |  |
|----------------|--|
| Acute physical | Flood (coastal, fluvial, pluvial, groundwater) |
|----------------|--|

**Primary potential impact**

Disruption to sales due to value chain disruption

**Company-specific description**

FirstEnergy covers 65,000 square miles of territory, and therefore some electrical infrastructure could be subject to periodic flooding, creating supply disruptions to our value chain.

**Timeframe**

Current up to one year

**Magnitude of potential impact**

Unknown

**Likelihood**

Likely

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

<Not Applicable>

**Potential financial impact figure - maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

Unknown

**Primary response to risk**

|            |   |
|------------|---|
| Downstream | Increase/review infrastructure investment |
|------------|---|

**Description of response**

FirstEnergy is hardening our system through investments such as flood walls at our JCP&L Sussex Substation that was funded by programs like JCP&L Reliability Plus; our Innovation Center; and Emerging Technologies team. Such programs and investments mitigate the flood risk, allowing our infrastructure to reliably provide service to our customers.

**Cost of response**

**Explanation of cost of response**

FirstEnergy expects to invest approximately \$9 billion per year into our distribution systems through 2025 to enhance distribution grid reliability and resiliency. Our goal is that by 2025, customers will see a 5% reduction in the duration of service interruptions (from the 2019 baseline).

**Country/Area & River basin**



|                          |   |
|--------------------------|---|
| United States of America | Other, please specify (Mississippi, Chesapeake, St. Lawrence) |
|--------------------------|---|

**Stage of value chain**

Use phase

**Type of risk & Primary risk driver**

Please select

**Primary potential impact**

Disruption to sales due to value chain disrruption

**Company-specific description**

FirstEnergy owns one of the largest transmission systems in PJM with approximately 24,000-line miles connecting the Midwest and Mid-Atlantic regions. The transmission system is an essential part of our work to build a reliable, resilient and lower carbon grid. Through our Energizing the Future (EtF) program, we are upgrading and modernizing our transmission system to ensure customers benefit from a smarter, stronger, and more secure power grid.

**Timeframe**

Current up to one year

**Magnitude of potential impact**

Unknown

**Likelihood**

Very likely

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

<Not Applicable>

**Potential financial impact figure - maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

Unknown

**Primary response to risk**

|            |   |
|------------|---|
| Downstream | Increase/review infrastructure investment |
|------------|---|

**Description of response**

Since launching EtF in 2014, FirstEnergy has completed 600 to 700 projects per year. These projects allow grid operators more operational flexibility that enables them to more swiftly respond to changing grid conditions. These improvements have provided a measurable result for our customers, including a 47 percent reduction in equipment-related outages on the transmission system serving The Illuminating Company, Ohio Edison, and Toledo Edison utilities.

**Cost of response**

**Explanation of cost of response**

Investments from 2014 to 2018 totaled nearly \$5.6 billion. We plan to invest \$8 billion through 2025 on transmission projects.

**Country/Area & River basin**

|                          |   |
|--------------------------|---|
| United States of America | Other, please specify (Mississippi, Chesapeake, St. Lawrence) |
|--------------------------|---|

**Stage of value chain**

Use phase

**Type of risk & Primary risk driver**

Please select

**Primary potential impact**

Disruption to sales due to value chain disrruption

**Company-specific description**

A large component of our EWRM addresses severe weather events, threats such as electromagnetic pulses, geomagnetic disturbances, and other significant occurrences in our service territories.

**Timeframe**

Current up to one year

**Magnitude of potential impact**

Unknown

**Likelihood**

Virtually certain

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

<Not Applicable>

**Potential financial impact figure - maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

Unknown

**Primary response to risk**

|                   |                                     |
|-------------------|-------------------------------------|
| Direct operations | Include in Business Continuity Plan |
|-------------------|-------------------------------------|

**Description of response**

FirstEnergy has developed an extensive internal emergency response organization. As such, an incident command structure is employed and drills are conducted at least annually. We participate in working groups, training opportunities, and conferences at all levels of the public and private sectors to ensure readiness, build relationships, and stay abreast of technological advances.

**Cost of response**

**Explanation of cost of response**

FirstEnergy does not account for costs related to planning for extreme weather events.

**Country/Area & River basin**

|                          |                                |
|--------------------------|--------------------------------|
| United States of America | Other, please specify (varies) |
|--------------------------|--------------------------------|

**Stage of value chain**

Supply chain

**Type of risk & Primary risk driver**

|            |                             |
|------------|-----------------------------|
| Regulatory | Litigation against supplier |
|------------|-----------------------------|

**Primary potential impact**

Supply chain disruption

**Company-specific description**

Many of FirstEnergy's suppliers use water in their processes for various functions. Such water use of water may create a regulatory or stakeholder conflict that the supplier must contend with as applicable.

**Timeframe**

Current up to one year

**Magnitude of potential impact**

Unknown

**Likelihood**

Likely

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

<Not Applicable>

**Potential financial impact figure - maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

Unknown

**Primary response to risk**

|                     |   |
|---------------------|---|
| Supplier engagement | Other, please specify (Procedure Adherence) |
|---------------------|---|

**Description of response**

FirstEnergy's Supplier Code of Conduct requires that suppliers adhere to FirstEnergy's environmental policy. FE requires that resources be minimized, and that is something that also applies to our suppliers.

**Cost of response**

**Explanation of cost of response**

FE does not account for costs related to planning for these events.

**(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes, we have identified opportunities, and some/all are being realized

**W4.3a**

**(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.**

**Type of opportunity**

Efficiency

**Primary water-related opportunity**

Improved water efficiency in operations

**Company-specific description & strategy to realize opportunity**

FirstEnergy's generation fleet operates closed loop systems, which recirculate cooling water.

**Estimated timeframe for realization**

Current - up to 1 year

**Magnitude of potential financial impact**

Unknown

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

FirstEnergy does not account for savings resulted from closed cycle cooling.

**Type of opportunity**

Resilience

**Primary water-related opportunity**

Resilience to future regulatory changes

**Company-specific description & strategy to realize opportunity**

Evolving regulatory landscapes can also alter the operations and maintenance of power stations. FirstEnergy actively evaluates those potential risks along with means to avoid those risks. The Harrison FGD system with its zero liquid discharge design allows it to control air pollution without the need to discharge wastewater to surface waters, like other FGD systems. As such, future water regulatory actions do not affect the FGD system at Harrison. Another project is the Harrison Leachate return line. The line will return leachate from the Harrison Landfill back to the scrubber at Harrison Power Station, which is a zero liquid discharge process. Such actions will absolve approximately 52.5 million gallons per year from future regulatory changes.

**Estimated timeframe for realization**

Current - up to 1 year

**Magnitude of potential financial impact**

Unknown

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

FirstEnergy does not have a centralized accounting system to account for cost avoidances from changes in regulatory structure.

**Type of opportunity**

Efficiency

**Primary water-related opportunity**

Cost savings

**Company-specific description & strategy to realize opportunity**

FirstEnergy regularly purchases water for WASH services from our local utility stakeholders. While having a safe, reliable water source for WASH is particularly important, we sometimes use such procured water for process purposes, which may or may not have such stringent quality standards. FirstEnergy's Environmental Group was presented with the President's Award in 2018 for being able to reduce our consumption of utility drinking water, thereby reducing purchased water by about 25 million gallons per year at two of our facilities.

**Estimated timeframe for realization**

Current - up to 1 year

**Magnitude of potential financial impact**

Unknown

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

FirstEnergy does not account for varying changes in water consumption.

---

**Type of opportunity**

Efficiency

**Primary water-related opportunity**

Improved water efficiency in operations

**Company-specific description & strategy to realize opportunity**

FirstEnergy developed storm water pollution prevention plans (SWPPPs) as part of our transmission and distribution project planning process. These SWPPPs are project specific and rely on best practices for both preventing erosion from stormwater runoff and protecting the quality of local waterways and tributaries from construction-related silt and sediment. Plans are developed by our Environmental group and provided to the Construction & Design Services group to make sure we comply with all applicable rules and regulations.

We also focus on preventing erosion and protecting waterways outside the scope of project planning. For example, we built retention basins around our LEED-certified Center for Advanced Energy Technology (CAET) to prevent flooding and erosion by restricting the flow of rainwater back to streets and storm drains. As part of our Energizing the Future transmission program, we also install similar retention basins around newly constructed substations to protect communities and local waterways from flooding and erosion. In addition, our CAET facility features a bioretention system that uses soil, sand and vegetation to help remove pollutants from rainwater before releasing the water back to the community's storm drain system.

**Estimated timeframe for realization**

Current - up to 1 year

**Magnitude of potential financial impact**

Unknown

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

FirstEnergy does not have a centralized accounting system to account for savings resulted from LEED certification designs

---

**Type of opportunity**

Markets

**Primary water-related opportunity**

Strengthened social license to operate

**Company-specific description & strategy to realize opportunity**

In 2020, FirstEnergy donated \$27,000 to the Western Reserve Land Conservancy's conservation project at the Chagrin River Landing in Eastlake, Ohio. The landing will include greater water recreational activities and restore areas back to their natural floodplain habitat.

**Estimated timeframe for realization**

Current - up to 1 year

**Magnitude of potential financial impact**

Unknown

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

The financial impact is a direct donation to the Western Reserve Land Conservancy that allows us to have a positive impact on, and better interact with our value chain, thereby promoting our ESG activities, core values, and social license to operate.

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W5. Facility-level water accounting

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W5.1

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(W5.1) For each facility referenced in W4.1c, provide coordinates, water accounting data, and a comparison with the previous reporting year.

**Facility reference number**

Facility 1

**Facility name (optional)**

Harrison Power Station

**Country/Area & River basin**

|                          |                   |
|--------------------------|-------------------|
| United States of America | Mississippi River |
|--------------------------|-------------------|

**Latitude**

39.230213

**Longitude**

-80.195185

**Located in area with water stress**

No

**Primary power generation source for your electricity generation at this facility**

Coal - hard

**Oil & gas sector business division**

<Not Applicable>

**Total water withdrawals at this facility (megaliters/year)**

17441

**Comparison of total withdrawals with previous reporting year**

About the same

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

16941

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

500

**Total water discharges at this facility (megaliters/year)**

12540

**Comparison of total discharges with previous reporting year**

About the same

**Discharges to fresh surface water**

12540

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

0

**Total water consumption at this facility (megaliters/year)**

4902

**Comparison of total consumption with previous reporting year**

Higher

**Please explain**

Process and operational changes at the station in addition to fluctuating water quality changes

---

**Facility reference number**

Facility 2

**Facility name (optional)**

Fort Martin Power Station

**Country/Area & River basin**

|                          |                   |
|--------------------------|-------------------|
| United States of America | Mississippi River |
|--------------------------|-------------------|

**Latitude**

39.423859

**Longitude**

-79.553991

**Located in area with water stress**

No

**Primary power generation source for your electricity generation at this facility**

Coal - hard

**Oil & gas sector business division**

<Not Applicable>

**Total water withdrawals at this facility (megaliters/year)**

18539

**Comparison of total withdrawals with previous reporting year**

About the same

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

18539

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

0

**Total water discharges at this facility (megaliters/year)**

8043

**Comparison of total discharges with previous reporting year**

About the same

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

0

**Total water consumption at this facility (megaliters/year)**

10496

**Comparison of total consumption with previous reporting year**

About the same

**Please explain**

**Facility reference number**

Facility 3

**Facility name (optional)**

Eastlake Synchronous Condenser

**Country/Area & River basin**

|                          |              |
|--------------------------|--------------|
| United States of America | St. Lawrence |
|--------------------------|--------------|

**Latitude**

41.671333

**Longitude**

-81.443333

**Located in area with water stress**

No

**Primary power generation source for your electricity generation at this facility**

Not applicable

**Oil & gas sector business division**

<Not Applicable>

**Total water withdrawals at this facility (megaliters/year)**

30817

**Comparison of total withdrawals with previous reporting year**

About the same

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

30817

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

0

**Total water discharges at this facility (megaliters/year)**

29898

**Comparison of total discharges with previous reporting year**

About the same

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

0

**Total water consumption at this facility (megaliters/year)**

920

**Comparison of total consumption with previous reporting year**

About the same

**Please explain**

---

W5.1a

---

(W5.1a) For the facilities referenced in W5.1, what proportion of water accounting data has been third party verified?

**Water withdrawals – total volumes**

**% verified**

76-100

**Verification standard used**

NPDES permitting and State Water Use Reporting

**Please explain**

<Not Applicable>

**Water withdrawals – volume by source**

**% verified**

76-100

**Verification standard used**

NPDES permitting and State Water Use Reporting

**Please explain**

<Not Applicable>

**Water withdrawals – quality by standard water quality parameters**

**% verified**

76-100

**Verification standard used**

NPDES permitting

**Please explain**

<Not Applicable>

**Water discharges – total volumes**

**% verified**

76-100

**Verification standard used**

NPDES permitting and State Water Use Reporting

**Please explain**

<Not Applicable>

**Water discharges – volume by destination**

**% verified**

76-100

**Verification standard used**

NPDES permitting and State Water Use Reporting

**Please explain**

<Not Applicable>

**Water discharges – volume by final treatment level**

**% verified**

76-100

**Verification standard used**

NPDES permitting

**Please explain**

<Not Applicable>

**Water discharges – quality by standard water quality parameters**

**% verified**

76-100

**Verification standard used**

NPDES permitting

**Please explain**

<Not Applicable>

**Water consumption – total volume**

**% verified**

76-100

**Verification standard used**

NPDES permitting and State Water Use Reporting

**Please explain**

<Not Applicable>



## W6. Governance

### W6.1

#### (W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

### W6.1a

#### (W6.1a) Select the options that best describe the scope and content of your water policy.

|       | Scope        | Content   | Please explain   |
|-------|--------------|---|--|
| Row 1 | Company-wide | Description of business dependency on water<br>Description of business impact on water<br>Description of water-related performance standards for direct operations<br>Company water targets and goals | FirstEnergy has a publicly available Environmental Policy that states our intent to minimize impacts and use natural resources wisely. In 2020, the company also created a goal to reduce water consumption at our two coal plants by an aggregate 20 percent by 2030, based on 2019 levels. |

### W6.2

#### (W6.2) Is there board level oversight of water-related issues within your organization?

Yes

### W6.2a

#### (W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

| Position of individual        | Please explain  |
|-------------------------------|---|
| Chief Executive Officer (CEO) | The CEO, a member of the Board of Directors, has direct responsibility for the implementation of FirstEnergy's climate strategy, including water-related issues.  |
| Board-level committee         | The Board of Directors has oversight of ESG topics, including Climate Strategy and climate risks and opportunities. FirstEnergy's Operations and Safety Oversight Committee of the Board of Directors, in coordination with the Corporate Governance, Corporate Responsibility and Political Oversight Committee, reviews and monitors the company's environmental strategy, initiatives and policies, including in the areas of climate change, environmental protection and sustainability. This Board Committee met 12 time in 2021. |

### W6.2b

#### (W6.2b) Provide further details on the board's oversight of water-related issues.

|       | Frequency that water-related issues are a scheduled agenda item | Governance mechanisms into which water-related issues are integrated  | Please explain  |
|-------|---|---|---|
| Row 1 | Scheduled - all meetings  | Overseeing acquisitions and divestiture<br>Overseeing major capital expenditures<br>Providing employee incentives<br>Reviewing and guiding major plans of action<br>Reviewing and guiding risk management policies<br>Reviewing and guiding strategy<br>Reviewing and guiding corporate responsibility strategy<br>Setting performance objectives | Oversight of our company climate-focused projects and strategies is overseen by FirstEnergy's Operations and Safety Oversight Committee of the Board of Directors. Such strategies and projects These include our thoughtful transition from coal generation facilities and enhancements of out transmission and distribution network to enable the expansion of a low-carbon economy |

### W6.2d

**(W6.2d) Does your organization have at least one board member with competence on water-related issues?**

|       | Board member(s) have competence on water-related issues | Criteria used to assess competence of board member(s) on water-related issues   | Primary reason for no board-level competence on water-related issues | Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future |
|-------|---|---|--|---|
| Row 1 | Yes   | At least one member of our Board has extensive experience with energy transition, clean energy, and energy sustainability. This individual is a member of the Corporate Governance, Corporate Responsibility and Political Oversight Committee. | <Not Applicable>   | <Not Applicable>  |

**W6.3**

**(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).**

**Name of the position(s) and/or committee(s)**

Chief Executive Officer (CEO)

**Responsibility**

Managing water-related risks and opportunities

**Frequency of reporting to the board on water-related issues**

As important matters arise

**Please explain**

The CEO has oversight of environmental-related risks and opportunities. As important topics arise, The CEO provides guidance to those with direct responsibility.

**Name of the position(s) and/or committee(s)**

Environment/Sustainability manager

**Responsibility**

Assessing future trends in water demand  
 Assessing water-related risks and opportunities  
 Managing water-related risks and opportunities

**Frequency of reporting to the board on water-related issues**

More frequently than quarterly

**Please explain**

FirstEnergy's Director, Environmental has direct management responsibility of water-related risks and opportunities.

**W6.4**

**(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?**

|       | Provide incentives for management of water-related issues | Comment   |
|-------|---|---|
| Row 1 | Yes   | As a part of FirstEnergy's STIP, there is an operations Index that represents 10% of total incentive. The operation index comprises of five equally weighted key operating metrics including water-management and compliance. |

**W6.4a**

**(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?**

|                     | Role(s) entitled to incentive  | Performance indicator  | Please explain   |
|---------------------|--|--|--|
| Monetary reward     | Board chair<br>Corporate executive team<br>Chief Executive Officer (CEO)<br>Chief Financial Officer (CFO)<br>Chief Operating Officer (COO)<br>Other C-suite Officer<br>Other, please specify (All employees) | Improvements in waste water quality - direct operations<br>Other, please specify (Reduction in NOVs, which include water related violations)   | FirstEnergy has environmental metrics (with associated incentive compensation) for employees, an executive management committee, and a Board of Director's committee.  |
| Non-monetary reward | Board chair<br>Board/Executive board<br>Director on board<br>Corporate executive team<br>Chief Executive Officer (CEO)<br>Other, please specify (Policy applies to all employees of FirstEnergy.)            | Reduction of water withdrawals<br>Reduction in consumption volumes<br>Improvements in efficiency - direct operations<br>Improvements in waste water quality - direct operations<br>Implementation of employee awareness campaign or training program<br>Supply chain engagement<br>Implementation of water-related community project | FirstEnergy regularly celebrates the efforts of employees to produce and deliver electricity in an environmentally sound manner. FirstEnergy has issued several news releases and public communications spotlighting employee efforts to reduce our environmental impact. Also, the Environmental Group won a President's Award in 2018 for water reduction efforts. |

**W6.5**

**(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?**

- Yes, direct engagement with policy makers
- Yes, trade associations
- Yes, funding research organizations

**W6.5a**

**(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?**

We seek insight from various stakeholder groups to inform FirstEnergy's strategies, programs and policies on a variety of issues. Our External Affairs organization executes a comprehensive stakeholder engagement process across our service area. Through this process, we actively discuss energy-related matters with local, state and federal policymakers, as well as consumer advocates, peer utilities, customers, investors and non-governmental organizations.

**W6.6**

**(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?**

No, but we plan to do so in the next two years

**W7. Business strategy**

**W7.1**

**(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?**

|   | Are water-related issues integrated?  | Long-term time horizon (years) | Please explain  |
|---|---|--------------------------------|---|
| Long-term business objectives               | Yes, water-related issues are integrated  | 5-10                           | FirstEnergy has set a goal for a 20% reduction in water consumption at our two regulated coal plants by 2030 from our 2019 baseline   |
| Strategy for achieving long-term objectives | No, water-related issues were reviewed but not considered as strategically relevant/significant | 5-10                           | While FirstEnergy continues to improve sustainability, including water conservation efforts, FirstEnergy facilities are not in water-stressed areas and water-related risks are minor with low probabilities. |
| Financial planning                          | No, water-related issues were reviewed but not considered as strategically relevant/significant | 5-10                           | While FirstEnergy continues to improve sustainability, including water conservation efforts, FirstEnergy facilities are not in water-stressed areas and water-related risks are minor with low probabilities. |

**W7.2**

**(W7.2) What is the trend in your organization’s water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?**

Row 1

Water-related CAPEX (+/- % change)

0

Anticipated forward trend for CAPEX (+/- % change)

0

Water-related OPEX (+/- % change)

0

Anticipated forward trend for OPEX (+/- % change)

0

**Please explain**

FirstEnergy does not account for water related expenditures. As we do have a goal to reach an 20% reduction in water consumption by 2030 (2019 baseline) We do not expect out CAPEX or OPEX to change.

**W7.3**

**(W7.3) Does your organization use scenario analysis to inform its business strategy?**

|       | Use of scenario analysis | Comment   |
|-------|--------------------------|---|
| Row 1 | Yes                      | In 2019, FirstEnergy published a climate report that included a two-degree scenario analysis. The analysis is based on the International Energy Agency’s 2DS (IEA 2DS). In selecting a scenario to study, our objective was to evaluate a 2DS with sufficient detail to provide meaningful insights for our business and geography. We also prioritized a publicly available analysis to promote greater transparency in the process. The structure of our analysis was guided by recommendations from the TCFD as well as a report published by Ceres and authored by MJ Bradley & Associates (MJB&A). We also took into consideration other third-party produced 2-degree scenarios, including “beyond 2-degree” scenarios that are consistent with an October 6, 2018, Special Report on Global Warming of 1.5°C from the Intergovernmental Panel on Climate Change. |

**W7.3a**

**(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization’s business strategy.**

|       | Type of scenario analysis used | Parameters, assumptions, analytical choices  | Description of possible water-related outcomes  | Influence on business strategy   |
|-------|--------------------------------|--|---|--|
| Row 1 | Climate-related                | The analysis is based on the International Energy Agency’s 2DS (IEA 2DS). In selecting a scenario to study, our objective was to evaluate a 2DS with sufficient detail to provide meaningful insights for our business and geography. We also prioritized a publicly available analysis to promote greater transparency in the process. The structure of our analysis was guided by recommendations from the TCFD as well as a report published by Ceres and authored by MJ Bradley & Associates (MJB&A). We also took into consideration other third-party produced 2-degree scenarios, including “beyond 2-degree” scenarios that are consistent with an October 6, 2018, Special Report on Global Warming of 1.5°C from the Intergovernmental Panel on Climate Change. While the IEA 2DS publication provided a strong basis for this analysis, we engaged a consultant to develop state-level detail from the IEA 2DS for the six states where FirstEnergy primarily operates: OH, PA, WV, NJ, MD, and NY. The IEA 2DS envisions that a 90% reduction in multi-sector U.S. CO2 emissions by 2060, along with other reductions across the globe, would be necessary to limit global temperature rise to below 2 degrees Celsius. When applied to our operating states, the scenario results show significant changes in energy use across all sectors of the economy, with the largest contribution from electricity generation and transportation sectors. | IEA 2DS offers one potential scenario in which conventional coal generation has been eliminated and non-carbon generation (not including nuclear) make up 75% of the country’s generation mix. The majority of FirstEnergy’s water consumption is used in the generation of electricity at our coal plants. | In response to this envisioned future, we expect to thoughtfully transition away from our coal generation fleet with planned operational end dates for Ft. Martin (2035) & Harrison (2040). We have 3,082 MW of coal generation remaining between our Harrison and Fort Martin Power Stations. |

**W7.4**

(W7.4) Does your company use an internal price on water?

Row 1

Does your company use an internal price on water?

No, and we do not anticipate doing so within the next two years

Please explain

While FirstEnergy continues to improve sustainability, including water conservation efforts, FirstEnergy facilities are not in water-stressed areas and water-related risks are minor with low probabilities.

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

|       | Products and/or services classified as low water impact          | Definition used to classify low water impact | Primary reason for not classifying any of your current products and/or services as low water impact | Please explain   |
|-------|--|--|---|--|
| Row 1 | No, and we do not plan to address this within the next two years | <Not Applicable>                             | Important but not an immediate business priority  | WRI Aqueduct was used on multiple scales. Whether reviewing overall water risk or water stress, none of the areas our generation or synchronous condensers are located in constitute a high risk or above. |

W8. Targets

W8.1

(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

|       | Levels for targets and/or goals | Monitoring at corporate level  | Approach to setting and monitoring targets and/or goals   |
|-------|---------------------------------|--|---|
| Row 1 | Company-wide targets and goals  | Targets are monitored at the corporate level<br>Goals are monitored at the corporate level | FirstEnergy manages environmental compliance through Board committee oversight and by including environmental excursions and Notice of Violations (NOV) in our Operations KPIs. Our environmental excursions and NOV KPI metric track any regulatory reportable air emission, water discharge or other unauthorized release that exceeds applicable environmental limitations, conditions and deadlines set by federal, state or local regulations. Our threshold, target and stretch goals for this metric are based on our previous year's performance, and the stretch goal is designed to encourage significant improvement in our commitment to making the environment better. The inclusion of these environmental metrics in our Operations KPIs enhances employees' awareness and attention to environmental compliance and drives continuous improvement across all areas of our business. FirstEnergy also maintains a water goal for our generation fleet that is designed to encourage long term environmental water stewardship and align with our carbon reduction efforts. As such, FirstEnergy has a goal to reduce water consumption at our two coal plants 20% by 2030, based on 2019 levels. |

W8.1a

**(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.**

**Target reference number**

Target 1

**Category of target**

Water consumption

**Level**

Business activity

**Primary motivation**

Reduced environmental impact

**Description of target**

FirstEnergy is targeting a 20% reduction in water consumption at our two coal plants by 2030 from our 2019 baseline.

**Quantitative metric**

% reduction in total water consumption

**Baseline year**

2019

**Start year**

2020

**Target year**

2030

**% of target achieved**

100

**Please explain**

FirstEnergy has met its goal ahead of schedule, we will continue to monitor and implement consistent measures to retain our 20% reduction by 2030

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**W8.1b**

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**(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.**

**Goal**

Engaging with local community

**Level**

Company-wide

**Motivation**

Recommended sector best practice

**Description of goal**

FirstEnergy engages with our local stakeholders on a routine basis to discuss local projects, emergency planning, and emergency response. In recent years, we have strengthened relationships and expanded partnerships, and we plan to continue building these connections as part of our strategic plan. Engagement with our local stakeholders allows us to more effectively plan projects mitigate water related risks and manage power supply disruptions due to water related issues.

**Baseline year**

**Start year**

**End year**

2025

**Progress**

In the last two years, we have expanded our community engagement through the implementation of employee business resource groups and volunteer time off programs. While more resources and tools will likely be deployed in the coming years, our efforts have yielded a measurable and meaningful impact.

---

**Goal**

Improve wastewater quality beyond compliance requirements

**Level**

Company-wide

**Motivation**

Risk mitigation

**Description of goal**

Through projects like the Harrison leachate return line, FirstEnergy is implementing water reduction and reuse projects that mitigate risk by reducing the amount of water that must be discharged and permitted. Projects are ongoing and evolving and will be evaluated for merit as needs arise

**Baseline year**

**Start year**

**End year**

**Progress**

The Harrison leachate return line is ongoing. Water reduction projects at Eastlake and Ashtabula occurred around 2018. Future projects will be evaluated for merit as they arise.

---

**Goal**

Promotion of water data transparency

**Level**

Company-wide

**Motivation**

Corporate social responsibility

**Description of goal**

FirstEnergy developed a Corporate Responsibility group in 2018. Since then, FirstEnergy has rapidly expanded external reporting of water related risks, opportunities, and data. While FirstEnergy has submitted water information to public authorities for decades, the consolidation and ease of access to obtain the data has greatly improved in the last several years.

**Baseline year****Start year**

2018

**End year**

2020

**Progress**

FirstEnergy now participates in water reporting activities for multiple organizations, like CDP, S&P Global, Sustainalytics, ISS, and others.

---

**Goal**

Watershed remediation and habitat restoration, ecosystem preservation

**Level**

Company-wide

**Motivation**

Corporate social responsibility

**Description of goal**

In 2020, FirstEnergy began a corporate initiative to plant trees across our footprint, promoting sustainable ecosystems and watershed improvements by reducing potential flooding and erosions. FirstEnergy's 10 Green Teams comprise employees from across the company who volunteer their time and talents to participate in a wide variety of environmental stewardship initiatives in support of our Mission Statement. Together, the Green Teams far surpassed their companywide goal in 2021, planting more than 14,000 trees in public spaces across our service territory. The goal for 2022 is to plant 20,000 trees.

**Baseline year**

2020

**Start year**

2020

**End year**

2022

**Progress**

Through its employee volunteer time-off program and Employee Business Resource Groups, FirstEnergy facilitated the planting of 1,000 trees in 2020. In 2022, the company aims to plant 20,000 trees with continued employee support.

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**Goal**

Improve wastewater quality beyond compliance requirements

**Level**

Business

**Motivation**

Commitment to the UN Sustainable Development Goals

**Description of goal**

In 2020, FirstEnergy created a goal to reduce water consumption at our two coal plants 20 percent by 2030, over 2019 levels.

**Baseline year**

2019

**Start year**

2020

**End year**

2030

**Progress**

FirstEnergy is actively tracking and reporting water consumption data in reports, such as CDP Water. It will continue to report water consumption and make thoughtful, responsible decisions to achieve the 20 percent reduction by 2030.

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## W9. Verification

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### W9.1

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**(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?**

No, we do not currently verify any other water information reported in our CDP disclosure

**W10. Sign off**

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**W-FI**

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**(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.**

No additional information to provide

**W10.1**

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**(W10.1) Provide details for the person that has signed off (approved) your CDP water response.**

|       | Job title           | Corresponding job category    |
|-------|---------------------|-------------------------------|
| Row 1 | SVP, CFO & Strategy | Chief Financial Officer (CFO) |

**W10.2**

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**(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].**

No

**Submit your response**

---

**In which language are you submitting your response?**

English

**Please confirm how your response should be handled by CDP**

|                                       | I understand that my response will be shared with all requesting stakeholders | Response permission |
|---------------------------------------|---|---------------------|
| Please select your submission options | Yes   | Public              |

**Please confirm below**

I have read and accept the applicable Terms