

# Welcome to your CDP Climate Change Questionnaire 2023

## C0. Introduction

### C0.1

**(C0.1) Give a general description and introduction to your organization.**

American Electric Power, based in Columbus, Ohio, is powering a cleaner, brighter energy future for its customers and communities. AEP's approximately 17,000 employees operate and maintain the nation's largest electricity transmission system and more than 225,000 miles of distribution lines to safely deliver reliable and affordable power to 5.6 million regulated customers in 11 states. AEP also is one of the nation's largest electricity producers with approximately 30,000 megawatts of diverse generating capacity, including more than 7,000 megawatts of renewable energy. More than 22,600 MW of renewable energy is interconnected across the U.S. via AEP's transmission network. The company's plans include growing its renewable generation portfolio to approximately 50% of total capacity by 2032. AEP is on track to reach an 80% reduction in carbon dioxide emissions from 2005 levels by 2030 and we have updated our net-zero GHG emissions reduction goal from 2050 to 2045. AEP is recognized consistently for its focus on sustainability, community engagement, and diversity, equity and inclusion. AEP's family of companies includes utilities AEP Ohio, AEP Texas, Appalachian Power (in Virginia and West Virginia), AEP Appalachian Power (in Tennessee), Indiana Michigan Power, Kentucky Power, Public Service Company of Oklahoma, and Southwestern Electric Power Company (in Arkansas, Louisiana, east Texas and the Texas Panhandle). AEP also owns AEP Energy, which provides innovative competitive energy solutions nationwide.

For more information, visit <https://www.aepsustainability.com/>

### C0.2

**(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.**

**Reporting year**

---

**Start date**

January 1, 2022

**End date**

December 31, 2022

**Indicate if you are providing emissions data for past reporting years**

No

### C0.3

**(C0.3) Select the countries/areas in which you operate.**

United States of America

### C0.4

**(C0.4) Select the currency used for all financial information disclosed throughout your response.**

USD

### C0.5

**(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.**

Equity share

### C-EU0.7

**(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.**

Row 1

#### Electric utilities value chain

Electricity generation

Transmission

Distribution

#### Other divisions

Smart grids / demand response

Battery storage

### C0.8

**(C0.8) 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	0255371017

Yes, a Ticker symbol	AEP
----------------------	-----

## C1. Governance

### C1.1

**(C1.1) Is there board-level oversight of climate-related issues within your organization?**

Yes

#### C1.1a

**(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.**

Position of individual or committee	Responsibilities for climate-related issues
Board-level committee	<p>AEP's Board of Directors is actively engaged in working with management to oversee the company's planning and response to climate impacts. The Board understands the importance of climate change issues and their significance to our employees, customers, investors and other stakeholders. The Board regularly discusses issues related to climate change, including carbon reduction goals, public policy and legislation, renewable investments and AEP's strategy for a clean energy transition.</p> <p>The Committee on Directors &amp; Corporate Governance of AEP's Board of Directors has oversight of sustainability performance reporting, which includes the company's strategy for addressing climate change and climate-related risks and provides input and guidance to management on selected issues.</p> <p>The Policy Committee of the Board is responsible for examining AEP's policies on major public issues affecting the AEP System, including environmental, technology, industry change and other matters. During 2022, the Policy Committee held three meetings that focused on strategic issues for the electric utility industry through 2030, including a discussion on the decarbonization of power generation, grid flexibility and customer resiliency, and climate adaptability; energy sector cybersecurity risks; and the role of nuclear energy in the clean energy transition.</p> <p>The full Board is engaged in approving AEP's strategy to invest in renewable energy and grid modernization, reduce carbon emissions, and support our local communities and regional economies. The Board holds management accountable for sustainability and financial performance, as described in a Board statement that we publish every year in our annual Corporate Sustainability Report:  <a href="https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Page=4">https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Page=4</a></p>

	<p>The board receives twice-annual updates on our progress, although discussion occurs throughout the year.</p> <p>For more information, visit the following sections of the 2023 CSR: Climate Governance: <a href="https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Climate-Governance">https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Climate-Governance</a> ESG Governance: <a href="https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#ESG-Governance">https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#ESG-Governance</a></p>
Chief Executive Officer (CEO)	<p>Due to the carbon intensive nature of our business, AEP's President &amp; CEO is directly responsible for overseeing AEP's decarbonization strategy and efforts, including AEP's climate policy. AEP's CEO serves on the Board of Directors and is a member of the policy committee.</p>

## C1.1b

### (C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	<ul style="list-style-type: none"> <li>Reviewing and guiding annual budgets</li> <li>Overseeing major capital expenditures</li> <li>Overseeing acquisitions, mergers, and divestitures</li> <li>Reviewing innovation/R&amp;D priorities</li> <li>Overseeing and guiding employee incentives</li> <li>Reviewing and guiding strategy</li> <li>Overseeing and guiding the development of a transition plan</li> <li>Monitoring the implementation of a transition plan</li> </ul>	<p>As part of its oversight role, the Board monitors climate risks and reviews opportunities that may be realized with climate change. The Board receives an environmental report from management at regularly scheduled Board meetings. In addition, the Board holds extended meetings twice a year, to provide extra time for a more robust review of the Company's strategy. Discussions about decarbonization and climate risk occur during Board meetings and those strategic planning sessions. The Board is responsible for approving the Company's allocation of capital.</p> <p>AEP's Board of Directors oversees the Company's strategy to create long-term value for AEP's shareholders. Environmental policies have a significant impact on the Company's strategy. As a result, the Board regularly engages with senior management in the oversight of environmental issues, including climate change, renewable energy and technology changes in the industry. As AEP continues to transition its business, the Board works with the senior management team to adjust plans as needed to respond to rapid changes, including technology and public policy. In 2020, the Board added the non-emitting generation capacity measure to the long-term incentive plan to encourage management to accelerate the</p>

		<p>transformation of the Company's generation resources to a higher percentage of renewable generation.</p> <p>Under the Board's oversight, in 2022, AEP updated our net-zero GHG emission reduction goals from 2050 to 2045 and revised our baseline from 2000 to 2005. Our goal to reduce GHG emissions 80% by 2030 is now measured against the 2005 baseline and includes all Scope 1 emissions. AEP's future resource portfolio, supported by the Integrated Resource Plans developed to meet the regulated capacity requirements within our operating companies, gives us confidence that we can meet these goals while also balancing reliability and customer affordability. Through 2022, we achieved a 66% reduction in Scope 1 GHG emissions (inclusive of emission reductions that resulted from assets sold and retired), or a 62% reduction according to the GHG Protocol, which excludes reductions that resulted from assets sold.</p> <p>The Board has delegated responsibility for overseeing the Company's annual Corporate Sustainability Report (CSR) to its Committee on Corporate Directors and Governance. The Committee reviews and approves the annual CSR, which in 2023 included information regarding AEP's Climate Policy, Clean Energy Strategy, and Climate Governance. The Committee also receives updates twice a year from management on its sustainability initiatives and its political engagement and lobbying activities. During those meetings, management reports on its engagement with stakeholders on a range of issues, including climate change.</p> <p>For more information:                  2023 Proxy Statement: <a href="https://tinyurl.com/yfxv22xk">https://tinyurl.com/yfxv22xk</a>                  Climate Policy: <a href="https://tinyurl.com/yc2p7cvd">https://tinyurl.com/yc2p7cvd</a>                  Climate Governance: <a href="https://tinyurl.com/3xyjekzj">https://tinyurl.com/3xyjekzj</a>                  ESG Governance: <a href="https://tinyurl.com/49bn5ss3">https://tinyurl.com/49bn5ss3</a></p>
--	--	--

## C1.1d

**(C1.1d) Does your organization have at least one board member with competence on climate-related issues?**

Board member(s) have competence	Criteria used to assess competence of board member(s) on climate-related issues
---------------------------------	---

on climate-related issues	
Row 1	<p>Yes</p> <p>One member of the Board is a former CEO of a major U.S. electric utility. Having served as a chief financial officer, this individual has a strong background in finance, financial reporting and shareholder outreach. He also has experience in environmental issues, operations and the energy business. His extensive experience in the utility industry provides valuable insight into the risks we face and provides unique insight into effective management of those risks to deliver strong results over the long term. His involvement in the utility industry also provides significant expertise on regulatory and policy issues that are central to our business.</p> <p>For more information:                      2023 Proxy Statement: <a href="https://tinyurl.com/yfxv22xk">https://tinyurl.com/yfxv22xk</a>                      Climate Policy: <a href="https://tinyurl.com/yc2p7cvd">https://tinyurl.com/yc2p7cvd</a>                      Climate Governance: <a href="https://tinyurl.com/3xyjekzi">https://tinyurl.com/3xyjekzi</a>                      ESG Governance: <a href="https://tinyurl.com/49bn5ss3">https://tinyurl.com/49bn5ss3</a></p>

## C1.2

**(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.**

### Position or committee

Chief Executive Officer (CEO)

### Climate-related responsibilities of this position

Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)  
 Managing climate-related acquisitions, mergers, and divestitures  
 Integrating climate-related issues into the strategy  
 Managing value chain engagement on climate-related issues  
 Assessing climate-related risks and opportunities  
 Managing climate-related risks and opportunities

### Coverage of responsibilities

### Reporting line

Reports to the board directly

### Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

**Please explain**

Due to the carbon intensive nature of our business, AEP's President & CEO has oversight for AEP's decarbonization strategy and efforts, along with AEP's climate policy. AEP's CEO serves on the Board of Directors and is a member of the policy committee.

The CEO is also part of the Climate Change Executive group

---

**Position or committee**

Chief Sustainability Officer (CSO)

**Climate-related responsibilities of this position**

Integrating climate-related issues into the strategy  
Setting climate-related corporate targets  
Monitoring progress against climate-related corporate targets  
Managing public policy engagement that may impact the climate  
Managing value chain engagement on climate-related issues  
Assessing climate-related risks and opportunities  
Managing climate-related risks and opportunities

**Coverage of responsibilities**

**Reporting line**

Other, please specify  
General Council/Legal

**Frequency of reporting to the board on climate-related issues via this reporting line**

More frequently than quarterly

**Please explain**

In 2022, AEP announced the new Role of Chief Sustainability Officer (CSO) to lead the company's sustainability and environmental, social and governance (ESG) strategy, corporate stakeholder engagement, and annual sustainability and ESG performance reporting and risk monitoring.

---

**Position or committee**

Sustainability committee

**Climate-related responsibilities of this position**

Managing value chain engagement on climate-related issues  
Assessing climate-related risks and opportunities  
Managing climate-related risks and opportunities

## Coverage of responsibilities

### Reporting line

CEO reporting line

### Frequency of reporting to the board on climate-related issues via this reporting line

Not reported to the board

### Please explain

AEP's management recently formed an executive-level climate change group to provide additional oversight on the company's transition pathway and decarbonization goals and strategy. This group is supported by multiple business unit-level teams that manage AEP's climate-related policy and regulatory priorities, system and resource planning, risk management and other essential tasks. This group's focus is to monitor and manage Climate related risks and opportunities and influence corporate strategy to account for these risks.

---

### Position or committee

Chief Financial Officer (CFO)

### Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities  
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)  
Managing climate-related acquisitions, mergers, and divestitures  
Integrating climate-related issues into the strategy  
Managing value chain engagement on climate-related issues

## Coverage of responsibilities

### Reporting line

CEO reporting line

### Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

### Please explain

Responsible for AEP's accounting, tax, audit services, treasury and risk, corporate planning and budgeting, and investor relations functions.

---

### Position or committee

Chief Risks Officer (CRO)



**Climate-related responsibilities of this position**

Integrating climate-related issues into the strategy  
Assessing climate-related risks and opportunities  
Managing climate-related risks and opportunities

**Coverage of responsibilities**

**Reporting line**

Finance - CFO reporting line

**Frequency of reporting to the board on climate-related issues via this reporting line**

Quarterly

**Please explain**

Responsible for all Enterprise Risk and Resiliency, Insurance and Risk Management, and Commercial Risk activities.

---

**Position or committee**

General Counsel

**Climate-related responsibilities of this position**

Integrating climate-related issues into the strategy  
Managing public policy engagement that may impact the climate  
Assessing climate-related risks and opportunities  
Managing climate-related risks and opportunities

**Coverage of responsibilities**

**Reporting line**

CEO reporting line

**Frequency of reporting to the board on climate-related issues via this reporting line**

Quarterly

**Please explain**

General Counsel

---

**Position or committee**

Other, please specify  
Environmental Team including VPs, Directors and Managers

**Climate-related responsibilities of this position**

Developing a climate transition plan  
Implementing a climate transition plan  
Integrating climate-related issues into the strategy  
Monitoring progress against climate-related corporate targets  
Managing value chain engagement on climate-related issues  
Assessing climate-related risks and opportunities  
Managing climate-related risks and opportunities

### **Coverage of responsibilities**

#### **Reporting line**

Other, please specify  
Energy Services Reporting Line

#### **Frequency of reporting to the board on climate-related issues via this reporting line**

Half-yearly

#### **Please explain**

Responsible for providing insight and direction into development of environmental policy and assuring compliance.

---

#### **Position or committee**

Other, please specify  
EVP Grid Solutions and Government Affairs

#### **Climate-related responsibilities of this position**

Integrating climate-related issues into the strategy  
Conducting climate-related scenario analysis  
Setting climate-related corporate targets  
Monitoring progress against climate-related corporate targets  
Managing public policy engagement that may impact the climate  
Managing value chain engagement on climate-related issues  
Assessing climate-related risks and opportunities  
Managing climate-related risks and opportunities

### **Coverage of responsibilities**

#### **Reporting line**

CEO reporting line

#### **Frequency of reporting to the board on climate-related issues via this reporting line**

Quarterly

**Please explain**

AEP’s Executive Vice President of Grid Solutions and Government Affairs leads the origination and planning of AEP’s multi-billion-dollar infrastructure investment programs across electric generation, transmission, distribution and telecommunications. This position is also responsible for leading AEP’s national policy and legislative efforts, as well as overseeing the company’s regulatory activity at the Federal Energy Regulatory Commission and four Regional Transmission Organizations. Responsibilities also include overseeing the management and all aspects of electric service for AEP’s transmission joint venture utility companies across the U.S.

**C1.3**

**(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?**

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	<p>Accountability for advancing AEP’s clean energy strategy is also supported by both short-term and long-term incentive compensation. For many years, AEP has tied a portion of short-term incentive compensation to the development of non-emitting generation. For the first time, in 2020, AEP’s Board established a new Carbon-Free Capacity Mix goal as part of the company’s long-term Executive incentive compensation plan because it is an actionable goal tied to the company’s Future Forward clean energy strategy. This incentive measure is aligned with and supports our strategy for achieving 80% reduction in CO2 emissions by 2030. These goals are aligned with our long-term strategy and commitment to invest substantial resources to reduce GHG emissions. We report our progress annually.</p> <p>View AEP’s 2023 Proxy pages 54-58  <a href="https://www.aep.com/assets/docs/investors/AnnualReportsProxies/docs/22annrep/2023ProxyStatement.pdf">https://www.aep.com/assets/docs/investors/AnnualReportsProxies/docs/22annrep/2023ProxyStatement.pdf</a></p>

**C1.3a**

**(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).**

**Entitled to incentive**

All employees

**Type of incentive**

Monetary reward

**Incentive(s)**

Bonus - % of salary

**Performance indicator(s)**

Other (please specify)

Increased regulated renewable generation

**Incentive plan(s) this incentive is linked to**

Short-Term Incentive Plan

**Further details of incentive(s)**

Regulated Renewables: Obtain approval for 350 MWs of regulated renewables and file for 1,800 MW of new regulated renewables projects.

**Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan**

This short-term employee incentive is part of AEP's Strategic Initiative s target. This incentive promotes both the approval and filing of regulated renewables projects.

Learn more in AEP's 2023 Proxy Statement 55:

<http://aepsustainability.com/lib/docs/2023ProxyStatement.pdf#page=75>

---

**Entitled to incentive**

Corporate executive team

**Type of incentive**

Monetary reward

**Incentive(s)**

Bonus - % of salary

**Performance indicator(s)**

Achievement of a climate-related target

**Incentive plan(s) this incentive is linked to**

Long-Term Incentive Plan

**Further details of incentive(s)**

AEP's compensation program is based on the fundamental premise of pay for performance. This compensation can come in several forms including, base pay and incentive pay. AEP offers both annual and long-term incentive programs to reward outstanding performance and achievement of business goals.

In 2022, the HR Committee selected a carbon free capacity measure with a 10% weight. Carbon free capacity includes nuclear, hydro, wind, solar, energy efficiency, demand

response and storage capacity owned or contracted by the Company as a percentage of AEP's total owned and contracted generating capacity. This performance factor measures the increase in the Company's carbon free capacity as a percentage of total generation capacity from January 1, 2022 to December 31, 2024.

**Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan**

This goal was included to encourage management to further seek out and develop opportunities to increase the percentage of the Company's generation capacity that does not emit carbon, which is aligned with the Company's long-term strategy and commitment to invest substantial resources to reduce greenhouse gas emissions. As of January 1, 2022 (the beginning of the performance period), 30.0% of AEP's total capacity was carbon free.

For further information, Please view AEP's 2023 Proxy Statement Page 58:  
<https://aepsustainability.com/lib/docs/2023ProxyStatement.pdf#page=78>

## C2. Risks and opportunities

### C2.1

**(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?**

Yes

### C2.1a

**(C2.1a) How does your organization define short-, medium- and long-term time horizons?**

	From (years)	To (years)	Comment
Short-term	0	3	
Medium-term	3	10	
Long-term	10	50	

### C2.1b

**(C2.1b) How does your organization define substantive financial or strategic impact on your business?**

Risk Management:

Risks and threats are an inevitable aspect of every business that require diligent monitoring, management and mitigation. Whether the threat is universal – posing a risk to every business, such as the global pandemic, security breaches, and supply chain shortages and disruptions – or the threat is more industry-specific, such as extreme weather and skilled labor shortage,

companies require dynamic and agile risk management efforts to identify and mitigate these threats.

As we navigate an unpredictable future, we must identify the appropriate levels of risk management while simultaneously detecting, preventing and mitigating new potential risks and weaknesses. This is imperative to keep pace with the ever-changing environment. AEP's risk management process facilitates the identification of a risk and discussion on the possible consequences resulting from the event. Application of the risk management process helps us identify strategic, financial, operational and regulatory risks; assess the threats and controls; evaluate the risk; plan mitigation strategies; and monitor risks for changing conditions.

#### Risk Governance & Oversight:

Enterprise Risk Oversight (ERO) defines and oversees the consistent application of AEP's risk management process and engages our multi-level governance structure to develop the collective risk profile of the company. Business units report risks that may impact the company as a whole to ERO. The Chief Risk Officer reports a summary of these elevated enterprise risks, including risk ranking and corresponding mitigation strategies, to the Risk Executive Committee and the Audit Committee of the Board. The risk summary is then discussed and reviewed by the Audit Committee of the Board.

#### Mitigating & Responding to Risk:

Identifying and reducing the likelihood of risks occurring is one part of the equation; it is equally important to be prepared to respond to and recover from risks in the event they do materialize. Our resilience strategy aims to reduce the impact from an event and return to normal operations.

Our Enterprise Resilience team functions on a 24/7 basis 365 days a year and is charged with sustaining the enterprise's emergency management and business continuity capabilities. Our Enterprise Emergency Management Standard aligns with the National Incident Management System and adopts the principles of the incident command system, which government agencies across the U.S. use to respond to local emergencies and large disasters. Our emergency management framework is an integral part of how we efficiently respond to and manage events to keep critical operations functioning.

To prepare, the Enterprise Resilience team works closely with the Enterprise Risk Oversight Committee to identify the drivers that could trigger an event; the controls for preventing it or reducing the frequency of it occurring; and mitigation strategies in the event it does occur. We try to anticipate high-impact, high-probability events to prepare for the ripple effects they could have and to limit the negative consequences. This includes developing all-hazards, functional based plans and hazard-specific plans aligned to our emergency management framework to manage the strategic response. Business unit and operating company-specific resilience plans are in place to protect our critical and non-critical processes to support continuity of operations during business disruptions.

Risk Information is included in AEP's 2023 Corporate Sustainability Report:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Risk-Management>

Additional Risk Information is included in AEP's 2023 Corporate Sustainability Report:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Risk-Management>

## C2.2

**(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.**

---

### **Value chain stage(s) covered**

Direct operations  
Upstream  
Downstream

### **Risk management process**

Integrated into multi-disciplinary company-wide risk management process

### **Frequency of assessment**

More than once a year

### **Time horizon(s) covered**

Short-term  
Medium-term  
Long-term

### **Description of process**

Enterprise Risk Oversight (ERO) defines and oversees the consistent application of AEP's risk management process in coordination with our business units and Chairman's Technology Message Introduction and TCFD Framework Transition Analysis Just Transition Physical Risks and Opportunities operating companies. The risk management process helps us identify strategic, financial, operational and regulatory risks, assess the threats and controls, evaluate the risk, plan mitigation strategies and monitor risks for changing conditions.

Risks are reported by business units or operating companies to the Enterprise Risk Oversight group. The Chief Risk Officer reports a summary of risks to the Risk Executive Committee, which consists of senior leaders, to illustrate risk ranking and planned mitigations. This summary of risks is then discussed and reviewed by the Audit Committee of the Board of Directors.

In evaluating risk, AEP considers potential events that could affect our business. In 2019, climate change was assessed using AEP's risk management framework and added to the summary view of risks reported to the Risk Executive Committee and Audit

Committee. The physical impact assessment of climate change and the climate change transition scenario analysis will provide additional detailed insights into future risk assessments for our assets and facilities.

AEP often assesses climate change through two separate lenses — physical risk and transition risk with unique causes, controls, and recovery measures examined within the broader climate risk categories. While we can't predict exactly what will occur or when, our experience and risk management activities across the organization will enable us to make sustainable and strategic decisions to prevent, prepare and recover.

For more information about how AEP measures and manages Climate Change Risk, Please visit the Managing and Mitigating Risk section of the Climate Impact Analysis (pages 15-17): <https://www.aepsustainability.com/lib/docs/AEPs-Climate-Impact-Analysis-2021.pdf>

## C2.2a

### (C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	The U.S. EPA has proposed a rule for New Source Performance Standards for greenhouse gas emissions from new, modified, and reconstructed fossil fuel-fired electric generating units; emission guidelines for greenhouse gas emissions from existing fossil fuel-fired electric generating units; and repeal of the Affordable Clean Energy Rule. This proposed rule would have significant impact to AEP's operations.
Emerging regulation	Relevant, always included	Changes to regulations, such as the GHG regulations proposed under the Clean Air Act, have the ability to affect AEP's operations and financial performance in the future.
Technology	Relevant, always included	The cost, maturity and availability of various low- and no-carbon energy technologies will play a large role in AEP's emissions and risk profile going forward.
Legal	Relevant, always included	Legal challenges involving regulations, particularly those governing GHG emissions, have the potential to change regulatory frameworks. These are also a reputation risk.
Market	Relevant, always included	Market dynamics shape the way AEP produces and delivers energy as well as AEP's emission profile.
Reputation	Relevant, always included	Customers, investors, insurers, lenders, and other stakeholders are increasingly considering AEP's carbon footprint in evaluations.



Acute physical	Relevant, always included	Given the exposed nature of AEP's infrastructure, physical risks from natural forces are always assessed and re-evaluated as additional information is obtained. This can lead to changes in design standards, mitigation efforts or other actions.
Chronic physical	Relevant, always included	AEP has evaluated the potential impact of long-term changes of temperature on demand for electricity.

## C2.3

**(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes

### C2.3a

**(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.**

#### Identifier

Risk 1

#### Where in the value chain does the risk driver occur?

Direct operations

#### Risk type & Primary climate-related risk driver

Technology

Transitioning to lower emissions technology

#### Primary potential financial impact

Other, please specify

Compliance Costs, Emerging Regulations, Stranded Assets/Recovery, Regulatory Decisions

#### Company-specific description

Regulation of greenhouse gas emissions could materially increase costs to AEP and its customers or cause some electric generating units to be uneconomical to operate or maintain.

Federal or state laws or regulations may be adopted that would impose new or additional limits on the emissions of greenhouse gases, (carbon dioxide and methane and others) from electric generation units using fossil fuels like coal. The potential effects of greenhouse gas emission limits on AEP's electric generation units are subject to significant uncertainties based on, among other things, the timing of the implementation of any new requirements, the required levels of emission reductions, the

nature of any market-based or tax-based mechanisms adopted to facilitate reductions, the relative availability of greenhouse gas emission reduction offsets, the development of cost-effective, commercial-scale carbon capture and storage technology and supporting regulations and liability mitigation measures, and the range of available compliance alternatives.

Regulated electric revenues and earnings are dependent on federal and state regulation that may limit AEP's ability to recover costs and other amounts:

The rates customers pay to AEP regulated utility businesses are subject to approval by the FERC and the respective state utility commissions of Arkansas, Indiana, Kentucky, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia and West Virginia. In certain instances, AEP's applicable regulated utility businesses may agree to negotiated settlements related to various rate matters that are subject to regulatory approval. AEP cannot predict the ultimate outcomes of any settlements or the actions by the FERC or the respective state commissions in establishing rates.

AEP's transmission investment strategy and execution are dependent on federal and state regulatory policy:

A significant portion of AEP's earnings is derived from transmission investments and activities. FERC policy currently favours the expansion and updating of the transmission infrastructure within its jurisdiction. If the FERC were to adopt a different policy, if states were to limit or restrict such policies, or if transmission needs do not continue or develop as projected, AEP's strategy of investing in transmission could be impacted.

More information: AEP 2022 10K pgs.32-45: <https://tinyurl.com/mry7p22p>

**Time horizon**

Long-term

**Likelihood**

Virtually certain

**Magnitude of impact**

High

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

No, we do not have this figure

**Potential financial impact figure (currency)**

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

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

**Explanation of financial impact figure**

**Cost of response to risk**

**Description of response and explanation of cost calculation**

**Comment**

---

**Identifier**

Risk 2

**Where in the value chain does the risk driver occur?**

Downstream

**Risk type & Primary climate-related risk driver**

Market

Changing customer behavior

**Primary potential financial impact**

Decreased revenues due to reduced demand for products and services

**Company-specific description**

AEP has increasingly seen customers seek to deploy low- or no-carbon generation resources (Distributed Energy Resources -DERs and Distribution Energy Management Systems-DEMS) as a means of replacing, augmenting, or offsetting electricity provided by AEP.

**Time horizon**

Medium-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium

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

No, we do not have this figure

**Potential financial impact figure (currency)**

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

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

## **Explanation of financial impact figure**

### **Cost of response to risk**

#### **Description of response and explanation of cost calculation**

As our industry transforms to the grid of the future, utilities will need to continue to meet customer expectations for safety, reliability and affordability while new expectations arise around resiliency, decarbonization, and customer choice and control. Along with more traditional interconnection requests for solar, wind and batteries, utilities must prepare for other devices and interactions with the grid through Demand Response programs, aggregations, and electric vehicles and their charging equipment.

State and federal policymakers and regulators are currently engaging stakeholders, including AEP, to prepare for the impact of DERs on the system. New standards and requirements are being developed to support the ability of DERs to interconnect to the distribution system and participate in wholesale markets.

AEP is taking a comprehensive approach to understanding and adapting to the increasing complexity to plan and operate a safe and reliable grid as power flows change on the distribution system. Visibility into DERs connected and interacting with the grid is a critical step for AEP to ensure that DERs and other devices are properly integrated into our planning and operations processes and tools. This will enable AEP to develop optimal and equitable energy solutions that support customer and grid needs.

AEP is well-positioned to understand both the challenges and opportunities that arise with DERs/DERMS and is committed to methodically enhance our capabilities to prepare for their implications.

### **Comment**

---

#### **Identifier**

Risk 3

#### **Where in the value chain does the risk driver occur?**

Direct operations

#### **Risk type & Primary climate-related risk driver**

Chronic physical

Changing precipitation patterns and types (rain, hail, snow/ice)

#### **Primary potential financial impact**

Increased indirect (operating) costs

#### **Company-specific description**

AEP is subject to physical and financial risks associated with climate change: Climate change creates physical and financial risk. Physical risks from climate change may include an increase in sea level and changes in weather conditions, such as changes in precipitation and extreme weather events, such as fires. Customers' energy needs vary with weather conditions, primarily temperature and humidity. For residential customers, heating and cooling represent their largest energy use. To the extent weather conditions are affected by climate change, customers' energy use could increase or decrease depending on the duration and magnitude of the changes.

Increased energy use due to weather changes may require AEP to invest in additional generating assets, transmission and other infrastructure to serve increased load. Decreased energy use due to weather changes may affect financial condition through decreased revenues. Extreme weather conditions in general require more system backup, adding to costs, and can contribute to increased system stress, including service interruptions. Extreme weather conditions creating high energy demand on AEP's own and/or other systems may raise electricity prices as AEP buys short-term energy to serve AEP's own system, therefore, increasing customer energy costs.

Severe weather and weather-related events impact AEP's service territories, primarily when thunderstorms, tornadoes, hurricanes, fires, floods and snow /ice storms occur. To the extent the frequency and intensity of extreme weather events and storms increase, AEP's cost of providing service will increase, including the costs and the availability of procuring insurance related to such impacts, and these costs may not be recoverable. Changes in precipitation resulting in droughts, water shortages or floods could adversely affect operations, principally the fossil fuel generating units. A negative impact to water supplies due to long-term drought conditions or severe flooding could adversely impact AEP's ability to provide electricity to customers, as well as increase energy prices. AEP may not recover all costs related to mitigating these physical and financial risks.

To the extent climate change impacts a region's economic health, it may also impact revenues. AEP's financial performance is tied to the health of the regional economies AEP serves. The price of energy is a factor in a region's cost of living.

More info: AEP 10K pg.32-45: <https://tinyurl.com/mry7p22p>

**Time horizon**

Long-term

**Likelihood**

More likely than not

**Magnitude of impact**

Medium-high

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

No, we do not have this figure

**Potential financial impact figure (currency)**

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

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

**Explanation of financial impact figure**

**Cost of response to risk**

**Description of response and explanation of cost calculation**

**Comment**

More information can be found here: <https://aepsustainability.com/lib/docs/AEPs-Climate-Impact-Analysis-2021.pdf#page=47>

## **C2.4**

**(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

### **C2.4a**

**(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.**

---

**Identifier**

Opp1

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Energy source

**Primary climate-related opportunity driver**

Use of lower-emission sources of energy

**Primary potential financial impact**

Returns on investment in low-emission technology

**Company-specific description**

For more than a century, AEP has invested capital to ensure its system is reliable and resilient. As the generation fleet transitions to lower carbon and intermittent resources at the same time other infrastructure ages, additional capital investment is needed for resiliency and to maintain reliability. Additionally, public discourse about climate-related weather events has prompted public interest in resiliency investment. AEP's investments in grid resiliency go hand-in-hand with grid modernization, including transmission and distribution infrastructure. AEP offers customer solutions that provide resilience for customers as well as the power grid.

Our capital investment strategy is critical in supporting our grid modernization, decarbonization and clean energy transition. From 2023 through 2027, AEP plans to invest \$40 billion in capital with an emphasis on transmission, distribution and regulated renewable energy. This includes investing \$26 billion in our transmission and distribution systems and \$9 billion in regulated renewable generation. We're strengthening our focus on our regulated investments and de-risking our business through proactive management of AEP's portfolio, including the sale of 1,365 megawatts of unregulated contracted renewables (August 2023).

**Time horizon**

Long-term

**Likelihood**

Very likely

**Magnitude of impact**

High

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

No, we do not have this figure

**Potential financial impact figure (currency)**

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

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

**Explanation of financial impact figure**

**Cost to realize opportunity**

**Strategy to realize opportunity and explanation of cost calculation**

Capital Investment Strategy:

Having a modern, reliable, resilient and secure grid is vital to our clean energy transformation. Investing in the grid is essential to enabling AEP's decarbonization

strategy as we prepare to accommodate new, cleaner grid resources and technologies, grow load in our service territory, and open the door to future customer-driven economic development opportunities. This is essential to serving evolving societal, economic and customer needs as well as meeting our net-zero carbon goals.

Our capital investment strategy is critical in supporting our decarbonization and renewable energy strategy, as well as making the electric power grid more resilient. From 2023 through 2027, AEP plans to invest \$40 billion in capital with an emphasis on transmission, distribution and regulated renewable energy. This includes investing \$26 billion in our transmission and distribution systems and \$9 billion in regulated renewable generation. We're strengthening our focus on our regulated investments and de-risking our business through proactive management of AEP's portfolio, including the recent sale of 1,365 megawatts of unregulated contracted renewables (August 2023).

Approximately 65% of AEP's capital forecast will be allocated to investments in transmission and distribution. Significant additional investments in transmission and distribution will support our clean energy transition by making the electric power grid more resilient and reliable and able to support the electrification of the economy. Currently, approximately 22,600 MW of renewable generation is interconnected across the U.S. via AEP's transmission system. Our flexible and robust capital plan is designed to meet our customer needs and provide the ability to strategically shift capital to deliver on our 6%-7% earnings per share growth commitment.

AEP's Strategy for a Clean Energy Future:

- Investing to ensure reliability, resilience, affordability and security of the electric power grid
- Adding renewables to support customer demand for clean energy
- Transforming our fossil fleet for a net-zero carbon future
- Scenario planning for the future to understand risks and opportunities
- Engaging in the public policy process
- Engaging employees and supporting communities

## Comment

---

### Identifier

Opp2

### Where in the value chain does the opportunity occur?

Downstream

### Opportunity type

Energy source

### Primary climate-related opportunity driver

Other, please specify



## Benefits of Electrification

### **Primary potential financial impact**

Returns on investment in low-emission technology

### **Company-specific description**

Electrification of the economy goes beyond transportation. Opportunities to move to clean, efficient electric technologies span the spectrum from industrial processes to home appliances. These technologies can accelerate the transition to decarbonization while saving customers money on their total energy costs. The 2022 Inflation Reduction Act (IRA) supports these goals through tax credits and rebates for income-qualified households and clean energy funding for businesses.

AEP is actively pursuing opportunities for electrification, including those related to the transport sector. With electrification of the transport sector, AEP's sales will increase resulting in additional revenues as well as the ability to potentially invest additional capital into AEP's system. We're working with our customers and communities to help them realize the benefits of electric transportation through community outreach, assessment tools, guides, customer programs and incentives, and low-cost off-peak charging rates. Customer program offerings span our service territory and include infrastructure deployment rebates, off-peak charging programs, energy efficiency rebates and consultative services.

Learn more in AEP's 2023 CSR page 34:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Electrification>

### **Time horizon**

Short-term

### **Likelihood**

Virtually certain

### **Magnitude of impact**

High

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

No, we do not have this figure

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

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

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

### **Explanation of financial impact figure**

## **Cost to realize opportunity**

### **Strategy to realize opportunity and explanation of cost calculation**

Electrification of the economy goes beyond transportation. Opportunities to move to clean, efficient electric technologies span the spectrum from industrial processes to home appliances. These technologies can accelerate the transition to decarbonization while saving customers money on their total energy costs. The 2022 Inflation Reduction Act (IRA) supports these goals through tax credits and rebates for income-qualified households and clean energy funding for businesses.

AEP is working with State Energy Offices to ensure existing utility-sponsored energy efficiency (EE) and beneficial electrification (BE) programs complement, rather than compete with any IRA-funded programs. We want our customers to be aware of, and take full advantage of, all available EE funding opportunities. At the same time, AEP continues to expand our efforts to help customers realize both the environmental and financial benefits of utilizing electric technologies in their homes and businesses.

As part of Appalachian Power's EE program, rebates are available to customers for installing certain high-efficiency residential heat pumps, heat pump water heaters, and Level 2 EV chargers.

Additionally, Appalachian Power has a BE pilot program in West Virginia that provides customers with the opportunity to switch from a non-regulated fuel source, such as propane or fuel oil, to a high-efficiency electric heat pump. Similarly, SWEPCO's energy efficiency rebates promote the benefits of heat pumps, heat pump water heaters, induction cooking, all-electric homes and other residential and commercial electrification technologies.

AEP Ohio is working directly with heat pump manufacturers, industrial process manufacturers, and EV charging station manufacturers to secure and jointly-market manufacturer rebates to customers. AEP Ohio also helps educate customers on the non-energy benefits of electric technologies such as reduced maintenance costs and avoided GHG emissions. This helps ensure customers make educated decisions on their equipment needs. PSO, SWEPCO and AEP Ohio also have active programs to educate customers on efficient industrial equipment, including forklifts, pipeline compressors, and induction and infrared technologies.

Learn more in AEP's 2023 CSR page 34:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Electrification>

## **Comment**

NATIONAL ELECTRIC HIGHWAY COALITION

National Electric Highway Coalition (NEHC): AEP founded the Electric Highway Coalition which evolved into the National Electric Highway Coalition (NEHC) when it merged with similar efforts across the country in 2021. The NEHC is now managed by Edison Electric Institute (EEI) and AEP is a proud member and serves on its steering committee. The NEHC is a collaboration of more than 60 investor-owned and municipal electric companies and electric cooperatives that are committed to providing electric vehicle (EV) fast charging stations that will allow the public to drive EVs with confidence along major U.S. travel corridors by the end of 2023. The NEHC is the largest such alliance of electric companies that have organized around the common goal of deploying EV fast charging infrastructure to support the growing number of EVs and to help ensure that the transition to EVs is seamless for drivers.

To date, EEI's member companies have invested more than \$4 billion in customer programs and projects to deploy charging infrastructure and to accelerate electric transportation. As EV sales continue to grow, EEI estimates that we will need 140,000 EV fast charging ports, a more than ten-fold increase over today, to support the more than 26 million EVs projected to be on U.S. roads in 2030.

Learn More: <https://www.eei.org/issues-and-policy/national-electric-highway-coalition>

## C3. Business Strategy

### C3.1

**(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?**

#### Row 1

---

##### **Climate transition plan**

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a climate transition plan within two years

##### **Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future**

AEP routinely meets with shareholders to discuss climate related plans and other ESG matters. We are asked for detailed plans for attaining net-zero, how we manage the transition cost for customers, and whether we can go faster. These are fair questions as the impacts of a changing climate continue to raise questions globally, with more frequent and severe weather events, wildfires, droughts and floods that are occurring. Within AEP's service territory, the most significant system-related impacts with a nexus to climate change are extreme weather events.

We believe our goals are compatible with and contribute to the objectives outlined in the Paris Climate Agreement and that we are on a path to achieve our 2030 and 2045 carbon emission reductions through the addition of renewables to the generation mix,

investments in new technology research, and planned coal unit retirements.

For more information regarding Stakeholder engagement, visit:

Stakeholder Engagement: <https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Stakeholder-Engagement>

Clean Energy Strategy: <https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Clean-Energy-Strategy>

## C3.2

### (C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

Use of climate-related scenario analysis to inform strategy	
Row 1	Yes, qualitative and quantitative

## C3.2a

### (C3.2a) Provide details of your organization’s use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios Customized publicly available transition scenario	Company-wide	1.6°C – 2°C	<p>In 2020, AEP evaluated potential climate transition scenarios that could be indicative of possible future GHG emission reduction strategies and the associated electric generation profiles for each.</p> <p>The scenarios were modelled through 2050. AEP did not consider changes to the distribution or transmission grid that might be needed due to customer load and resource mix. Those changes will be examined in future modelling, in conjunction with entities responsible for reliability of the bulk electric system, as generation resource changes become clearer. Our focus for this exercise was on AEP’s generation fleet.</p> <p>These scenarios may be indicative of AEP’s future generation profile. However, they are not meant to predict the future; rather, they are simply “plausible representations of uncertain future states.” The output from our scenario modelling provides a future snapshot of what may occur given different variables, such as changes in support for more aggressive emission reduction goals and what is plausible for others.</p> <p>AEP developed three different scenarios to assess potential</p>

			<p>climate change transition impacts:</p> <ol style="list-style-type: none"> <li>1. Business As Usual                     <ul style="list-style-type: none"> <li>• Our current generation plans, as informed by our Integrated Resource Plans (IRPs) with a \$15/ton + 3.5%/year carbon price beginning in 2028.</li> </ul> </li> <li>2. Fast Transition                     <ul style="list-style-type: none"> <li>• BAU plus accelerated AEP coal retirements with a \$30/ton + 3.5%/year carbon price beginning in 2028.</li> </ul> </li> <li>3. 100% Clean Energy                     <ul style="list-style-type: none"> <li>• Fast Transition case plus additional coal retirements, restrictions on natural gas build and 100% Clean Energy by 2050.</li> </ul> </li> </ol> <p>Our analysis was guided by the TCFD framework, setting specific parameters related to geography and macro-economic variables. Also, in accordance with TCFD, we developed assumptions related to technology development/deployment, energy mix, price of key commodities or inputs, timing of potential impacts, and potential policy changes. Finally, we considered which scenarios to use as a guide, time horizons, and supporting data and models. These scenarios also align with UNSDG 13 - Climate Action.</p> <p>More information, visit:                  AEP's Climate Report pg. 22-34:  <a href="https://aepsustainability.com/performance/report/docs/AEPs-Climate-Impact-Analysis-2021.pdf">https://aepsustainability.com/performance/report/docs/AEPs-Climate-Impact-Analysis-2021.pdf</a></p> <p>*Note, AEP's Climate Strategy and Goals have been updated since this analysis was conducted in 2020. Updated goals and strategy available in our 2023 Corporate Sustainability Report pg. 20:  <a href="https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Clean-Energy-Strategy">https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Clean-Energy-Strategy</a></p>
Physical climate scenarios Customized publicly available physical scenario	Company-wide	Unknown	Climate change presents physical risks for the AEP system as well as business opportunities. AEP operates a large, interconnected network of facilities that generate, transport, and deliver electricity across the United States to serve approximately 5.5 million customers. Within these diverse operations, equipment, facilities operations, and employees are exposed to environmental variables that may be influenced by a changing climate. We highlight potential physical risks and opportunities posed by climate change, risk mitigation measures and lessons learned from past

		<p>events, and how interrelated factors may affect our long-term business strategy.</p> <p>We identified and conducted an analysis of the top 6 risks in the climate report:</p> <ul style="list-style-type: none"> <li>• Ambient Temperature (extreme heat or cold)</li> <li>• Precipitation Amount and Type (drought/flood/water level and ice/snow/rain)</li> <li>• Severe Weather (lightning, hurricanes, tornados, damaging winds)</li> <li>• Sea Level Rise</li> <li>• Wind Speed</li> <li>• Solar Irradiance (measurement of solar radiation that reaches a point of the earth’s surface)</li> </ul> <p>Changes that cause the most concern are generally subtle but are more severe in extremes. For example, the frequency of storms may be slightly higher, but the severity of them is increasing. These variations, which are geographically dispersed, are gaining attention from insurance underwriters, investors, lenders and others who are concerned about financial and operational risks associated with the physical aspects of climate change.</p> <p>We examined the potential impacts to physical assets, such as buildings, substations, poles and generating units, as well as what we’ve learned through experience of more than a century of severe weather events.</p> <p>Our analysis of physical risk revealed vulnerabilities that we are addressing. It showed us that our efforts to harden and build resilience into the system are essential. Our capital investment strategy, changes to design standards for vulnerable infrastructure, increased automation and digitalization, and efforts to have critical spare parts at the ready are all part of our grid modernization plan to enable the clean energy transition.</p> <p>For more information, Please refer to AEP’s Climate Report pg. 22-34, 47-73: <a href="https://tinyurl.com/2s42ftbn">https://tinyurl.com/2s42ftbn</a></p> <p>Clean Energy Strategy section of 2023 CSR page 20: <a href="https://tinyurl.com/c4sssf6v">https://tinyurl.com/c4sssf6v</a>                  Pathway to Net Zero: <a href="https://tinyurl.com/v5p6htn5">https://tinyurl.com/v5p6htn5</a></p>
--	--	---

## C3.2b

**(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.**

### Row 1

---

#### Focal questions

1. To identify risks and opportunities related to climate change
2. To help inform capital investment and regulatory strategies
3. Advance electrification and electric vehicles
4. Explore impacts of potential future climate policy pathways
5. Inform strategic planning for the corporation
  - Transforming our fossil fleet for a net-zero carbon future;
  - Scenario planning for the future;
  - Investing to ensure reliability, resilience, affordability and security of the grid;
  - Engaging in the public policy process;
  - Engaging employees and supporting those impacted by the transition
6. Inform future emission reduction and renewable Energy Goals

#### Results of the climate-related scenario analysis with respect to the focal questions

The scenarios developed represented a unique approach to examining potential carbon emissions and generating fleet changes for AEP's operations. With increased constraints on carbon emissions through carbon pricing and accelerated coal retirements, renewable energy dominated the future energy portfolio and emissions trended significantly lower. However, even in the Business-as-Usual Case, emissions are projected to be only a small fraction of historic levels. This reflects AEP's current strategy to transition to clean resources. In both scenarios, emissions are reduced more than 90% below 2000 levels enterprise-wide by the mid-2030s.

With varied assumptions on carbon pricing, it is very possible to get to less than 5% of our 2000 CO<sub>2</sub> emission levels. However, we were not quite able to get to zero emissions given the assumptions. That is because the modeling required some level of natural gas-fueled capacity to provide energy, albeit in a very limited capacity. We will continue to seek a viable 100% clean energy scenario to model in future efforts, as we also look to advanced energy storage and green hydrogen to further reduce emissions.

The 100% Clean Energy option, although not completed in this exercise, provided important insights into what will be required and what still needs to be done to achieve net-zero carbon by 2050. The scenarios developed and the outcomes of the BAU and Fast Transition scenarios are compatible with the Paris Agreement.

In 2022, AEP updated our net-zero GHG emission reduction goals from 2050 to 2045 and revised our baseline from 2000 to 2005. Our goal to reduce GHG emissions 80% by



2030 is now measured against the 2005 baseline and includes all Scope 1 emissions. AEP’s future resource portfolio, supported by the Integrated Resource Plans we develop to meet the regulated capacity requirements within our operating companies, gives us confidence that we can meet these goals while also balancing risks and customer affordability. Through 2022, we achieved a 66% reduction in Scope 1 GHG emissions (inclusive of emission reductions that result from assets sold and retired), or a 62% reduction according to the GHG Protocol, which excludes reductions that result from assets sold.

Our current 5-year capital plan allocates approximately \$9 billion to invest in regulated renewables. The industry will rely heavily on renewables, natural gas, existing nuclear, energy storage, and energy efficiency. To get to a net-zero carbon emissions reality by 2045, many building blocks must fall into place across multiple sectors, including advancements in technologies such as small modular nuclear reactors, carbon capture and sequestration, and/or advanced, largescale energy storage technologies that can meet peak demand needs.

For more information, visit:

AEP’s Climate Report pg. 22-34: <https://tinyurl.com/2s42ftbn>

Clean Energy Strategy section of 2023 CSR: <https://tinyurl.com/c4sssf6v>

Pathway to Net Zero: <https://tinyurl.com/v5p6htn5>

### C3.3

**(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.**

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>AEP continues to reduce its greenhouse gas footprint, modernize our electric Power grid and add renewable energy to its system as a means of reducing climate transition risk and providing an opportunity for capital investment and shareholder return as part of our corporate strategy.</p> <p>Our capital investment strategy is critical in supporting our decarbonization and renewable energy strategy. From 2023 through 2027, AEP plans to invest \$40 billion in capital with an emphasis on transmission, distribution and regulated renewable energy. This includes investing \$26 billion in our transmission and distribution systems and \$9 billion in regulated renewable generation. We’re strengthening our focus on our regulated</p>



		<p>investments and de-risking our business through proactive management of AEP’s portfolio, including the recent sale of 1,365 megawatts of unregulated contracted renewables (August 2023).</p> <p>Approximately 65% of AEP’s capital forecast will be allocated to investments in transmission and distribution. Significant additional investments in transmission and distribution will support our clean energy transition by making the electric power grid more resilient and reliable and able to support the electrification of the economy. Currently, approximately 22,600 MW of renewable generation is interconnected across the U.S. via AEP’s transmission system. Our flexible and robust capital plan is designed to meet our customer needs and provide the ability to strategically shift capital to deliver on our 6%-7% earnings per share growth commitment.</p> <p>More Information:</p> <p>Clean Energy Strategy: <a href="https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Clean-Energy-Strategy">https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Clean-Energy-Strategy</a></p> <p>Pathway to Net-Zero: <a href="https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Pathway-to-Net-Zero">https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Pathway-to-Net-Zero</a></p>
Supply chain and/or value chain	Yes	<p>AEP’s customers are also in many cases suppliers and often have an interest in reducing their emissions profile with AEP’s help. This customer demand for cleaner electricity helps inform AEP’s decisions around generation planning. As a result, AEP’s renewable generating portfolio will represent approximately 50% our total capacity by 2032. AEP also has jurisdictions where it offers a green tariff that allows customers to sign up for 100% renewable energy. Our suppliers are often our customers as well, so we share a mutual interest in looking at climate risks and opportunities holistically.</p>
Investment in R&D	Yes	<p>EPRI Climate Read:</p> <p>AEP participates in several research, development and deployment of low carbon initiatives through the Electric Power Research Institute (EPRI). The Climate READi Power Resilience and Adaptation Initiative is EPRI’s latest effort to convene global thought leaders, scientific researchers and industry experts to create a common framework to address climate-related physical risks and adaptation. As the electric power grid decarbonizes and the economy electrifies, energy reliability and resilience are vital. It’s not possible, affordable or practical to harden every asset to withstand every severe weather event or condition. Taking a</p>

		<p>riskbased approach to assessing asset vulnerabilities and prioritizing resilient investments to mitigate the risk is essential. This allows us to examine proactive measures to withstand and recover from climate-related physical impacts more quickly.</p> <p>Low Carbon Resource Initiative:                  AEP is a founding partner of the Low Carbon Resource Initiative (LCRI), co-led by EPRI and the Gas Technology Institute. The project conducted an integrated modeling exercise to understand the technologies and strategies required to achieve economy-wide net-zero carbon emissions by 2050. This includes:</p> <ul style="list-style-type: none"> <li>• Flexible options for energy technologies and resources are essential to the affordability of reducing carbon emissions to meet the net-zero goal.</li> <li>• Fossil fuels will remain in the mix with penetration of resource mix dependent upon the advancement of technology and resources such as hydrogen. At the same time, energy consumers will shift to low-carbon energy resources as electricity production transitions to low-carbon fuels.</li> <li>• Energy efficiency and efficient electrification will contribute to lower energy consumption across transportation, buildings and industrial uses.</li> <li>• Renewables, backed by new natural gas and/ or hydrogen-fueled electric generating capacity, are necessary to ensure resource adequacy and flexibility to provide reliable electricity.</li> <li>• Existing nuclear power provides vital firm capacity to ensure reliable electricity in a net-zero carbon world and may be increased by new advanced nuclear technologies.</li> </ul> <p>Technology section of AEP's Climate Impact analysis:  <a href="https://tinyurl.com/2s42ftbn">https://tinyurl.com/2s42ftbn</a></p> <p>Pathway to Net Zero section of AEP's 2023 CSR:  <a href="https://tinyurl.com/v5p6htn5">https://tinyurl.com/v5p6htn5</a></p>
Operations	Yes	<p>We are working with our regulators, policymakers, customers and other stakeholders to modernize, strengthen and transition the electric power system to support growing demand for clean energy at a pace that works for our stakeholders. We are doing this while maintaining reliability, affordability and equitable access to clean resources, in addition to ensuring adequate capacity is available to meet customers' 24/7 energy needs. As we transform our generation fleet, we are making significant investments in our transmission and distribution systems to accommodate new</p>

		<p>technology, new forms of electricity generation and distribution, the advanced use of smart meters, the accelerating electrification of the economy, and more.</p> <p>We are making significant progress. AEP already retired or sold nearly 13,500 megawatts (MW) of coal-fueled generation during the past decade. We have plans to stop burning coal at additional power plants over the next decade, representing approximately 4,800 MW of coal-fired generation. By 2032, remaining coal plants are projected to represent approximately 19% of AEP’s nameplate generating capacity</p> <p>Our capital investment strategy is critical in supporting our decarbonization and renewable energy strategy. From 2023 through 2027, AEP plans to invest \$40 billion in capital with an emphasis on transmission, distribution and regulated renewable energy. This includes investing \$26 billion in our transmission and distribution systems and \$9 billion in regulated renewable generation. We’re strengthening our focus on our regulated investments and de-risking our business through proactive management of AEP’s portfolio, including the recent sale of 1,365 megawatts of unregulated contracted renewables (August 2023).</p> <p>Approximately 65% of AEP’s capital forecast will be allocated to investments in transmission and distribution to support our clean energy transition by making the electric power grid more resilient and reliable and able to support the electrification of the economy. Currently, approximately 22,600 MW of renewable generation is interconnected across the U.S. via AEP’s transmission system. Our flexible and robust capital plan is designed to meet our customer needs and provide the ability to strategically shift capital to deliver on our 6%-7% earnings per share growth commitment.</p> <p>Clean Energy Strategy: <a href="https://tinyurl.com/c4sssf6v">https://tinyurl.com/c4sssf6v</a></p>
--	--	--

### C3.4

**(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.**

Financial planning elements that have been influenced	Description of influence

Row 1	Revenues Direct costs Indirect costs Capital expenditures Capital allocation Acquisitions and divestments Access to capital Assets Liabilities	<p>Having a modern, reliable, resilient and secure grid is vital to our clean energy transformation. Investing in the grid is essential to enabling AEP's decarbonization strategy as we prepare to accommodate new, cleaner grid resources and technologies, grow load in our service territory, and open the door to future customer-driven economic development opportunities. This is essential to serving evolving societal, economic and customer needs as well as meeting our net-zero carbon goals.</p> <p>Our vision for a clean energy future focuses on promoting and investing in modernizing the grid and regulated renewables. As renewable resources become more affordable due to advances in technology and support from federal tax credits, we see these clean options capturing larger shares of our integrated resource plans (IRPs).</p> <p>Our capital investment strategy is critical in supporting our decarbonization and renewable energy strategy. From 2023 through 2027, AEP plans to invest \$40 billion in capital with an emphasis on transmission, distribution and regulated renewable energy. This includes investing \$26 billion in our transmission and distribution systems and \$9 billion in regulated renewable generation. We're strengthening our focus on our regulated investments and de-risking our business through proactive management of AEP's portfolio, including the recent sale of 1,365 megawatts of unregulated contracted renewables (August 2023).</p> <p>Approximately 65% of AEP's capital forecast will be allocated to investments in transmission and distribution. Significant additional investments in transmission and distribution will support our clean energy transition by making the electric power grid more resilient and reliable and able to support the electrification of the economy. Currently, approximately 22,600 MW of renewable generation is interconnected across the U.S. via AEP's transmission system. Our flexible and robust capital plan is designed to meet our customer needs and provide the ability to strategically shift capital to deliver on our 6%-7% earnings per share growth commitment.</p> <p>In 2022, AEP updated our net-zero GHG emission reduction targets from 2050 to 2045 and revised our baseline from 2000 to 2005. Our goal to reduce GHG emissions 80% by 2030 is now measured against the 2005 baseline and includes all Scope 1 emissions. AEP's future resource portfolio, supported by the Integrated Resource Plans we develop to meet the regulated capacity requirements within our operating companies, gives us confidence that we can meet these goals while also balancing risks and customer affordability. Through 2022, we achieved a 66% reduction in Scope 1 GHG emissions (inclusive of emission reductions that result from assets sold and retired) or a 62% reduction according to the GHG Protocol, which excludes reductions that result from assets sold. We remain</p>
----------	--	--

	<p>confident we will achieve this goal.</p> <p>AEP integrates a carbon price in its commodity forecasting as a proxy for future climate regulation. The carbon price begins in 2028 at approximately \$15/metric ton of CO2 emissions, escalating at 3.5% per year on a nominal basis. In the Fast Transition scenario for AEP's climate report, we used a carbon price beginning at \$30/metric ton, which escalated 3.5% per year on a nominal basis.</p> <p>Clean Energy Strategy: <a href="https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Clean-Energy-Strategy">https://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Clean-Energy-Strategy</a></p>
--	---

### C3.5

**(C3.5) In your organization’s financial accounting, do you identify spending/revenue that is aligned with your organization’s climate transition?**

Identification of spending/revenue that is aligned with your organization’s climate transition	
Row 1	No, and we do not plan to in the next two years

## C4. Targets and performance

### C4.1

**(C4.1) Did you have an emissions target that was active in the reporting year?**

Absolute target

#### C4.1a

**(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.**

**Target reference number**

Abs 1

**Is this a science-based target?**

No, and we do not anticipate setting one in the next two years

**Target ambition**

**Year target was set**

2022

**Target coverage**

Company-wide

**Scope(s)**

Scope 1

**Scope 2 accounting method**

**Scope 3 category(ies)**

**Base year**

2005

**Base year Scope 1 emissions covered by target (metric tons CO<sub>2</sub>e)**

134,000,000

**Base year Scope 2 emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year total Scope 3 emissions covered by target (metric tons CO<sub>2</sub>e)**

**Total base year emissions covered by target in all selected Scopes (metric tons CO<sub>2</sub>e)**

134,000,000

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

99

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

**Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO<sub>2</sub>e)**



**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO<sub>2</sub>e)**

**Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO<sub>2</sub>e)**

**Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

99

**Target year**

2030

**Targeted reduction from base year (%)**

80

**Total emissions in target year covered by target in all selected Scopes (metric tons CO<sub>2</sub>e) [auto-calculated]**

26,800,000

**Scope 1 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

51,100,000

**Scope 2 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)**

**Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)**

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)**

51,100,000

**Does this target cover any land-related emissions?**

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

**% of target achieved relative to base year [auto-calculated]**

77.3320895522

**Target status in reporting year**

Underway

**Please explain target coverage and identify any exclusions**

This emission reduction target is assessed on an annual basis. In 2022, AEP updated our 2030 target to be based on a 2005 baseline . Target covers Scope 1 emissions.

The 2022 scope 1 emissions stated above represent a 66% reduction in all Scope 1 GHG emissions (inclusive of emission reductions that result from assets sold and retired), or a 62% reduction according to the GHG Protocol, which excludes reductions that result from assets sold. The scope 1 baseline data provided above was restated and now represents our alignment with the GHG protocol baseline year methodology. We remain confident we will achieve our goal of 80% GHG reduction by 2030 goal.

We have long believed that our clean energy transformation strategy is compatible with and contributes to the Paris Agreement. The climate scenario analysis we undertook demonstrates that our strategy is on course with achieving the goals of the Paris Agreement. It also reminds us that the transition must build resilience into the system to handle extremes. It also shows us that there are still many uncertainties about technology, resources and the pace and cost of the transition. Our path forward will evolve, and, as it does, we will continue to engage our stakeholders.

**Plan for achieving target, and progress made to the end of the reporting year**

In 2020, we undertook a year-long Climate Impact Analysis effort to analyse the risks to our company from climate change, as well as potential business opportunities it might create. The report reflects our commitment to working toward 100% clean energy while also addressing the physical risks to infrastructure and people from a changing climate and the socio-economic effects that coal-fuelled power plant closures have on the workforce as well as local and regional economies. In 2022, We reviewed our carbon emission reduction goals as part of this process and have accelerated them to achieve an 80% reduction by 2030 and net-zero emissions by 2045 (from a 2005 baseline). The climate scenarios we conducted showed that we can reach more than 95% toward zero by 2045 with conventional technologies, and we remain hopeful that emerging technologies such as advanced nuclear, carbon capture, hydrogen and energy storage will help us close that gap. Through the end of 2022, AEP has achieved a 66% reduction in Scope 1 GHG emissions (inclusive of emission reductions that result from assets sold and retired), or a 62% reduction according to the GHG Protocol, which excludes reductions that result from assets sold. We remain confident we will achieve this goal.

We have long believed that our clean energy transformation strategy is compatible with the Paris Agreement. The climate scenario analysis we undertook demonstrates that our

strategy is on course with achieving the goals of the Paris Agreement. It also reminds us that the transition must build resilience into the system to handle extremes. It also shows us that there are still many uncertainties about technology, resources and the pace and cost of the transition. Our path forward will evolve, and, as it does, we will continue to engage our stakeholders.

AEP's Strategy for a Clean Energy Future:

- Building and enabling renewables
- Transforming our fossil fleet for a net-zero carbon future
- Scenario planning for the future to understand risks and opportunities
- Investing to ensure reliability, resilience, affordability and security of the grid
- Engaging in the public policy process
- Engaging employees and supporting communities

For more info, visit: <http://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Clean-Energy-Strategy>

**List the emissions reduction initiatives which contributed most to achieving this target**

## C4.2

**(C4.2) Did you have any other climate-related targets that were active in the reporting year?**

Net-zero target(s)

Other climate-related target(s)

## C4.2b

**(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.**

---

**Target reference number**

Oth 1

**Year target was set**

2020

**Target coverage**

Company-wide

**Target type: absolute or intensity**

Absolute

**Target type: category & Metric (target numerator if reporting an intensity target)**

Other, please specify

Other, please specify

Fleet Electrification: By 2030, electrify 40% of our on-road fleet and 50% of our forklifts

**Target denominator (intensity targets only)**

**Base year**

2020

**Figure or percentage in base year**

1.5

**Target year**

2030

**Figure or percentage in target year**

40

**Figure or percentage in reporting year**

7.5

**% of target achieved relative to base year [auto-calculated]**

15.5844155844

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

Fleet electrification is part of our effort to reduce CO2 emissions by 80% by 2030 and achieve net-zero by 2050.

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**Please explain target coverage and identify any exclusions**

Covers all AEP Operations

**Plan for achieving target, and progress made to the end of the reporting year**

AEP continues to lead by example as we work toward electrifying our own fleet of vehicles. With the expanding EV market, we have updated our initial goal to electrify our light duty fleet. Our goal encompasses our entire on-road fleet, from sedans to Class 8 trucks. From 2020 through 2022, we electrified 5% of our on-road fleet, with a goal of electrifying 40% by 2030. During that same time period, we also electrified 40% of our forklifts and set a goal of 50% electrified forklifts by 2030.

New Market Opportunities

- Strong probability that the 3/4t Pickup market will have EV platforms available in 2025, leverage new platform offering (FCEV, PHEV)

- 2024 Longer range EV Cargo in the Market (BrightDrop, Stellantis) opportunity to convert Cargo Vans
- By 2025 Big "3" will have BEV 1/2t Pickups with ranges from 320 miles to 500 miles. Ford in market 2022/2023 F-150 Lightning 320 miles, 2024 GM Silverado 1500 300 & 400 miles, 2025 Stellantis RAM 1500 500 miles
- Increase of offerings in the Small SUV market starting in 2023/2024

**List the actions which contributed most to achieving this target**

## C4.2c

**(C4.2c) Provide details of your net-zero target(s).**

---

**Target reference number**

NZ1

**Target coverage**

Company-wide

**Absolute/intensity emission target(s) linked to this net-zero target**

Abs1

**Target year for achieving net zero**

2045

**Is this a science-based target?**

No, and we do not anticipate setting one in the next two years

**Please explain target coverage and identify any exclusions**

Our goal is to reduce AEP's carbon emissions from directly owned generation (scope 1) 80% by 2030 compared to 2005 levels and to achieve net-zero emissions by 2045 (scopes 1 and 2). The climate scenarios we conducted in our Climate Impact Analysis showed that we can reach more than 95% toward zero by 2045 with conventional technologies, and we remain hopeful that emerging technologies such as advanced nuclear, carbon capture, hydrogen and energy storage will help us close that gap. Through the end of 2022, AEP has achieved a 66% reduction in Scope 1 GHG emissions (inclusive of emission reductions that result from assets sold and retired), or a 62% reduction according to the GHG Protocol, which excludes reductions that result from assets sold. AEP's Net Zero target is assessed on an annual basis, and we remain confident we will achieve this goal.

We have long believed that our clean energy transformation strategy is compatible with the Paris Agreement. The climate scenario analysis we undertook demonstrates that our strategy is on course with achieving the goals of the Paris Agreement. It also reminds us that the transition must build resilience into the system to handle extremes. It also shows us that there are still many uncertainties about technology, resources and the

pace and cost of the transition. Our path forward will evolve, and, as it does, we will continue to engage our stakeholders.

AEP's Climate Impact Analysis: <http://aepsustainability.com/lib/docs/AEPs-Climate-Impact-Analysis-2021.pdf>

Clean Energy Strategy: <http://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Clean-Energy-Strategy>

**Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?**

Yes

**Planned milestones and/or near-term investments for neutralization at target year**

We continue to work toward achieving our near-term goal of reducing GHG emissions (Scope 1) 80% by 2030 and Net zero (Scopes 1 & 2) by 2045. AEP's goals and our strategy for transitioning are driven by our integrated resource plans, which are overseen by state regulators. Increasingly, we have seen renewables become more cost competitive, enabling AEP to invest in economical clean energy resources that also reduce our carbon footprint. In addition, many of our customers want clean energy for their homes and businesses.

Our capital investment strategy is critical in supporting our decarbonization and renewable energy strategy. From 2023 through 2027, AEP plans to invest \$40 billion in capital with an emphasis on transmission, distribution and regulated renewable energy. This includes investing \$26 billion in our transmission and distribution systems and \$9 billion in regulated renewable generation. We're strengthening our focus on our regulated investments and de-risking our business through proactive management of AEP's portfolio, including the recent sale of 1,365 megawatts of unregulated contracted renewables (August 2023).

Approximately 65% of AEP's capital forecast will be allocated to investments in transmission and distribution. Significant additional investments in transmission and distribution will support our clean energy transition by making the electric power grid more resilient and reliable and able to support the electrification of the economy. Currently, approximately 22,600 MW of renewable generation is interconnected across the U.S. via AEP's transmission system. Our flexible and robust capital plan is designed to meet our customer needs and provide the ability to strategically shift capital to deliver on our 6%-7% earnings per share growth commitment.

Clean Energy Strategy: <http://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Clean-Energy-Strategy>

**Planned actions to mitigate emissions beyond your value chain (optional)**



## C4.3

**(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.**

Yes

### C4.3a

**(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.**

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation		
To be implemented*		
Implementation commenced*	1	
Implemented*		
Not to be implemented		

### C4.3b

**(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.**

**Initiative category & Initiative type**

Other, please specify

Other, please specify

Implementing Energy Efficiency Programs: Various Lighting, Heat and Appliance Technologies

**Estimated annual CO2e savings (metric tonnes CO2e)**

202,287

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

**Investment required (unit currency – as specified in C0.4)**

86,806,298

**Payback period**

4-10 years

**Estimated lifetime of the initiative**

6-10 years

**Comment**

AEP's operating companies continue to help customers implement energy efficiency measures to help reduce the energy consumption of our customers. Annual savings are based on a five-year simple payback and are disclosed in AEP's Corporate Sustainability Report: <http://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Customer-Care-Support>

**C4.3c**

**(C4.3c) What methods do you use to drive investment in emissions reduction activities?**

Method	Comment
Compliance with regulatory requirements/standards	Since our electric rates are regulated, we are only allowed to recover costs from customers for activities that are deemed to be economically prudent or mandated by law. EPA regulations governing emissions from existing electric generators could drive significant investment in the future.
Employee engagement	<p>Many AEP employees are involved in forums, regular communications, competitions and opportunities and innovative partnerships in the U.S. and around the world to scout new technologies, validate them quickly, demonstrate their benefits to customers and policymakers, and secure timely regulatory support or contractual approvals for development and deployment. Partnerships include:</p> <p>Electric Power Research Institute (EPRI) – an independent, nonprofit energy research and development organization.</p> <p>Edison Electric Institute (EEI) – an association that represents all U.S. investor-owned electric companies, providing public policy leadership, strategic business intelligence, and essential conferences and forums.</p> <p>American Clean Power (ACP) – support companies from across the clean power sector in their efforts to provide cost-effective solutions to the climate crisis while creating jobs, spurring massive investment in the U.S. economy, and driving high-tech innovation across the nation.</p> <p>WIRES Group – a trade association that promotes investment in the North American electric transmission system through development and dissemination of information, strategic advocacy, and innovation in</p>

	<p>regulatory, policy making, industry, and education forums.</p> <p>Free Electrons – a global energy accelerator with the mission to create the future of energy.</p> <p>Various Original Equipment Manufacturers (OEMs) – AEP directly works with the OEMs to learn about technologies that are commercially available today and what will be available in the near future, especially relating to low-carbon technologies.</p> <p>Power Generators Air Coalition: A non-profit coalition of electric Generators collaborating to comply with regulations and participate in sound rulemaking under the clean air act.</p> <p>Collaborating with stakeholders enables low-carbon, affordable, resilient and reliable electricity to be the lifeline of a modern decarbonized global economy and the backbone of digital and connected cities of the future. We are committed to actively engaging with our stakeholders and appreciate two-way conversations that provide value to us and them. Below is a list of the stakeholders with whom we engage most frequently, the topics of interest and how we engage.</p>
Internal price on carbon	<p>Integrated Resource Plans (IRPs) are planning documents that allow utilities to plan for future needs to meet peak loads and energy obligations for a set period of time, such as 15 years, and they are based on the best information available at the time they are prepared. They are planning documents and are not intended to represent firm commitments or financial decisions about specific future generation resources.</p> <p>AEP has integrated a carbon price in its commodity forecasting as a proxy for future climate regulation. Our current generation plans, as informed by our Integrated Resource Plans (IRPs) include a carbon price. The carbon price begins in 2028 at approximately \$15/metric ton of CO2 emissions, escalating at 3.5% per year on a nominal basis. In the Fast Transition scenario for this report, we used a carbon price beginning at \$30/metric ton, which escalated 3.5% per year on a nominal basis.</p> <p>For more information, please visit:  <a href="https://www.aepsustainability.com/performance/report/docs/AEPs-Climate-Impact-Analysis-2021.pdf">https://www.aepsustainability.com/performance/report/docs/AEPs-Climate-Impact-Analysis-2021.pdf</a></p>
Partnering with governments on technology development	<p>Partnership Examples:</p> <p>National Electric Highway Coalition (NEHC): AEP was a founding member of the Electric Highway Coalition. The NEHC is now managed by Edison Electric Institute (EEI) and AEP is a proud member and serves on its steering committee. The NEHC is a collaboration of more than 60 investor-</p>

	<p>owned and municipal electric companies and electric cooperatives that are committed to providing electric vehicle (EV) fast charging stations that will allow the public to drive EVs with confidence along major U.S. travel corridors by the end of 2023. The NEHC is the largest such alliance of electric companies that have organized around the common goal of deploying EV fast charging infrastructure to support the growing number of EVs and to ensure a seamless transition to EVs.</p> <p>EEL's member companies have invested more than \$4 billion in customer programs and projects to deploy charging infrastructure and to accelerate electric transportation. As EV sales continue to grow, EEL estimates that we will need 140,000 EV fast charging ports, to support the more than 26 million EVs projected to be on U.S. roads in 2030.</p> <p>We are looking for opportunities to support our local communities to electrify their fleet. As part of a New Source Review settlement with the EPA, Appalachian Power awarded \$2.1 million in grants to five school systems across southwest and central Virginia toward the purchase of nine energy-efficient buses powered by electricity. AEP Ohio and I&amp;M plan to make similar awards in 2022. Electric school buses are quieter and less expensive to maintain and operate.</p> <p>In 2022, AEP received the Edison Electric Institute Advocacy Excellence Award, recognizing AEP's efforts to expand broadband access throughout Virginia and West Virginia. In December 2021, the first of these projects came to fruition when the Elk Creek Volunteer Fire Department became the first customer to receive high-speed internet service in rural Grayson County, Virginia. More than 6,000 customers identified in the Grayson County project area are expected to gain access to broadband over the next year. Construction is also underway in Logan and Mingo counties that will make broadband access available to more than 15,000 unserved customers in West Virginia.</p> <p>For more info, visit:  <a href="http://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Customer-Care-Support">http://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Customer-Care-Support</a></p>
<p>Dedicated budget for energy efficiency</p>	<p>Each of AEP's subsidiaries (where energy efficiency programs are in place) has a budget dedicated to energy efficiency programs in the company's jurisdiction. Energy efficiency goals are submitted annually, and progress is updated quarterly. Annual demand reduction, conservation and avoided CO2 emissions from energy efficiency are reported in AEP's Corporate Sustainability Report.</p> <p>Today, we offer customers 150+ programs across nearly all of our 11-state service territory. In 2020, our energy efficiency programs reduced energy</p>

	<p>usage by more than 406 million KWh and avoided more than 204 US tons of CO2 emissions.</p> <p>Energy Efficiency/Demand Response:                  As we introduce more renewable generation into our energy mix, the need to invest in energy storage grows. Energy storage can help smooth the flow of power as generation from intermittent resources such as wind and solar varies over time. Storage technology supports local reliability and demand response for our customers, and it is integrated into our distribution and resource planning processes. AEP's competitive businesses executed and finalized two energy storage projects with the City of Martinsville, Virginia, and South River, New Jersey. Each project consists of Li-Ion batteries that will directly serve customers to reduce their electric costs during peak load events. The projects were placed into service in the first half of 2022.</p> <p>Recognition for Our Efforts:                  AEP's energy efficiency programs and efforts have been recognized among some of the best in the industry for several years. In 2022, the U.S. Environmental Protection Agency (EPA) announced its ENERGY STAR® Partner of the Year awards for businesses and organizations that have made outstanding contributions to protecting the environment through superior energy efficiency achievements. AEP Texas, Public Service Company of Oklahoma and Southwestern Electric Power Company (SWEPCO – Arkansas) were named ENERGY STAR Partner of the Year – Sustained Excellence winners. SWEPCO (Louisiana and Texas) was recognized for the ENERGY STAR Partner of the Year – Energy Efficiency Program Delivery award, and Appalachian Power received the Award for Excellence in ENERGY STAR Marketing.</p> <p>For more information, please visit:  <a href="http://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Customer-Care-Support">http://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Customer-Care-Support</a></p>
<p>Financial optimization calculations</p>	<p>All AEP investments are optimized using a carbon price and other assumptions related to regulatory risk, including those presented by carbon.</p> <p>In 2020, we conducted a climate scenario analysis. AEP's analysis included a Business as Usual (BAU) and a Fast Transition Scenario. Both scenarios included a carbon tax to influence the outcome. The BAU scenario employed a CO2 dispatch burden on all fossil generating units that escalates 3.5% per year from \$15 per metric ton starting in 2028. The CO2 burden was increased to \$30 per metric ton in the Fast Transition scenario, this resulted in uptick in power prices. AEP has also begun using a \$40 carbon price during our IRP process to accurately portray potential</p>

	<p>future events.</p> <p>At AEP, our ability to execute our strategy and the pace of change are contingent upon securing support from regulators. We have a responsibility to provide reliable, affordable electricity to our customers, but how we do it is changing. As we invest in the clean energy transition, we are also investing in grid modernization to empower customers with more choices and greater control over their energy use. Our clean energy transition plan is as critical to enabling economic growth in our service territory as it is to reduce our carbon footprint.</p> <p>AEP retired or sold nearly 13,500 MW of coal-fueled generation during the last decade. Between 2023 through 2028 AEP will stop burning approximately 4,800 MW of coal to generate electricity. Our capital investment strategy is critical in supporting our decarbonization and renewable energy strategy. From 2023 through 2027, AEP plans to invest \$40 billion in capital with an emphasis on transmission, distribution and regulated renewable energy. This includes investing \$26 billion in our transmission and distribution systems and \$9 billion in regulated renewable generation. We're strengthening our focus on our regulated investments and de-risking our business through proactive management of AEP's portfolio, including the recent sale of 1,365 megawatts of unregulated contracted renewables (August 2023).</p> <p>For more information, please visit:  <a href="http://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Clean-Energy-Strategy">http://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Clean-Energy-Strategy</a></p>
--	---

## C4.5

**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?**

Yes

## C4.5a

**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.**

---

**Level of aggregation**

Product or service

**Taxonomy used to classify product(s) or service(s) as low-carbon**

Green Bond Principles (ICMA)

**Type of product(s) or service(s)**

Power  
Onshore wind

**Description of product(s) or service(s)**

In 2021, AEP developed a Sustainable Finance Framework under which any AEP subsidiary will be able to issue Green and Social Bonds, Loans, or other financial instruments such as Letters of Credit in relation to the Green and Social Use of Proceeds. This Framework was developed in alignment with the ICMA Green Bond Principles (GBP), 2021, the LSTA Green Loan Principles (GLP), the ICMA Social Bond Principles (SBP), 2021 and the ICMA Sustainability Bond Guidelines (SBG), 2021.

**MANAGEMENT OF PROCEEDS**

An amount equivalent to the net proceeds of each Financing Instrument will be earmarked for allocation against the Portfolio of Eligible Projects. The net proceeds from the Financing Instruments will be tracked internally. Eligible Projects are those that fit criteria outlined by this Framework and have been disbursed in the last 24 months prior to the issuance date or expenditures in the following 24 months.

**Case Study:**

In Oklahoma, the North Central Energy Facilities (NCEF) began commercial operation in 2021. These wind farms provide 1,484 MW of clean energy to customers of Public Service Company of Oklahoma and the Southwestern Electric Power Company, which is estimated to save them approximately \$3 billion in electricity costs over 30 years. \$1.4 billion was provided by AEP's Sustainability Bonds to support NCE.

AEP's Sustainable Finance Framework:

<https://www.aep.com/assets/docs/investors/esg/AEPSustainableFinanceFramework.pdf>

**Have you estimated the avoided emissions of this low-carbon product(s) or service(s)**

No

**Methodology used to calculate avoided emissions**

**Life cycle stage(s) covered for the low-carbon product(s) or services(s)**

**Functional unit used**

**Reference product/service or baseline scenario used**

**Life cycle stage(s) covered for the reference product/service or baseline scenario**

**Estimated avoided emissions (metric tons CO<sub>2</sub>e per functional unit) compared to reference product/service or baseline scenario**

**Explain your calculation of avoided emissions, including any assumptions**

**Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year**

---

**Level of aggregation**

Product or service

**Taxonomy used to classify product(s) or service(s) as low-carbon**

Other, please specify

Renewable Energy

**Type of product(s) or service(s)**

Power

Other, please specify

All renewable Generation

**Description of product(s) or service(s)**

Our capital investment strategy is critical in supporting our decarbonization and renewable energy strategy. From 2023 through 2027, AEP plans to invest \$40 billion in capital with an emphasis on transmission, distribution and regulated renewable energy. This includes investing \$26 billion in our transmission and distribution systems and \$9 billion in regulated renewable generation. We're strengthening our focus on our regulated investments and de-risking our business through proactive management of AEP's portfolio, including the recent sale of 1,365 megawatts of unregulated contracted renewables (August 2023).

Approximately 65% of AEP's capital forecast will be allocated to investments in transmission and distribution. Significant additional investments in transmission and distribution will support our clean energy transition by making the electric power grid more resilient and reliable and able to support the electrification of the economy. Currently, approximately 22,600 MW of renewable generation is interconnected across the U.S. via AEP's transmission system. Our flexible and robust capital plan is designed to meet our customer needs and provide the ability to strategically shift capital to deliver on our 6%-7% earnings per share growth commitment.

- View Page 23 of AEP's 2023 CSR to read how we plan to diversify our Generation Portfolio: <http://aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf>



**Have you estimated the avoided emissions of this low-carbon product(s) or service(s)**

No

**Methodology used to calculate avoided emissions**

**Life cycle stage(s) covered for the low-carbon product(s) or services(s)**

**Functional unit used**

**Reference product/service or baseline scenario used**

**Life cycle stage(s) covered for the reference product/service or baseline scenario**

**Estimated avoided emissions (metric tons CO<sub>2</sub>e per functional unit) compared to reference product/service or baseline scenario**

**Explain your calculation of avoided emissions, including any assumptions**

**Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year**

## **C-EU4.6**

**(C-EU4.6) Describe your organization's efforts to reduce methane emissions from your activities.**

AEP actively manages its facilities to ensure that any air emissions are limited, particularly in the case of methane which is a source of fuel for our natural gas-fueled facilities. As this fuel carries a cost, we make every effort to ensure that it is 100% combusted in the electric generation process to provide value to our customers. AEP estimates that direct methane emissions from natural gas infrastructure are negligible.

AEP is committed to doing our part to operate more efficiently while reducing our carbon footprint through ongoing reduction of energy consumption within our operations. In 2022, we reduced our kilowatt-hour (kWh) usage, normalized for weather, by approximately 38%, compared with the 2007 baseline. This resulted in approximately \$5.2 million in cost savings. Energy consumption reductions are mostly achieved through equipment investments, such as new lighting, heating and cooling systems, control systems installations and employee education. More recently, however, the shift to remote work and a decrease in the number of

AEP facilities also contributed to the reduction in energy usage at some of our facilities. Today, we have 16 LEED certified company facilities across our service territory, demonstrating our commitment to reducing carbon emissions, improving efficiency, saving money and creating healthy workspaces for our employees. In addition, since 2016, we have installed more than of 360 electric vehicle (EV) charging stations at several of our facilities across our service territory, making charging accessible and efficient for our employees.

## C5. Emissions methodology

### C5.1

**(C5.1) Is this your first year of reporting emissions data to CDP?**

No

### C5.1a

**(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?**

Row 1

**Has there been a structural change?**

Yes, a divestment

**Name of organization(s) acquired, divested from, or merged with**

AEP sold its ownership stake in unregulated generating units. The assets were owned by AEP OPCo and AEP CSPCo.

**Details of structural change(s), including completion dates**

Structural changes were made due to the following events since the base year. AEP divesting ownership interest in Cardinal units 2 and 3, Gavin units 1 and 2, Waterford units 1,2 and 3 - and Zimmer unit 1. Lawrenceburg units were also sold but they were not in the base year. Conesville unit 4 ownership was increased from 43.5% to 83.47% in 2017.

### C5.1b

**(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?**

Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)

Row 1	Yes, a change in methodology	<p>Base year was changed from 2000 to 2005 in 2022. Additionally, it was determined that a major base year adjustment was in order since a number of electric generation units had been divested and should have been removed from the base year emission totals.</p> <p>AEP's Data is transitioning to be aligned with the GHG Protocol. Our 2022 Scope 1 emissions in this report represent a 66% reduction in all Scope 1 GHG emissions (inclusive of emission reductions that result from assets sold and retired), or a 62% reduction according to the GHG Protocol, which excludes reductions that result from assets sold. The Scope 1 baseline data provided above was restated and now represents our alignment with the GHG protocol baseline year methodology. We remain confident we will achieve our goal of 80% GHG reduction by 2030.</p>
-------	------------------------------	--

### C5.1c

**(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?**

	Base year recalculation	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	Yes	Scope 1	<p>Base year was changed from 2000 to 2005 in 2022. Additionally, it was determined that a major base year adjustment was in order since a number of electric generation units had been divested and should have been removed from the base year emission totals.</p> <p>AEP's Data is transitioning to be aligned with the GHG Protocol. Our 2022 scope 1 emissions in this report represent a 66% reduction in all Scope 1 GHG emissions (inclusive of emission reductions that result from assets sold and retired), or a 62% reduction according to the GHG Protocol, which excludes reductions that result from assets sold. The scope 1 baseline data provided above was restated and now represents our alignment with the GHG protocol baseline year methodology. We remain confident we will achieve our goal of 80% GHG reduction by 2030 goal.</p>	No

## C5.2

### (C5.2) Provide your base year and base year emissions.

#### Scope 1

---

**Base year start**

January 1, 2005

**Base year end**

December 31, 2005

**Base year emissions (metric tons CO<sub>2</sub>e)**

134,000,000

**Comment**

Base year was changed to 2005. In addition, adjustments were made to 2005 base year that were not part of the 2021 CDP report. See note above

#### Scope 2 (location-based)

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

#### Scope 2 (market-based)

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

#### Scope 3 category 1: Purchased goods and services

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

**Scope 3 category 2: Capital goods**

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

**Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)**

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

**Scope 3 category 4: Upstream transportation and distribution**

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

### **Scope 3 category 5: Waste generated in operations**

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

### **Scope 3 category 6: Business travel**

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

### **Scope 3 category 7: Employee commuting**

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

### **Scope 3 category 8: Upstream leased assets**

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

**Scope 3 category 9: Downstream transportation and distribution**

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

**Scope 3 category 10: Processing of sold products**

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

**Scope 3 category 11: Use of sold products**

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

**Scope 3 category 12: End of life treatment of sold products**

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

**Scope 3 category 13: Downstream leased assets**

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

**Scope 3 category 14: Franchises**

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

**Scope 3 category 15: Investments**

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Was not reported in base year.

**Scope 3: Other (upstream)**

---

**Base year start**

January 1, 2000



**Base year end**

December 31, 2000

**Base year emissions (metric tons CO2e)**

**Comment**

Was not reported in base year.

**Scope 3: Other (downstream)**

---

**Base year start**

January 1, 2000

**Base year end**

December 31, 2000

**Base year emissions (metric tons CO2e)**

**Comment**

Was not reported in base year.

## C5.3

**(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

US EPA Mandatory Greenhouse Gas Reporting Rule

## C6. Emissions data

### C6.1

**(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?**

**Reporting year**

---

**Gross global Scope 1 emissions (metric tons CO2e)**

51,100,000

**Comment**

AEP's data is transitioning to be aligned with the GHG Protocol. Base year was changed from 2000 to 2005 in 2022. Additionally, it was determined that a major base year adjustment was in order since a number of electric generation units had been divested and should have been removed from the base year emission totals. Our 2022 Scope 1

emissions in this report represent a 66% reduction in all Scope 1 GHG emissions (inclusive of emission reductions that result from assets sold and retired), or a 62% reduction according to the GHG Protocol, which excludes reductions that result from assets sold. The Scope 1 baseline data provided above was restated and now represents our alignment with the GHG protocol baseline year methodology.

We remain confident we will achieve our target of 80% GHG reduction by 2030 goal.

EPA Continuous Emission Monitoring System (CEMS) Relative Accuracy Tests Audits (RATA) procedures certify gas emission monitors to within +/- 10%. These emissions are verified and submitted to the US EPA to comply with federally enforceable reporting requirements and emission limits, where applicable.

## C6.2

### (C6.2) Describe your organization's approach to reporting Scope 2 emissions.

#### Row 1

---

##### **Scope 2, location-based**

We are reporting a Scope 2, location-based figure

##### **Scope 2, market-based**

We are reporting a Scope 2, market-based figure

##### **Comment**

Location Based Uncertainty:

Business Unit (BU) energy consumption to support operations and energy consumption as a result of line losses are from the FERC Form 1 filing and are considered high quality. These items are totalled and eGRID factors are used to determine BU emissions. If BU is a self-generator and its generation exceeds the losses - then losses are part of the BU Scope 1 emissions and are not included in the Scope 2 emissions. AEP uses the most recent EPA's eGRID regional emission rates available in scope emission calculations.

Market Based Uncertainty:

Business Unit (BU) energy consumption to support operations and energy consumption as a result of line losses are from the FERC Form 1 filing and are considered high quality. The company is working to develop complete market-based rates for each BU. Known emission factors are applied to their associated energy and the balance of energy uses the regional eGRID averages. If BU is a self-generator and its generation exceeds the losses - then losses are part of the BU Scope 1 emissions and are not included in the Scope 2 emissions. AEP uses the most recent EPA eGRID regional emission rates available in scope emission calculations.

## C6.3

**(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO<sub>2</sub>e?**

### Reporting year

---

**Scope 2, location-based**

363,484

**Scope 2, market-based (if applicable)**

349,935

**Comment**

Scope 2 emissions are the result of purchased power being consumed internally. Line losses are only included if a business unit is not a self-generator. For BU's that are self-generators, line losses are included as part of Scope 1.

## C6.4

**(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?**

Yes

### C6.4a

**(C6.4a) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.**

---

**Source of excluded emissions**

Kerosene fueled torpedo heaters (mobile) and emergency equipment

**Scope(s) or Scope 3 category(ies)**

Scope 1

**Relevance of Scope 1 emissions from this source**

Emissions are not relevant

**Relevance of location-based Scope 2 emissions from this source**

**Relevance of market-based Scope 2 emissions from this source**

**Relevance of Scope 3 emissions from this source**

**Date of completion of acquisition or merger**

**Estimated percentage of total Scope 1+2 emissions this excluded source represents**

0

**Estimated percentage of total Scope 3 emissions this excluded source represents**

**Explain why this source is excluded**

EPA's 40 CFR Part 98 does not require that CO<sub>2</sub>e emissions be reported for mobile torpedo heaters. AEP emissions for these sources have been estimated at less than 2,000 metric tons. Emergency equipment is exempt from eGRT GHG reporting.

**Explain how you estimated the percentage of emissions this excluded source represents**

The equipment named above typically only operates a couple hours a month for test runs and are small/miniscule in scale compared to a power plant emissions. Their emissions are a very small fraction of an electric utilities total scope emissions.

## C6.5

**(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.**

**Purchased goods and services**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO<sub>2</sub>e)**

527,681

**Emissions calculation methodology**

Supplier-specific method

Other, please specify

Estimated transportation adder

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

10

**Please explain**

Consumable data related to the power generation business are available and reported. Currently, AEP is working to improve collection of corporate (e.g., office buildings, service center, etc.) consumable data.

### Capital goods

---

**Evaluation status**

Not evaluated

**Please explain**

No meaningful corporate data collected on capital good purchases.

### Fuel-and-energy-related activities (not included in Scope 1 or 2)

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO<sub>2</sub>e)**

41,198,607

**Emissions calculation methodology**

Fuel-based method

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

50

**Please explain**

Qty of fuel consumed combined with lifecycle production emissions factors from Worldwatch Institute to estimate emissions from Production and Transportation of fuels. Purchased and resold energy had eGRID regional factors applied to estimate emissions

### Upstream transportation and distribution

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Fuel and material transportation is already included in the life cycle analysis used for other category.

### Waste generated in operations

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO<sub>2</sub>e)**

0

**Emissions calculation methodology**

Other, please specify

Estimated using EPA WARM Model

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

A breakdown of AEP waste streams was used in EPA's WARM model. The value is actually negative (-1,143,565 metric tons CO<sub>2</sub>e) due to recycling efforts (particularly metal recycling) and the extensive beneficial reuse of Coal Combustion Products (ash).

**Business travel**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO<sub>2</sub>e)**

7,847

**Emissions calculation methodology**

Supplier-specific method

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

100

**Please explain**

Internal records of business travel were kept for air travel, rental cars, hotel stays, employee vehicle miles for business travel, and corporate jets. Travel agency emission numbers were used when supplied. All business travel emissions are based at least in part on value partner supplied data

**Employee commuting**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO<sub>2</sub>e)**

25,029

**Emissions calculation methodology**

Other, please specify  
See explanation below

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Commuting data was based on details from a 2013 study. Number of employees was updated and that number was adjusted for the estimate of workforce that was working remote for the majority of the reporting year. Internal data was used to determine average distance travelled per employee. Internal data used to estimate number of employees working remotely

### Upstream leased assets

---

#### Evaluation status

Not relevant, explanation provided

#### Please explain

Any meaningful leased equipment fuel consumption is captured by corporate fuel purchase records in scope 1.

### Downstream transportation and distribution

---

#### Evaluation status

Not relevant, explanation provided

#### Please explain

The transportation and distribution of electricity (Transmission & Distribution losses) is already captured by scope 1.

### Processing of sold products

---

#### Evaluation status

Not relevant, explanation provided

#### Please explain

Emissions from sold energy are captured in Scope 1 and Scope 3 category 3.

### Use of sold products

---

#### Evaluation status

Not relevant, explanation provided

#### Please explain

The use of electric energy does not cause any further GHG emissions.

### End of life treatment of sold products

---

#### Evaluation status

Not relevant, explanation provided

#### Please explain

Electricity requires no end of life treatment.

### Downstream leased assets

---

#### Evaluation status

Not relevant, explanation provided

**Please explain**

Any meaningful leased equipment fuel consumption is captured by corporate fuel purchase records in scope 1.

**Franchises**

---

**Evaluation status**

Not evaluated

**Please explain**

No franchises.

**Investments**

---

**Evaluation status**

Not evaluated

**Please explain**

The above scopes and categories are believed to capture all relevant emission sources.

**Other (upstream)**

---

**Evaluation status**

Not evaluated

**Please explain**

The above scopes and categories are believed to capture all relevant emission sources.

**Other (downstream)**

---

**Evaluation status**

Not evaluated

**Please explain**

## C6.7

**(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?**

No

## C6.10

**(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO<sub>2</sub>e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**



---

**Intensity figure**

0.00262041

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

51,463,628

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

19,639,500,000

**Scope 2 figure used**

Location-based

**% change from previous year**

22.43

**Direction of change**

Decreased

**Reason(s) for change**

Change in output

Change in revenue

**Please explain**

Emissions and emission intensity factors are driven by unit availability and energy market selections. In 2022, AEP's system generation decreased ~14%. Scope 1&2 emissions decreased ~ 10%. Generation from coal and gas assets was down ~7%. The emissions are a function of the units that operate and ultimately the heat rate efficiency of that year's generation mix. Much of this a result of fuel prices: coal versus gas \$/mmbtu.

---

**Intensity figure**

0.5309

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

51,463,628

**Metric denominator**

megawatt hour generated (MWh)

**Metric denominator: Unit total**

96,936,000

**Scope 2 figure used**

Location-based

**% change from previous year**

5

**Direction of change**

Decreased

**Reason(s) for change**

Change in output

**Please explain**

AEP is a large electric utility with a predominate fossil fuel fleet of EGU's and two large nuclear units. Slight changes in the fossil fuel fleet utilization, a small YOY reduction in nuclear MWh output, the addition of new renewables and the full year operation of renewables added late in 2021 were contributing factors.

## C7. Emissions breakdowns

### C7.1

**(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?**

Yes

### C7.1a

**(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).**

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	50,678,925	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	146,801	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	200,498	IPCC Fifth Assessment Report (AR5 – 100 year)
SF6	73,920	IPCC Fifth Assessment Report (AR5 – 100 year)

### C-EU7.1b

**(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.**

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives			3.1	73,920	
Combustion (Electric utilities)	50,562,830	5,223		50,908,939	
Combustion (Gas utilities)					
Combustion (Other)	116,095	20		117,285	
Emissions not elsewhere classified					

## C7.2

**(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.**

Country/area/region	Scope 1 emissions (metric tons CO2e)
United States of America	51,100,000

## C7.3

**(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

By activity

### C7.3c

**(C7.3c) Break down your total gross global Scope 1 emissions by business activity.**

Activity	Scope 1 emissions (metric tons CO2e)
Stationary Combustion	50,908,939
Mobile Sources	117,285
Fugitive Emissions	73,920

## C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization’s total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Comment
Electric utility activities	50,928,015	Added approximately 19,076 tons CO2e (Diesel usage of mobile sources associated with generation operations) to the Stationary Combustion. No fugitive emissions are associated with generation activities

### C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Yes

### C7.7a

(C7.7a) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

**Subsidiary name**

Appalachian Power Company  
 ISIN US037735BZ93

**Primary activity**

Energy services & equipment

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

**Scope 1 emissions (metric tons CO2e)**

14,415,620

**Scope 2, location-based emissions (metric tons CO2e)**

0

**Scope 2, market-based emissions (metric tons CO2e)**

0

**Comment**

APCO is a self-generator. No purchased power was used for internal use. Emissions from energy used internally are included in scope 1.

---

**Subsidiary name**

Kentucky Power Company  
ISIN US491386AL26

**Primary activity**

Energy services & equipment

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

**Scope 1 emissions (metric tons CO2e)**

3,113,397

**Scope 2, location-based emissions (metric tons CO2e)**

0

**Scope 2, market-based emissions (metric tons CO2e)**

0

**Comment**

KPCO is a self-generator. No purchased power was used for internal use. Emissions from energy used internally are included in scope 1.

---

**Subsidiary name**

Indiana Michigan Power Company  
ISIN US454889AM82

**Primary activity**

Energy services & equipment

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

**Scope 1 emissions (metric tons CO2e)**

5,469,618

**Scope 2, location-based emissions (metric tons CO2e)**

0

**Scope 2, market-based emissions (metric tons CO2e)**

0

**Comment**

IMPCO is a self-generator. No purchased power was used for internal use. Emissions from energy used internally are included in scope 1.

---

**Subsidiary name**

Wheeling Power Company

**Primary activity**

Energy services & equipment

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

**Scope 1 emissions (metric tons CO2e)**

1,863,604

**Scope 2, location-based emissions (metric tons CO2e)**

0

**Scope 2, market-based emissions (metric tons CO2e)**

0

**Comment**

WPCO is a self-generator. No purchased power was used for internal use. Emissions from energy used internally are included in scope 1.

---

**Subsidiary name**

Public Service Company of Oklahoma  
ISIN US744533BJ80

**Primary activity**

Energy services & equipment

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

**Scope 1 emissions (metric tons CO<sub>2</sub>e)**

4,849,810

**Scope 2, location-based emissions (metric tons CO<sub>2</sub>e)**

8.5

**Scope 2, market-based emissions (metric tons CO<sub>2</sub>e)**

8.5

**Comment**

Small amount of power was reported as used by company. Assumption is this energy used by company was sourced externally.

---

**Subsidiary name**



Southwestern Electric Power Company  
ISIN US845437BN1

**Primary activity**

Energy services & equipment

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

**Scope 1 emissions (metric tons CO<sub>2</sub>e)**

13,636,249

**Scope 2, location-based emissions (metric tons CO<sub>2</sub>e)**

9,928

**Scope 2, market-based emissions (metric tons CO<sub>2</sub>e)**

9,928

**Comment**

Small amount of power was reported as used by company. Assumption is this energy used by company was sourced externally.

---

**Subsidiary name**

AEP Generation Resources

**Primary activity**

Energy services & equipment

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

**Scope 1 emissions (metric tons CO<sub>2</sub>e)**

2,040,558

**Scope 2, location-based emissions (metric tons CO<sub>2</sub>e)**

0

**Scope 2, market-based emissions (metric tons CO<sub>2</sub>e)**

0

**Comment**

---

**Subsidiary name**

Ohio Power Company

ISIN US199575AT85

**Primary activity**

Energy services & equipment

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

**Scope 1 emissions (metric tons CO<sub>2</sub>e)**

0

**Scope 2, location-based emissions (metric tons CO<sub>2</sub>e)**

317,611

**Scope 2, market-based emissions (metric tons CO<sub>2</sub>e)**

304,063

**Comment**

---

**Subsidiary name**

Kingsport Power Company

**Primary activity**

Energy services & equipment

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

**Scope 1 emissions (metric tons CO2e)**

0

**Scope 2, location-based emissions (metric tons CO2e)**

30,659

**Scope 2, market-based emissions (metric tons CO2e)**

30,659

**Comment**

## C7.9

**(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?**

Decreased

## C7.9a

**(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.**

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption				
Other emissions reduction activities				
Divestment				
Acquisitions				
Mergers				
Change in output	4,964,102	Decreased	9	Decrease from stationary sources from prior year

Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified				
Other	44,708	Increased	1	Change due to increase in total purchased power combined with increases in most EPA eGRID regional factors

### C7.9b

**(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?**

Location-based

## C8. Energy

### C8.1

**(C8.1) What percentage of your total operational spend in the reporting year was on energy?**

More than 40% but less than or equal to 45%

### C8.2

**(C8.2) Select which energy-related activities your organization has undertaken.**

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No

Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

## C8.2a

**(C8.2a) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.**

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	171,962,141	171,962,141
Consumption of purchased or acquired electricity		0	0	0
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		0	171,962,141	171,962,141

## C8.2b

**(C8.2b) Select the applications of your organization’s consumption of fuel.**

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	No
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

## C8.2c

**(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

### Sustainable biomass

---

**Heating value**

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

na

### Other biomass

---

**Heating value**

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

na

### Other renewable fuels (e.g. renewable hydrogen)

---

**Heating value**

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

na

**Coal**

---

**Heating value**

HHV

**Total fuel MWh consumed by the organization**

133,694,529

**MWh fuel consumed for self-generation of electricity**

133,694,529

**MWh fuel consumed for self-generation of heat**

0

**Comment**

Value calculated using specified fuel total mmbtu's and applying CDP HHV to MWh methodology factor of 0.29307

**Oil**

---

**Heating value**

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

**Gas**

---

**Heating value**

HHV

**Total fuel MWh consumed by the organization**

38,267,612

**MWh fuel consumed for self-generation of electricity**

38,267,612

**MWh fuel consumed for self-generation of heat**



**Comment**

Value calculated using specified fuel total mmbtu's and applying CDP HHV to MWh methodology factor of 0.29307

**Other non-renewable fuels (e.g. non-renewable hydrogen)**

---

**Heating value**

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

na

**Total fuel**

---

**Heating value**

HHV

**Total fuel MWh consumed by the organization**

171,962,141

**MWh fuel consumed for self-generation of electricity**

171,962,141

**MWh fuel consumed for self-generation of heat**

0

**Comment**

Total of individual fuels specified above. MWh are calculated using mmbtu's and CDP HHV to MWh Methodology factor of 0.29307.

## C-EU8.2d

**(C-EU8.2d) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.**

**Coal – hard**

---

**Nameplate capacity (MW)**

11,619

**Gross electricity generation (GWh)**

43,015

**Net electricity generation (GWh)**

39,518

**Absolute scope 1 emissions (metric tons CO2e)**

42,595,642

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

1,077.9

**Comment**

Capacity data is inclusive of total owned, controlled and long-term PPA capacity.  
Emissions Intensity based on net GWh.

**Lignite**

---

**Nameplate capacity (MW)**

580

**Gross electricity generation (GWh)**

2,753

**Net electricity generation (GWh)**

2,527

**Absolute scope 1 emissions (metric tons CO2e)**

2,885,450

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

1,142.1

**Comment**

Capacity data is inclusive of total owned, controlled and long-term PPA capacity.  
Emissions Intensity based on net GWh.

**Oil**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

0

**Comment**

**Gas**

---

**Nameplate capacity (MW)**

7,613

**Gross electricity generation (GWh)**

15,254

**Net electricity generation (GWh)**

14,667

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

5,619,052

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

383

**Comment**

Capacity data is inclusive of total owned, controlled and long-term PPA capacity.  
Emissions Intensity based on net GWh.

**Sustainable biomass**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

0

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

0

**Comment**

**Other biomass**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

**Waste (non-biomass)**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

**Nuclear**

---

**Nameplate capacity (MW)**

2,296

**Gross electricity generation (GWh)**

16,621

**Net electricity generation (GWh)**

16,621

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

Capacity data is inclusive of total owned, controlled and long-term PPA capacity.  
Emissions Intensity based on net GWh.

**Fossil-fuel plants fitted with CCS**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

**Geothermal**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

**Hydropower**

---

**Nameplate capacity (MW)**

885

**Gross electricity generation (GWh)**

836

**Net electricity generation (GWh)**

836

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

Capacity data is inclusive of total owned, controlled and long-term PPA capacity.  
(Includes Smith Mountain Pumping and Summerville)

Emissions Intensity based on net GWh.

**Wind**

---

**Nameplate capacity (MW)**

5,846

**Gross electricity generation (GWh)**

17,890

**Net electricity generation (GWh)**

17,890

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

Capacity data is inclusive of total owned, controlled and long-term PPA capacity.  
Emissions Intensity based on net GWh.

**Solar**

---

**Nameplate capacity (MW)**

436

**Gross electricity generation (GWh)**

567

**Net electricity generation (GWh)**

567

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

Capacity data is inclusive of total owned, controlled and long-term PPA capacity.  
Emissions Intensity based on net GWh.

**Marine**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

0

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

0

**Comment**

**Other renewable**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

0

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

0

**Comment**

**Other non-renewable**

---

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

0

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

0

**Comment**

**Total**

---

**Nameplate capacity (MW)**

29,275

**Gross electricity generation (GWh)**

96,936

**Net electricity generation (GWh)**

92,626

**Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)**

51,100,144

**Scope 1 emissions intensity (metric tons CO<sub>2</sub>e per GWh)**

551.7

**Comment**

Total generation capacity is inclusive of total Owned generation capacity: 25,050 plus the total other controlled and long-term PPA capacity: 4,225  
Emissions Intensity based on net GWh.

## C8.2g

**(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.**

---

**Country/area**

United States of America

**Consumption of purchased electricity (MWh)**

14,233

**Consumption of self-generated electricity (MWh)**

4,345,190



**Consumption of purchased heat, steam, and cooling (MWh)**

0

**Consumption of self-generated heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

4,359,423

## C-EU8.4

**(C-EU8.4) Does your electric utility organization have a transmission and distribution business?**

Yes

## C-EU8.4a

**(C-EU8.4a) Disclose the following information about your transmission and distribution business.**

---

**Country/area/region**

United States of America

**Voltage level**

Distribution (low voltage)

**Annual load (GWh)**

148,614

**Annual energy losses (% of annual load)**

**Scope where emissions from energy losses are accounted for**

**Emissions from energy losses (metric tons CO<sub>2</sub>e)**

**Length of network (km)**

356,063

**Number of connections**

**Area covered (km<sup>2</sup>)**

518,431

## Comment

---

### Country/area/region

United States of America

### Voltage level

Transmission (high voltage)

### Annual load (GWh)

193,010

### Annual energy losses (% of annual load)

### Scope where emissions from energy losses are accounted for

### Emissions from energy losses (metric tons CO<sub>2</sub>e)

### Length of network (km)

64,374

### Number of connections

### Area covered (km<sup>2</sup>)

518,431

### Comment

Some distribution losses maybe embedded

## C9. Additional metrics

### C9.1

**(C9.1) Provide any additional climate-related metrics relevant to your business.**

---

### Description

Other, please specify

AEP System Total TRI Releases for 2022 (Pounds)

### Metric value

9,133,749

**Metric numerator**

AEP System Total TRI Releases for 2022 (Pounds)

**Metric denominator (intensity metric only)**

**% change from previous year**

6.8

**Direction of change**

Increased

**Please explain**

We report through the Toxic Release Inventory (TRI) program, part of the Emergency Planning and Community Right-to-Know Act (EPCRA). EPCRA requires companies with 10 or more employees, in certain industries, to collect and publicly disclose information about how they manufacture, process, or use any of nearly 650 chemicals on a special list developed by the U.S. EPA.

The Toxics Release Inventory (TRI) program is part of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). EPCRA requires companies with 10 or more employees, in certain industries, to collect and publicly disclose information about how they manufacture, process or use any of nearly 650 chemicals on a special list developed by the U.S. EPA. Out of the 650 chemicals on the TRI list, AEP reported 25 in 2017.

Companies are required to report the amount of these chemicals they manufacture or process when that amount exceeds 25,000 pounds a year. For most chemicals that are simply used, such as chemicals purchased to clean a facility, the amount required to trigger a report is 10,000 pounds or more in a year. A few chemicals have much lower reporting thresholds. The U.S. EPA establishes these numbers. The report is not related in any way to health or environmental standards.

In general, coal-fired power plants need to report on very few of the 650 chemicals on the U.S. EPA's list. However, because of the nature of our industry and the amount of coal we consume, large coal-fired electric power plants will be listed at or near the top of rankings, when compared with other reporting industries, in terms of number of pounds reported by a single facility. Although the chemicals reported by AEP are released in large amounts, they generally rank low in toxicity.

Learn More here: <https://www.aep.com/requiredpostings/tri>

---

**Description**

Energy usage

**Metric value**

100,582,993

**Metric numerator**

AEP's Facility Energy Consumption measured in KWh

**Metric denominator (intensity metric only)**

**% change from previous year**

3.6

**Direction of change**

Decreased

**Please explain**

AEP is committed to doing our part to operate more efficiently while reducing our carbon footprint through ongoing reduction of energy consumption within our operations. In 2022, we reduced our kilowatt-hour (kWh) usage, normalized for weather, by approximately 38%, compared with the 2007 baseline. This resulted in approximately \$5.2 million in cost savings. Energy consumption reductions are mostly achieved through equipment investments, such as new lighting, heating and cooling systems, control systems installations and employee education. More recently, however, the shift to remote work and a decrease in the number of AEP facilities also contributed to the reduction in energy usage at some of our facilities. Today, we have 16 LEED certified company facilities across our service territory, demonstrating our commitment to reducing carbon emissions, improving efficiency, saving money and creating healthy workspaces for our employees. In addition, since 2016, we have installed more than of 360 electric vehicle (EV) charging stations at several of our facilities across our service territory, making charging accessible and efficient for our employees.

## C-EU9.5a

**(C-EU9.5a) Break down, by source, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.**

**Coal – hard**

---

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

460,000,000

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

23

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

12

**Most recent year in which a new power plant using this source was approved for development**

2012

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

AEP's Capital Investment Strategy:

Having a modern, reliable, resilient and secure grid is vital to our clean energy transformation. Investing in the grid is essential to enabling AEP's decarbonization strategy as we prepare to accommodate new, cleaner grid resources and technologies, grow load in our service territory, and open the door to future customer-driven economic development opportunities. This is essential to serving evolving societal, economic and customer needs as well as meeting our net-zero carbon goals.

Our capital investment strategy is critical in supporting our decarbonization and renewable energy strategy. From 2023 through 2027, AEP plans to invest \$40 billion in capital with an emphasis on transmission, distribution and regulated renewable energy. This includes investing \$26 billion in our transmission and distribution systems and \$9 billion in regulated renewable generation. We're strengthening our focus on our regulated investments and de-risking our business through proactive management of AEP's portfolio, including the recent sale of 1,365 megawatts of unregulated contracted renewables (August 2023).

Approximately 65% of AEP's capital forecast will be allocated to investments in transmission and distribution. Significant additional investments in transmission and distribution will support our clean energy transition by making the electric power grid more resilient and reliable and able to support the electrification of the economy. Currently, approximately 22,600 MW of renewable generation is interconnected across the U.S. via AEP's transmission system. Our flexible and robust capital plan is designed to meet our customer needs and provide the ability to strategically shift capital to deliver on our 6%-7% earnings per share growth commitment.

For More information, view the Decarbonization section of AEP's 2023 CSR:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

**Lignite**

---

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

0

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

For More information, view the Decarbonization section of AEP's 2023 CSR:  
<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

## Oil

---

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

0

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

For More information, view the Decarbonization section of AEP's 2023 CSR:  
<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

## Gas

---

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

56,000,000

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

3

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

4

**Most recent year in which a new power plant using this source was approved for development**

2012

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

For More information, view the Decarbonization section of AEP's 2023 CSR:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

#### **Sustainable biomass**

---

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

0

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

For More information, view the Decarbonization section of AEP's 2023 CSR:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

#### **Other biomass**

---

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

0

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

For More information, view the Decarbonization section of AEP's 2023 CSR:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

## Waste (non-biomass)

---

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

0

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

For More information, view the Decarbonization section of AEP's 2023 CSR:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

## Nuclear

---

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

90,000,000

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

5



**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

3

**Most recent year in which a new power plant using this source was approved for development**

1975

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

For More information, view the Decarbonization section of AEP's 2023 CSR:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

## Geothermal

---

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

0

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

For More information, view the Decarbonization section of AEP's 2023 CSR:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

## Hydropower

---

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

33,000,000

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

2

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

2

**Most recent year in which a new power plant using this source was approved for development**

1964

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

For More information, view the Decarbonization section of AEP's 2023 CSR:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

## Wind

---

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

1,273,000,000

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

65

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

64

**Most recent year in which a new power plant using this source was approved for development**

2022

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

For More information, view the Decarbonization section of AEP's 2023 CSR:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

## Solar

---

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

29,000,000

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

1

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

12

**Most recent year in which a new power plant using this source was approved for development**

2021

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

For More information, view the Decarbonization section of AEP's 2023 CSR:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

## Marine

---

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

0

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

For More information, view the Decarbonization section of AEP's 2023 CSR:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

### Fossil-fuel plants fitted with CCS

---

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

0

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

For More information, view the Decarbonization section of AEP's 2023 CSR:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

### Other renewable (e.g. renewable hydrogen)

---

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

30,000,000

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

2

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

2

**Most recent year in which a new power plant using this source was approved for development**

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

For More information, view the Decarbonization section of AEP's 2023 CSR:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

**Other non-renewable (e.g. non-renewable hydrogen)**

**CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)**

0

**CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

**Explain your CAPEX calculations, including any assumptions**

Percentages in metric 9.5a are based on AEP's 2022-2026 CAPEX spend on generation assets only (the percentages provided are not inclusive of CAPEX spend on Transmission and Distribution assets).

For More information, view the Decarbonization section of AEP's 2023 CSR:

<https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

**C-EU9.5b**

**(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).**

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan
Distributed generation	<p>Nuclear energy is one of the most reliable carbon-free sources of electricity. It is a secure energy source that isn't subject to weather conditions.</p> <p>As the grid continues to evolve, we are evaluating ways to optimize how we make, move and deliver electric services. This includes exploring new generation technology such as advanced small modular</p>			

	<p>nuclear reactors (SMRs). Small Modular Reactors (SMRs) are an emerging carbon-free dispatchable generation resource. They are advanced nuclear reactors that offer a lower capital investment, greater scalability, and siting flexibility. This type of power source can be an essential part of achieving carbon reduction in the power sector while maintaining a reliable grid. Wind and solar must be paired with storage to compete with SMRs as a carbon-free baseload replacement technology. Getting to net-zero by 2045 will require additional alternative technologies and resources that can provide 24/7 power, such as SMRs.</p> <p>Why this technology is important: We believe new technology resources will be essential to reach our net-zero goal. Intermittent renewable energy requires back-up baseload generation support to ensure grid stability and reliability. Advanced nuclear technology (e.g., SMRs) is one of the emerging, zero emission, dispatchable generation resources that could be part of the net-zero solution. SMRs could also leverage existing fossil plant sites.</p> <p>For More information, visit page 26 of AEP's 2023 Corporate Sustainability report to see what other technologies we are monitoring: <a href="https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Page=23">https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Page=23</a></p>			
<p>Other, please specify                  CLEAN ENERGY TECHNOLOGY</p>	<p>Carbon Capture and Sequestration (CCS): Carbon capture and sequestration (CCS) can reduce emissions of carbon dioxide from fossil electric generating units or industrial processes by capturing it before it is released into the atmosphere. CCS technology, while promising, has not been widely deployed at a commercial scale and has not been demonstrated in the US in commercial operation at fossil fueled power plants. It is currently expensive relative to other options for low-carbon electricity (e.g.,</p>			

	<p>wind and solar), difficult to retrofit on existing plants, and inefficient in its use of energy. In addition, there are challenges with the sequestration of carbon that still must be resolved. However, if it matures and becomes more cost-effective, it could potentially support the long-term need for 24/7 resources, such as fossil fuels, to fill in the gaps when intermittent resources are not available.</p> <p>Long-Duration Energy Storage (LDES):                  As the world comes to rely on more solar- and wind-generated energy, a means to provide back-up power will be required when these intermittent resources are not available. There are many long duration energy storage (LDES) technologies under development to possibly help fill that gap. LDES comprises a group of technologies that can be deployed to store energy for prolonged periods and potentially scaled up to meet electricity demand for days or even weeks.</p> <p>For more information, visit page 26 of AEP's 2023 Corporate Sustainability report to see what other technologies we are monitoring:  <a href="https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Page=23">https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Page=23</a></p>			
Other, please specify Renewable Energy	Our capital investment strategy is critical in supporting our decarbonization and renewable energy strategy. From 2023 through 2027, AEP plans to invest \$40 billion in capital with an emphasis on transmission, distribution and regulated renewable energy. This includes investing \$26 billion in our transmission and distribution systems and \$9 billion in regulated renewable generation. We're strengthening our focus on our regulated investments and de-risking our business through proactive management of AEP's portfolio, including the recent sale of 1,365 megawatts of unregulated contracted renewables (August 2023).	9,000,000,000	22.5	2027

	<p>For more information, visit page 26 of AEP's 2023 Corporate Sustainability report to see what other technologies we are monitoring: <a href="https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Page=23">https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Page=23</a></p>			
<p>Other, please specify</p> <p>Transmission and Distribution</p>	<p>Our capital investment strategy is critical in supporting our decarbonization and renewable energy strategy. From 2023 through 2027, AEP plans to invest \$40 billion in capital with an emphasis on transmission, distribution and regulated renewable energy. This includes investing \$26 billion in our transmission and distribution systems</p> <p>Approximately 65% of AEP's capital forecast will be allocated to investments in transmission and distribution. Significant additional investments in transmission and distribution will support our clean energy transition by making the electric power grid more resilient and reliable and able to support the electrification of the economy. Currently, approximately 22,600 MW of renewable generation is interconnected across the U.S. via AEP's transmission system. Our flexible and robust capital plan is designed to meet our customer needs and provide the ability to strategically shift capital to deliver on our 6%-7% earnings per share growth commitment.</p> <p>For More information, visit page 26 of AEP's 2023 Corporate Sustainability report to see what other technologies we are monitoring: <a href="https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Page=23">https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Page=23</a></p>	26,000,000,000	65	2027
Distributed generation	<p>AEP is exploring impacts of the growth in Distributed Energy Resources (DERs), such as solar photovoltaic, energy storage, and smart electric vehicle charging stations, as well as Distribution Energy Management Systems (DERMS). DERMS is a control system that acts as a switchboard for DER-related protocols and information to simplify</p>			



	<p>the management of these disparate systems and feed information into other utility backend systems for planning, operations and customer engagement.</p> <p>Why this technology is important: AEP needs to proactively develop a framework to manage the influx of DERs, leverage their potential benefits and evaluate investments in DER technology consistently.</p> <p>For More information, visit page 26 of AEP's 2023 Corporate Sustainability report to see what other technologies we are monitoring: <a href="https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Page=23">https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Page=23</a></p>			
--	--	--	--	--

**C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6**

**(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?**

	Investment in low-carbon R&D	Comment
Row 1	Yes	<p>Technology will play a pivotal role in decarbonizing the broader economy, especially as it relies more heavily on the electric power sector. Consequently, AEP is closely monitoring the development of low- and zero-carbon generation technologies, distributed energy solutions and electric vehicle deployment.</p> <p>AEP is a founding member of the Electric Power Research Institute's Low Carbon Resource Initiative (EPRI), a partnership between utilities, EPRI and the Gas Technology Institute. This five-year research and development project will design pathways for the energy sector to advance low-carbon technologies for large-scale deployment. Its primary focus is on the 2030 – 2050 timeframe. The goal is to enable an understanding of the technologies we can use to facilitate economy wide decarbonization. This five-year initiative will:</p> <ul style="list-style-type: none"> <li>• Identify development of promising technologies from around the world</li> <li>• Demonstrate and assess the performance of key technologies and processes/identify improvements</li> <li>• Inform key stakeholders and the public about technology options and potential pathways to a low carbon future in 2019, AEP received an EPRI Technology</li> </ul>

	<p>Transfer Award in recognition of our work on the Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting and Outreach project.</p> <p>R&amp;D PARTNERSHIPS</p> <p>Edison Electric Institute– an association that represents all U.S. investor-owned electric companies, providing public policy leadership, strategic business intelligence, and forums.</p> <p>American Clean Power– support companies across the clean power sector in their efforts to provide cost-effective solutions to the climate crisis while creating jobs, spurring investments, and driving high-tech innovation.</p> <p>WIRES Group – a trade association that promotes investment in the North American electric transmission system through development of information, strategic advocacy/innovation in many forums.</p> <p>Free Electrons – Global energy accelerator with the mission to create the future of energy.</p> <p>Various Original Equipment Manufacturers – AEP directly works with the OEMs to learn about low-carbon technologies available today and in the near future</p> <p>Partnerships: <a href="https://tinyurl.com/366avvhm">https://tinyurl.com/366avvhm</a></p> <p>Sustainable finance framework Pg 5: <a href="https://www.aep.com/assets/docs/investors/esg/AEPSustainableFinanceFramework_k.pdf">https://www.aep.com/assets/docs/investors/esg/AEPSustainableFinanceFramework_k.pdf</a></p>
--	---

## C-CO9.6a/C-EU9.6a/C-OG9.6a

**(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.**

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)	Average % of total R&D investment planned over the next 5 years	Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan
Unable to disaggregate by technology area					AEP is a founding partner of the Low Carbon Resource Initiative (LCRI), co-led by EPRI and the Gas

					<p>Technology Institute.</p> <p>The project conducted an integrated modeling exercise to understand the technologies and strategies required to achieve economy-wide net-zero carbon emissions by 2050 in the U.S. The findings validate that an “all of the above” strategy is paramount. This includes:</p> <ul style="list-style-type: none"><li>• Flexible options for energy technologies and resources are essential to the affordability of reducing carbon emissions to meet the net-zero goal.</li><li>• Fossil fuels will remain in the mix with penetration of resource mix dependent upon the advancement of technology and resources such as hydrogen. At the same time, energy consumers will shift to low-carbon energy resources as electricity production transitions to low-carbon fuels.</li><li>• Energy efficiency and efficient electrification will contribute to lower energy consumption across transportation, buildings and industrial uses.</li><li>• Renewables, backed by new natural gas and/ or hydrogen-</li></ul>
--	--	--	--	--	---

				<p>fueled electric generating capacity, are necessary to ensure resource adequacy and flexibility to provide reliable electricity.</p> <ul style="list-style-type: none"><li>• Existing nuclear power provides vital firm capacity to ensure reliable electricity in a net-zero carbon world and may be increased by new advanced nuclear technologies.</li></ul> <p>In addition to AEP's R&amp;D investments through EPRI, the company participates in startup accelerators where new technologies, including those related to decarbonization and the energy transition, are being tested and deployed. We have invested in Mainspring Energy, which manufactures fuel-flexible linear power generators. These generators can use traditional fossil fuels (propane/natural gas), but Mainspring also has successfully tested the use of ammonia and hydrogen as an alternative, cleaner fuel. Most of Mainspring's deployments to date have been with commercial and</p>
--	--	--	--	---

					<p>industrial customers, such as grocery chains and logistics centers, but in 2022, AEP and Mainspring announced a pilot project to test their technology on the electric power grid. We are set to pilot this technology in Oklahoma, which will enable us to defer construction of new infrastructure assets that would otherwise be required to meet customers' energy needs, saving customers millions of dollars.</p>
<p>Other, please specify</p> <p>Electric Vehicles and Electric Vehicle Infrastructure</p>	<p>Large scale commercial deployment</p>				<p>NATIONAL ELECTRIC HIGHWAY COALITION              National Electric Highway Coalition (NEHC): AEP founded the Electric Highway Coalition which evolved into the National Electric Highway Coalition (NEHC) when it merged with similar efforts across the country in 2021. The NEHC is now managed by Edison Electric Institute (EEI) and AEP is a proud member and serves on its steering committee. The NEHC is a collaboration of more than 60 investor-owned and municipal electric companies and electric cooperatives that are committed to</p>

				<p>providing electric vehicle (EV) fast charging stations that will allow the public to drive EVs with confidence along major U.S. travel corridors by the end of 2023. The NEHC is the largest such alliance of electric companies that have organized around the common goal of deploying EV fast charging infrastructure to support the growing number of EVs and to help ensure that the transition to EVs is seamless for drivers.</p> <p>To date, EEI's member companies have invested more than \$4 billion in customer programs and projects to deploy charging infrastructure and to accelerate electric transportation. As EV sales continue to grow, EEI estimates that we will need 140,000 EV fast charging ports, a more than ten-fold increase over today, to support the more than 26 million EVs projected to be on U.S. roads in 2030.</p>
--	--	--	--	--

## C10. Verification

### C10.1

**(C10.1) Indicate the verification/assurance status that applies to your reported emissions.**

	Verification/assurance status
Scope 1	No third-party verification or assurance
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

### C10.2

**(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?**

No, we are waiting for more mature verification standards and/or processes

## C11. Carbon pricing

### C11.1

**(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?**

Yes

#### C11.1a

**(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.**

RGGI - ETS

#### C11.1b

**(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.**

**RGGI - ETS**

**% of Scope 1 emissions covered by the ETS**

0.11

**% of Scope 2 emissions covered by the ETS**

0

**Period start date**

January 1, 2022

**Period end date**

December 31, 2022

**Allowances allocated**

0

**Allowances purchased**

55,473

**Verified Scope 1 emissions in metric tons CO2e**

0

**Verified Scope 2 emissions in metric tons CO2e**

0

**Details of ownership**

Facilities we own and operate

**Comment**

The single facility (Clinch River Gas Plant) that operates in the RGGI jurisdiction does not have any reportable scope 2 emissions.

## C11.1d

**(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?**

One state in which AEP operates, Virginia, joined the Regional Greenhouse Gas Initiative beginning in 2021. AEP anticipates complying through the use of purchased emissions allowances and the eventual retirement of its two-remaining fossil-fired electric generating units in Virginia in 2026.

## C11.2

**(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?**

No

## C11.3

**(C11.3) Does your organization use an internal price on carbon?**

Yes

## C11.3a

**(C11.3a) Provide details of how your organization uses an internal price on carbon.**



**Type of internal carbon price**

Shadow price

**How the price is determined**

Cost of required measures to achieve emissions reduction targets

Price with material impact on business decisions

**Objective(s) for implementing this internal carbon price**

Drive energy efficiency

Drive low-carbon investment

Identify and seize low-carbon opportunities

Navigate GHG regulations

Stakeholder expectations

Stress test investments

**Scope(s) covered**

Scope 1

Scope 2

**Pricing approach used – spatial variance**

**Pricing approach used – temporal variance**

**Indicate how you expect the price to change over time**

**Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)**

15

**Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)**

30

**Business decision-making processes this internal carbon price is applied to**

Capital expenditure

Operations

**Mandatory enforcement of this internal carbon price within these business decision-making processes**

Yes, for some decision-making processes, please specify

Integrated Resource Plans, Market assumptions,

**Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan**

As we transition to a clean energy economy, climate change impacts are central to our planning an electric power system that is reliable, resilient and affordable. How fast we

make the transition and at what cost remain priorities for regulators, public policymakers and the energy industry. AEP's Climate Scenario Analysis, published in 2021, has helped us gain a deeper understanding of the transition, physical risks associated with certain climate variables, and the economic and social toll it presents, as well as identify potential pathways forward to achieving our goal of net-zero carbon emissions by 2045.

AEP's Climate analysis included a carbon Tax in all 3 scenarios outlines. The Business-as-Usual scenario employed a carbon price of \$15 per MT that escalates 3.5% per year starting in 2028. The carbon price was increased to \$30 per MT in the Fast Transition and the 100% Clean Energy scenarios, this resulted in uptick in power prices. This analysis helps to inform our future strategy and Integrated Resource Planning (IRP) process.

The IRP process is a formal process within many of our states, which involves publicly disclosing a plan for future operations and resources. AEP uses an internal price on carbon to appropriately capture the potential future policy and regulatory risk associated from scope 1&2 emissions.

## C12. Engagement

### C12.1

#### (C12.1) Do you engage with your value chain on climate-related issues?

- Yes, our suppliers
- Yes, our customers/clients
- Yes, other partners in the value chain

### C12.1a

#### (C12.1a) Provide details of your climate-related supplier engagement strategy.

---

##### Type of engagement

Information collection (understanding supplier behavior)

##### Details of engagement

Collect GHG emissions data at least annually from suppliers

Other, please specify

Environmental Management Practices

##### % of suppliers by number

##### % total procurement spend (direct and indirect)

## **% of supplier-related Scope 3 emissions as reported in C6.5**

### **Rationale for the coverage of your engagement**

AEP is a member of the Sustainable Supply Chain Alliance (SSCA) that focuses on advancing supply chain sustainability best practices within the electric utility industry. This endeavor also collaborates with other utilities and a community of 200 suppliers who participate in the Information Collection effort.

### **Impact of engagement, including measures of success**

- Development of a support structure for future information gathering and measurable success: Learn, Measure, Improve.
- Based on member input and benchmarking data value includes: risk mitigation, supplier engagement, investor requests/scorecards/surveys, and member confidence in the validity of the data in the Assessment.
- Speaking with industry experts some level of verification (in line with what is being proposed here) is expected to be table-stakes in the near term, if not already, for any credible program

### **Comment**

## **C12.1b**

**(C12.1b) Give details of your climate-related engagement strategy with your customers.**

---

### **Type of engagement & Details of engagement**

Education/information sharing

Run an engagement campaign to education customers about your climate change performance and strategy

### **% of customers by number**

100

### **% of customer - related Scope 3 emissions as reported in C6.5**

### **Please explain the rationale for selecting this group of customers and scope of engagement**

Climate change, including decarbonization and our transition to a clean energy future, continues to be the primary issue of interest among the majority of our stakeholders. This complex and multi-dimensional issue touches almost every aspect of our business, which requires us to engage with diverse stakeholders whether virtually, through one on-one engagement, through town hall meetings, or through formal regulatory processes.

AEP has been providing reliable electric service to our customers for more than 117 years. This includes supplying a critical source of energy that enables safety, comfort and today's modern amenities. It is our commitment and responsibility to deliver electric service to every customer within our service territory. It is also our commitment to provide our customers with equal access to clean and modern energy options, which is why we are investing in the grid to expand programs, digital capabilities and clean energy offerings that are affordable, inclusive and accessible to all, while being mindful to ensure that our clean energy transition doesn't leave our customers or communities behind. Our clean energy transition plan is as critical to enabling economic growth in our service territory as it is to reducing our carbon footprint.

### **Impact of engagement, including measures of success**

For more information, visit AEP's 2023 CSR

Decarbonization: <https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Decarbonization>

Customer Care & Support: <https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Customer-Care-Support>

---

### **Type of engagement & Details of engagement**

Education/information sharing

Share information about your products and relevant certification schemes (i.e. Energy STAR)

### **% of customers by number**

100

### **% of customer - related Scope 3 emissions as reported in C6.5**

### **Please explain the rationale for selecting this group of customers and scope of engagement**

We believe customers should be empowered to make decisions on how to optimize their energy experience. This is why we help customers better understand and manage their energy usage through energy efficiency programs and offerings. Today, AEP provides customers with access to a variety of energy management tools to help them accomplish these goals. These tools keep our customers informed through proactive energy usage alerts and provide personalized energy efficiency tips and programs.

We understand financial hardships can make it difficult for some of our customers to pay their energy bills, especially within our geographic footprint where 95% of our customers live in counties where the median income is below the national average. At AEP, we are committed to keeping our customers connected and providing access to additional assistance if needed.

### **Impact of engagement, including measures of success**

Our continued investments in grid modernization, such as smart meter technology, further enhance our ability to provide customers with energy management tools and programs. Smart meters use secure, two-way wireless communication to measure and record electricity usage and send the information from a customer's meter to AEP. This information gives us the ability to develop and deliver highly personalized solutions, such as high bill alerts. In 2022, AEP invested more than \$86 million in customer energy efficiency programs. As of January 2023, AEP has deployed smart meter technology to 72% of our customers through our 11-state service territory.

AEP offers our customers a robust set of energy efficiency programs to help them manage their energy usage. This includes:

- Bill comparisons
- Home and business energy analysis
- Home weatherization, lighting, HVAC
- Commercial and industrial equipment upgrades and process improvements

Recognition Our Customer Care & Support:

- 2022 Cogent Syndicated Utility Trusted Brand and Customer Engagement Study "Customer Champion" (AEP Ohio)
- In the 2022 J.D. Power utility Experience Study, AEP shared the number one rank for customers evaluating the website across a variety of tasks and factors
- 2023 ENERGY STAR Partner of the Year Sustained Excellence for Energy Efficiency Program Delivery (AEP Texas, Appalachian Power Company, Public Service Company of Oklahoma & Southwestern Electric Power Company)

In addition, in 2022, we received more than 59,000 pledges totalling more than \$25 million in energy assistance from our self-serve agency websites, resulting in a record number of pledges and funding (income guidelines determine eligibility).

For more information, visit AEP's 2023 CSR

Customer Care & Support: <https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Customer-Care-Support>

---

### **Type of engagement & Details of engagement**

Collaboration & innovation  
Other, please specify  
Electrification

### **% of customers by number**

### **% of customer - related Scope 3 emissions as reported in C6.5**

**Please explain the rationale for selecting this group of customers and scope of engagement**

Electrification:

Electrification of the economy goes beyond transportation. Opportunities to move to clean, efficient electric technologies span the spectrum from industrial processes to home appliances. These technologies can accelerate the transition to decarbonization while saving customers money on their total energy costs. The 2022 Inflation Reduction Act (IRA) supports these goals through tax credits and rebates for income-qualified households and clean energy funding for businesses.

AEP is working with State Energy Offices to ensure existing utility-sponsored energy efficiency (EE) and beneficial electrification (BE) programs complement, rather than compete with any IRA-funded programs. AEP continues to expand our efforts to help our customers realize both the environmental and financial benefits of utilizing electric technologies in their homes and businesses.

**Impact of engagement, including measures of success**

As part of Appalachian Power's EE program, rebates are available to customers for installing certain high-efficiency residential heat pumps, heat pump water heaters, and Level 2 EV chargers. Additionally, Appalachian Power has a BE pilot program in West Virginia that provides customers with the opportunity to switch from a non-regulated fuel source, such as propane or fuel oil, to a high-efficiency electric heat pump. Similarly, SWEPCO's energy efficiency rebates promote the benefits of heat pumps, heat pump water heaters, induction cooking, all-electric homes and other residential and commercial electrification technologies.

AEP Ohio is working directly with heat pump manufacturers, industrial process manufacturers, and EV charging station manufacturers to secure and jointly-market manufacturer rebates to customers. AEP Ohio also helps educate customers on the non-energy benefits of electric technologies such as reduced maintenance costs and avoided GHG emissions. PSO, SWEPCO and AEP Ohio also have active programs to educate customers on efficient industrial equipment, including forklifts, pipeline compressors, and induction and infrared technologies.

AEP also has a goal to provide electric vehicle (EV) charging options that optimize the use of the grid for the benefit of all customers. I&M's IM Plugged In program has incentives for residential, workplace, fleet and multi-unit dwelling customers planning to install EV chargers. In 2022, AEP Ohio completed its four-year pilot program and installed more than 350 EV stations across its service territory.

Funding from the Infrastructure Investment and Jobs Act (IIJA) began to roll out in 2022, including substantial support for electric transportation. AEP is proud to work with stakeholders and customers across our system to spread the word and assist with the industry transformation. Schools in our territories received \$67 million for 170 new electric school buses from EPA's first round of IIJA funding.

In addition, AEP is a founding member and steering committee member of the National Electric Highway Coalition (NEHC) now managed by EEI. The NEHC is a collaboration of more than 60 electric companies/co-ops that are committed to providing EV fast charging stations along major U.S. travel corridors by the end of 2023.

For more information, Visit: <https://tinyurl.com/ytyw3x93>

## C12.1d

### **(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.**

#### Stakeholder Engagement:

Listening to and engaging with diverse stakeholders is a priority for us. We rely on the voices of our employees, customers, investors, communities, nongovernmental organizations (NGOs), regulators and policymakers to better inform our efforts and decision-making. Not only does it expand our knowledge and understanding, but also helps mitigate risks and identify opportunities for collaboration. We are proud of our longstanding commitment to stakeholder engagement.

We engage with our stakeholders on a variety of issues. While our approach to engagement varies by each stakeholder group, we are committed to fostering an open and inclusive environment to discuss issues that matter most to our stakeholders. Climate change, including decarbonization and our transition to a clean energy future, continues to be the primary issue of interest among many of our stakeholders. This complex and multi-dimensional issue touches almost every aspect of our business, which requires us to engage with diverse stakeholders to discuss not only our path to a low-carbon energy future, but also the potential social and economic impacts to our local customers and communities. Whether retiring an asset or investing in new infrastructure, such as transmission or renewable facilities, our efforts and impact extend across our service territory and within our local neighborhoods. This requires us to balance the needs of our human, cultural and natural resources with our community's need for reliable and affordable electricity.

We have a long history of engaging with landowners and local communities about new projects to inform them of the need, benefits, timeline and process. This is conducted through a variety of channels including mailings, door hangers, phone calls, one-on-one engagements and open houses. We also look for opportunities to be inclusive in our efforts, whether it is ensuring events are held at appropriate times to offer flexibility for community members to participate or providing translated materials at public meetings in areas with a high percentage of non-native English speakers.

We are committed to enhancing our inclusive engagement efforts. In 2022, we published an Environmental and Social Justice Policy that reinforces our commitment to consider environmental and social impacts when developing new infrastructure, transitioning our existing generation fleet or deploying new programs, services and technologies. The goal of our environmental and social justice efforts is to ensure that we are providing ALL communities with the opportunity to understand our proposed policies and projects and discuss their concerns so

that we can fully consider the environmental, social and health-related impacts of our decisions. This includes listening, learning and seeking opportunities to partner with our stakeholders, especially low-wealth communities, communities of color and other historically marginalized communities, to incorporate environmental and social justice into our business strategy.

**INNOVATIVE PARTNERSHIPS** We collaborate with industry trade organizations, technology experts, developers, start-ups, universities and consortiums to influence policy, conduct research and co-develop technologies that are not currently available today. Partnerships:

- Electric Power Research Institute– an independent, non-profit energy research and development organization.
- Edison Electric Institute – an association that represents all U.S. investor-owned electric companies, providing public policy leadership, strategic business intelligence, and forums.
- American Clean Power– support companies across the clean power sector in their efforts to provide cost-effective solutions to the climate crisis while creating jobs, spurring massive investment in the U.S. economy, and driving high-tech innovation.
- WIRES Group – a trade association that promotes investment in the North American electric transmission system through development of information, advocacy, and innovation in regulatory, policy making, industry, and education forums.
- Free Electrons – a global energy accelerator with the mission to create the future of energy.
- Various Original Equipment Manufacturers – AEP works with the OEMs to learn about technologies that are commercially available today and what will be available in the near future, especially relating to low-carbon technologies.

Learn More:

Stakeholder Engagement: <https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf#Stakeholder-Engagement>

Environmental Social Justice Policy:

[https://www.aep.com/Assets/docs/AEP\\_Environmental\\_Social\\_Justice\\_Policy.pdf](https://www.aep.com/Assets/docs/AEP_Environmental_Social_Justice_Policy.pdf)

Decarbonization: <https://tinyurl.com/kvbdhpby>

## C12.2

**(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?**

No, and we do not plan to introduce climate-related requirements within the next two years

## C12.3

**(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?**

Row 1

**External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate**

Yes, we engage directly with policy makers



Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Yes, we fund organizations or individuals whose activities could influence policy, law, or regulation that may impact the climate

**Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?**

No, and we do not plan to have one in the next two years

**Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan**

In 2023 AEP published its first Trade Association Climate Lobbying Report. This report provides an overview of American Electric Power's climate position and principles and how they align with the lobbying activities undertaken by the major trade associations to which we currently belong. The timeframe covered by this report is January 1, 2022 – December 31, 2022, unless otherwise noted.

In addition, this report identifies AEP's direct engagement within these trade associations, such as serving on a board of directors, serving on a committee, etc. This includes identifying those who engage with these trade associations on AEP's behalf.

Some people have advocated that AEP should withdraw its membership from trade groups that have positions with which AEP's views are not in full alignment, especially on climate change-related issues. The threshold for alignment that some stakeholders consider crucial involves support for the Paris Climate Agreement, which sets long-term, global goals to limit the global temperature increase this century to 1.5 to 2 degrees Celsius. The Agreement, approved at the UN Climate Change Conference (COP21) in 2015, is a legally binding international treaty that calls for countries to reduce their emissions and work together to adapt to the impacts of climate change. The U.S. re-joined the Paris Climate Agreement in 2021.

Many of our peers and customers belong to these same trade groups that are under scrutiny for their climate positions, and it is important for us to engage in those forums to hear from them first-hand and educate members on why we may have differing views.

For More information, visit pages 13-14 of AEP's Climate Lobbying Analysis:

<https://www.aep.com/Assets/docs/investors/governance/political/AEPTradeAssnClimateReportFINAL.pdf>

## C12.3a

**(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?**

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

AEP routinely engages policy makers related to emissions trading program development and the implementation of a Carbon tax. At this time, there is not a specific policy, law or regulation to specifically point to as being particularly relevant.

**Category of policy, law, or regulation that may impact the climate**

Carbon pricing, taxes, and subsidies

**Focus area of policy, law, or regulation that may impact the climate**

**Policy, law, or regulation geographic coverage**

National

**Country/area/region the policy, law, or regulation applies to**

United States of America

**Your organization's position on the policy, law, or regulation**

Undecided

**Description of engagement with policy makers**

High level discussion have occurred related to potential program design elements and what AEP may support or oppose.

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

**Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?**

No, we have not evaluated

---

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

Mandatory climate-related reporting: Proposed SEC Rule on Climate Disclosure

**Category of policy, law, or regulation that may impact the climate**

Climate change mitigation

**Focus area of policy, law, or regulation that may impact the climate**

Climate-related reporting  
Climate transition plans  
Emissions – CO2

**Policy, law, or regulation geographic coverage**

National

**Country/area/region the policy, law, or regulation applies to**

United States of America

**Your organization's position on the policy, law, or regulation**

Support with major exceptions

**Description of engagement with policy makers**

AEP engaged with different trade organization to offer comments on the proposed rule on SEC climate disclosure.

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

AEP has some concern with the broad scope of the rule, the level of detail required, and the timelines associated with new disclosures as well as the annual filing date

**Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?**

No, we have not evaluated

## C12.3b

**(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.**

---

**Trade association**

Edison Electric Institute (EII)

**Is your organization's position on climate change policy consistent with theirs?**

Consistent

**Has your organization attempted to influence their position in the reporting year?**

Yes, we publicly promoted their current position

**Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position**

EEL's member companies are among the most regulated companies in the country. EEI engages on their behalf with federal and state legislators, regulators, and other policymakers through lobbying, advocacy, and regulatory proceedings, with the goal of providing customers with affordable, reliable, and resilient clean energy.

EEI also engages with a range of other industry stakeholders on issues related to grid reliability; cyber and physical security; mutual assistance and disaster response; finance

and tax matters; environmental, social, and governance (ESG); and programs, services, and solutions for electricity customers.

EEl advocates for policies that align with AEP's position on climate. Its policy positions are stated as follows:

- "Enable the siting, permitting, and construction of new technologies and the transmission infrastructure we need to deliver clean energy to customers.
- Enhance energy grid modernization and resilience.
- Leverage electric power sector emission reductions to reduce emissions in other sectors of the economy."

EEl sent a delegation representing electric utilities to the 27th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP27) in 2022 and organized and/or participated in several events on issues ranging from electrification of the U.S. economy to advancing technologies that would enable achieving net-zero carbon goals.

EEl supports climate-related disclosure that meets the needs of investors. EEl and the American Gas Association (AGA) developed an environmental, social, governance, and sustainability (ESG/sustainability) reporting template, with the goal of helping electric and gas companies provide the financial sector with more uniform and consistent ESG/sustainability data and information. AEP publishes an annual EEl ESG/Sustainability Report for Investors that includes climate-related data.

EEl provided comments to the U.S. Securities and Exchange Commission (SEC) on the proposed climate financial disclosure rule, which AEP supported.

EEl is an important industry advocate and AEP is an active participant, enabling us to engage in thought leadership, share best practices, and ensure collaboration in the best interest of customers, our company, and the industry.

For More information, visit pages 13-14 of AEP's Climate Lobbying Analysis:

<https://www.aep.com/Assets/docs/investors/governance/political/AEPTradeAssnClimateReportFINAL.pdf>

**Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)**

448,310

**Describe the aim of your organization's funding**

The Edison Electric Institute (EEI) is the primary trade association that represents U.S. investor-owned electric utilities. EEI's member companies provide electricity to more than 235 million Americans and operate in all 50 states and the District of Columbia. In addition, EEI represents 65 international electric companies and hundreds of industry suppliers and related organizations.

AEP is a member of EEI and has held multiple leadership positions within the organization, Edison Electric Institute (EEI) including serving as Chair of the EEI Board of Directors. AEP President & CEO, Julie Sloat, is a member of the EEI Board of Directors. AEP is currently actively engaged within EEI on several issues and on committees.

In 2022, the portion of AEP's membership dues to EEI that was allocated to lobbying activities was \$448,310.

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

---

**Trade association**

US Chamber of Commerce

**Is your organization's position on climate change policy consistent with theirs?**

Mixed

**Has your organization attempted to influence their position in the reporting year?**

Yes, we attempted to influence them but they did not change their position

**Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position**

The U.S. Chamber's approach to climate change aligns with AEP's philosophy and position on climate change. The Chamber states its support for the following:

- "A market-based approach to accelerate GHG emissions reductions across the economy.
- Leveraging the power of business to develop, finance, build and operate the solutions needed to power economic growth worldwide, mitigate GHG emissions, and build resilient, lower-carbon infrastructure.
- Maintaining U.S. leadership in climate science.
- Embracing technology and innovation for managing climate risks and reduction of GHG emissions.
- Aggressively pursue energy efficiency on the supply and demand sides.
- Promoting climate resilient infrastructure.
- Encouraging international collaboration between governments and businesses to build the best models to tackle climate challenges, which is why the Chamber supports U.S. participation in the Paris Climate Agreement."

The Chamber's approach to climate change is in line with AEP's belief that an 'all of the above' strategy is paramount to achieving a clean energy economy. The Chamber

supports the bipartisan Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA), which AEP also supports.

Partial Alignment:

The Chamber has voiced strong opposition to the Build Back Better Act. This included opposing tax increases and citing the lack of a durable climate policy, among other things. The U.S. Chamber has also taken legal actions to block federal emissions-reduction guidelines, including opposing regulatory actions that would address climate.

For more information, visit pages 20 of AEP's Climate Lobbying Analysis:

<https://www.aep.com/Assets/docs/investors/governance/political/AEPTradeAssnClimateReportFINAL.pdf>

**Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)**

105,000

**Describe the aim of your organization's funding**

The U.S. Chamber of Commerce is a major business organization that lobbies on behalf of businesses across the United States. Members range in size from small businesses to chambers of commerce and major corporations and represent all sectors of the economy.

AEP is a member of the U.S. Chamber of Commerce and expects to continue this membership. Many of AEP's customers are also members of the U.S. Chamber, and it is important to be an engaged member. One of the ways AEP engages with the Chamber is through its ESG Working Group. In 2022, the portion of AEP's membership dues to the U.S. Chamber that was allocated to lobbying activities was \$105,000.

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

---

**Trade association**

Business Roundtable

**Is your organization's position on climate change policy consistent with theirs?**

Consistent

**Has your organization attempted to influence their position in the reporting year?**

Yes, we publicly promoted their current position

**Describe how your organization’s position is consistent with or differs from the trade association’s position, and any actions taken to influence their position**

BRT CEOs are calling for a well-designed market-based mechanism to reduce emissions.

The BRT supports placing a price on carbon as an effective incentive to reduce GHG emissions and mitigate climate change. While this is not a preferred policy approach for AEP, we use a price of carbon in our integrated resource plans as a proxy for climate policy.

The BRT’s core principles for effective climate policy, which are outlined in its report Addressing Climate Change: Principles and Policies, align with AEP’s principles and policies. The BRT’s principles include:

- Align policy goals and GHG emissions reduction targets with scientific evidence.
- Increase global engagement, cooperation, and accountability.
- Leverage market-based solutions wherever possible.
- Provide for adequate transition time and long-term regulatory certainty.
- Preserve the competitiveness of U.S. businesses, including avoiding economic and emissions “leakage.”
- Minimize social and economic costs for those least able to bear them.
- Support public and private investment in low-carbon and GHG emissions reduction technologies.
- Minimize administrative burdens and duplicative policies while maximizing compliance flexibility.
- Ensure that U.S. policies account for international emissions reduction programs.
- Advance climate resilience and adaptation.
- Eliminate barriers to the deployment of emissions reduction technologies and low-carbon energy sources.

For more information, visit pages 12 of AEP’s Climate Lobbying Analysis:

<https://www.aep.com/Assets/docs/investors/governance/political/AEPTradeAssnClimateReportFINAL.pdf>

**Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)**

120,000

**Describe the aim of your organization’s funding**

The Business Roundtable is an association of chief executive officers (CEOs) of America’s leading companies who work together to “promote a thriving U.S. economy and expanded opportunity for all Americans through sound public policy.”

AEP president and CEO, Julie Sloat, is a member of the BRT. We expect to continue this membership.

In 2022, the portion of AEP's membership dues to the BRT that was allocated to lobbying activities was \$120,000. AEP was a signatory to the BRT's Statement on the Purpose of a Corporation

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

---

**Trade association**

Other, please specify

National Association of Manufacturers (NAM)

**Is your organization's position on climate change policy consistent with theirs?**

Mixed

**Has your organization attempted to influence their position in the reporting year?**

Yes, we attempted to influence them but they did not change their position

**Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position**

NAM represents 14,000 companies in every industrial sector and is an influential advocate for policies that support manufacturers. Its four values stated on its website that drive its advocacy are:

- "Free enterprise
- Competitiveness
- Individual liberty
- Equal opportunity"

Many of AEP's manufacturing customers are members of NAM.

NAM's 'Competing to Win' agenda aligns with AEP's positions on multiple issues, including clean energy, the implementation of federal programs (Infrastructure Investment and Jobs Act, or IIJA; and Creating Helpful Incentives to Produce Semiconductors, or CHIPS), support for a resilient supply chain, tax reform, and environmental permitting reform.

From a climate perspective, AEP's participation in NAM helps us to engage in thought leadership with our peers and customers on the role of manufacturing in enabling the clean energy transition.

Partial Alignment:



NAM supported U.S. withdrawal from the Paris Agreement in 2017 and has argued for various federal regulatory actions that would pull back on federal climate response.

For more information, visit page 16 of AEP's Climate Lobbying Analysis:

<https://www.aep.com/Assets/docs/investors/governance/political/AEPTradeAssnClimateReportFINAL.pdf>

**Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)**

17,502

**Describe the aim of your organization's funding**

The National Association of Manufacturers (NAM) is the largest trade group representing manufacturers in the U.S.

According to NAM, its members represent 79% of Fortune 100 manufacturers and 54% of Fortune 500 manufacturers. 90% of its members are small and medium-sized manufacturers.

AEP is a member of NAM and expects to continue this membership.

In 2021, the portion of AEP's membership dues to NAM that was allocated to lobbying activities was \$17,502. (2022 membership was paid in 2021)

More information located in AEP's Climate Lobbying Report:

<https://www.aep.com/Assets/docs/investors/governance/political/AEPTradeAssnClimateReportFINAL.pdf>

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is not aligned

## C12.3c

**(C12.3c) Provide details of the funding you provided to other organizations or individuals in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.**

---

**Type of organization or individual**

Research organization

**State the organization or individual to which you provided funding**

Electric Power Research Institute Low Carbon Resource Initiative (EPRI LCRI)

**Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)**

1,000,000

**Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate**

To further advance these technologies, AEP committed \$5 million to the Low Carbon Resource Initiative (LCRI), which is a collaborative low carbon R&D effort lead by EPRI and the Gas Technology Institute. This 5-year effort will look at opportunities around carbon capture and storage, hydrogen production and electrification among other low carbon technologies. This initiative is focused on advancing technologies and new resources during the 2030-2050 timeframe.

Link to LCRI: <https://www.epri.com/lcri>

**Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

## C12.4

**(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

---

**Publication**

In voluntary sustainability report

**Status**

Complete

**Attach the document**

 FINAL 2023 CSR July 2023.pdf

**Page/Section reference**

Entire Document

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets  
Other metrics

**Comment**

Link: <https://www.aepsustainability.com/lib/docs/2023-AEP-Sustainability-Report.pdf>

---


**Publication**

In mainstream reports

**Status**

Complete

**Attach the document**

 2023 10K.pdf

**Page/Section reference**

2022 10K Pages 8-11, 40-45, 77-78 and others

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets  
Other metrics

**Comment**

Link: <https://d18rn0p25nwr6d.cloudfront.net/CIK-0000004904/849094a1-243f-4116-9c0e-335abcbe1ed5.pdf>

**Publication**

In mainstream reports, incorporating the TCFD recommendations

**Status**

Complete

**Attach the document**

 AEPs-Climate-Impact-Analysis-2021.pdf

**Page/Section reference**

Entire Document- This document is AEP's Climate Impact Analysis that outlines various transition scenarios. It also includes a Mapping to the TCFD framework on Pages 10-21.

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets  
Other metrics

**Comment**

This report is aligned with the Task Force for Climate related Financial Disclosure (TCFD) framework, which is emerging as the preferred approach for reporting on climate risk management. We also referenced the Fourth National Climate Assessment, among other climate-related documents. (See appendix for reference resource list.)  
 Link: <https://aepsustainability.com/performance/report/docs/AEPs-Climate-ImpactAnalysis-2021.pdf>

**Publication**

In mainstream reports, incorporating the TCFD recommendations

**Status**

Complete

**Attach the document**

 Final 2023-TCFD-Index.pdf

**Page/Section reference**

Entire Document- This is AEP's 2023 Update of our TCFD mapping

**Content elements**

- Governance
- Strategy
- Risks & opportunities
- Emissions figures
- Emission targets
- Other metrics

**Comment**

This is AEP's 2022 Update of our TCFD mapping:  
 Link: <http://aepsustainability.com/lib/docs/2023-TCFD-Index.pdf>

**C12.5**

**(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.**

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Other, please specify Wildlife Habitat Council	In 2023, our Flint Creek Power Plant in Gentry, Arkansas, maintained its silver Wildlife Habitat Council Conservation Certification. The Flint Creek Power Plant has approximately 700 acres designated as wildlife habitat and is home to the 65-acre

	Eagle Watch and Nature Trail, which includes a half-mile walking trail and wildlife viewing pavilions, all open to the public. The facility is also home to a pollinator garden, prairie restoration efforts and many environmental educational events, all of which are voluntarily hosted by plant employees.
--	---

## C15. Biodiversity

### C15.1

**(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?**

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, executive management-level responsibility	AEP maintains an Environment, Safety and Health Policy, which is “owned” or enforced by our Vice President of Environmental Services. This policy describes how, “AEP is committed to social responsibility and sustainability. We are proactive in our efforts to protect people and the environment by committing to: maintain compliance with all applicable environmental, safety and health (ES&H) requirements while pursuing the spirit of ES&H stewardship; ensure that people working for or on behalf of AEP understand and integrate ES&H responsibilities into their business functions; support continual improvement of environmental performance and pollution prevention; and hazard elimination through employee involvement and continual health and safety improvement.” Compliance with environmental rules and regulations, which includes the protection of biodiversity, is non-negotiable. It is our only option. As we build and maintain new and existing infrastructure across our service territory, such as transmission or renewable generation facilities, we are mindful of the potential impacts we may have on wildlife and ecosystems. This includes species protected under the Endangered Species Act, the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act. We remain committed to following all federal, state and local environmental regulations and practicing environmental stewardship where possible when siting, constructing and operating our assets. For example, this includes adherence to the U.S. Fish & Wildlife Service’s (USFWS) voluntary Land-Based Wind Energy Guidelines.

## C15.2

**(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?**

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	<p>Adoption of the mitigation hierarchy approach</p> <p>Commitment to respect legally designated protected areas</p> <p>Commitment to avoidance of negative impacts on threatened and protected species</p>	<p>Other, please specify</p> <p>We adhere to the U.S. Fish &amp; Wildlife Service's voluntary Land-Based Wind Energy Guidelines and are certified under the Wildlife Habitat Council's voluntary sustainability and biodiversity standards at our Flint Creek facility in Arkansas.</p>

## C15.3

**(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?**

### Impacts on biodiversity

**Indicate whether your organization undertakes this type of assessment**

Yes

**Value chain stage(s) covered**

Direct operations

**Tools and methods to assess impacts and/or dependencies on biodiversity**

Other, please specify

We follow the protocols of the U.S. Environmental Protection Agency or U.S. Fish and Wildlife Service when assessing our dependency on, and impacts to, biodiversity.

**Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)**

AEP needs access to sufficient quantities of good quality water in order to generate electricity using the steam-electric process (burning coal or gas to generate steam to move a turbine). We also need water for hydroelectric production. At AEP's generating facilities that utilize a once-through cooling water system, large quantities of water are

withdrawn from large rivers, man-made impoundments, or (in the case of D.C. Cook Plant), from adjacent Lake Michigan. If the potential impacts on biodiversity (impingement of fish upon intake screens or the entrainment of small fish and fish eggs through the condenser cooling system) are too great, our operations could be impacted. Section 316(b) of the Clean Water Act requires that the placement and operation of cooling water intake systems meet Best Technology Available for minimizing adverse environmental impact (often interpreted to be synonymous with the most cost-effective means of minimizing fish entrainment and impingement). AEP has conducted 316(b) studies following U.S. EPA approved protocols to assess potential impacts to fish populations. As an outcome of these studies, AEP may be required to retrofit improved fish protection equipment at some once-through cooled facilities. Such changes will lower the rates of impingement and/or entrainment of vulnerable fish species.

Another example of assessing value chain impacts to biodiversity involves our dependency on sufficient acreages of habitat to use for mitigation in those instances where we cannot avoid biodiversity impacts (i.e., loss of bat habitat due to the construction of a new transmission line). In August 2021, AEP was awarded a federal grant from the U.S. FWS's Cooperative Endangered Species Conservation Fund to support the development of a multi-species HCP that will apply to our entire transmission system for 30 years. This HCP is important because it will not only protect the covered species but will also generate cost and time savings for AEP and our customers. This program is administered by the U.S. FWS and we have been following its procedures to assess the potential impacts of our activities as we improve and expand our transmission system. This HCP will enable transmission construction activities to proceed following the mitigation methods described in the USFWS-approved HCP.

Additional information can be found in our GRI responses at:  
<http://aepsustainability.com/lib/docs/2023-GRI-Report.pdf>

## Dependencies on biodiversity

---

### Indicate whether your organization undertakes this type of assessment

Yes

### Value chain stage(s) covered

Direct operations

### Tools and methods to assess impacts and/or dependencies on biodiversity

Other, please specify

We follow the protocols of the U.S. Environmental Protection Agency or U.S. Fish and Wildlife Service when assessing our dependency on, and impacts to, biodiversity.

### Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

Please refer to our responses to the previous question. In addition, AEP is dependent upon sufficient quantities of water in order to generation electricity using the steam-electric process. At some facilities, the quality of the water is so poor due to erosion or nutrient pollution, which can generate harmful algal blooms, that we cannot use it for plant processes. Another example of biodiversity dependency is having access to sufficient acreages of habitat to use for mitigation (please refer to comments in the above response).

There are other, more subtle, dependencies on biodiversity. Vegetation growing under solar panels creates a cooler micro-climate, which allows the panels to be more efficient. Panels installed over gravel, which is hotter, are less efficient.

Additional information can be found in our GRI responses at:  
<http://aepsustainability.com/lib/docs/2023-GRI-Report.pdf>

## C15.4

**(C15.4) Does your organization have activities located in or near to biodiversity-sensitive areas in the reporting year?**

Yes

### C15.4a

**(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.**

---

#### **Classification of biodiversity -sensitive area**

Other biodiversity sensitive area, please specify

When assessing properties for areas of high biodiversity, we utilize several sources of information, including the Nature Serve Map of Biodiversity Importance.

#### **Country/area**

United States of America

#### **Name of the biodiversity-sensitive area**

We define biodiversity-sensitive areas as National Wildlife Refuges, Forests, Parks or Grasslands; Bureau of Land Management areas; National Recreational Lands; National Scenic Rivers; State Forests, Parks, Nature Preserves, Wildlife Management Areas and Scenic Rivers. We also include areas identified by NatureServe as critically imperiled (Global Conservation Status of "G1") or imperiled ("G2").

#### **Proximity**

Adjacent

**Briefly describe your organization's activities in the reporting year located in or near to the selected area**



AEP owns or manages the land around its power generating and transmission facilities. This includes power plant sites, office buildings, substations, transmission and distribution lines, as well as coal fields yet to be mined, lands that have been mined, residential structures, river access and various other sites. AEP also operates electric transmission and distribution lines throughout its service territories in Arkansas, Indiana, Kentucky, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, West Virginia, and Virginia. Of AEP's nearly 40,000-mile transmission network, approximately 917 miles, or less than 3 percent, traverse federal or state lands. As of Jan 1, 2022, AEP owned, leased or managed 22 facilities in or adjacent to, areas of high biodiversity.

**Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity**

Yes, but mitigation measures have been implemented

**Mitigation measures implemented within the selected area**

Project design  
Restoration  
Biodiversity offsets

**Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented**

Our first response is to avoid the areas, minimize any unavoidable impacts, and to mitigate those impacts that do occur. One way we are addressing biodiversity impacts is by working with the U.S. Fish & Wildlife Service in an effort to obtain an Incidental Take Permit (ITP), which allows for limited and unintentional take of certain endangered or threatened species during the construction of transmission projects. In 2019, we received an Incidental Take Permit (ITP) and began implementing an approved HCP across portions of three states for the American burying beetle (ABB). At the time the ITP was issued, the ABB was listed as endangered; however, in 2020 the listing was downgraded to threatened. Even amid ongoing litigation with the downgrade of the ABB, AEP remains committed to the continued use of the 30-year ITP/HCP, which allows the use of pre-approved practices through a regional, programmatic approach to minimize impacts to the beetle and its habitat and to encourage its recovery.

The construction of pollution control equipment and associated landfills at power plant sites can result in the loss of wetland and riparian areas. The construction of new transmission lines can have similar impacts. However, these losses are permitted under the Corps of Engineers' 404 program and mitigated by the company, often on a two to one, three to one, or higher basis.

AEP operates several hydroelectric projects that are adjacent to or contain areas of high biodiversity. The potential impacts of these facilities include alteration of stream and wetland areas by inundation, fluctuation of river flows and reservoir levels, blockage of upstream and downstream fish movement, and turbine-induced mortality. While there are many potential hydroelectric environmental impacts, all of these are assessed, and if necessary, mitigated during the FERC Licensing process. Every AEP hydroelectric

project has successfully completed this process.

AEP owns and operates wind facilities that have the potential to impact large raptors, such as golden eagles, and smaller birds, while migrating in large flocks. To avoid avian-bird interactions, turbine design and wind farm siting have taken avian issues into consideration very early in the process. We have voluntarily adopted a system-wide Avian Protection Plan to mitigate avian mortality, bird-related power outages, and other risks associated with bird interactions with our assets. In recent years, bats have come to the wind industry’s attention and studies to grasp the dimension of this issue continue. Because of deaths of endangered bats, some wind farms must curtail operations when bats are active.

For more information about how we operate in protected areas or areas of high biodiversity, please refer to the biodiversity section of our Corporate Sustainability Report at: <http://aepsustainability.com/performance/> or our 2023 GRI Report at: <http://aepsustainability.com/lib/docs/2023-GRI-Report.pdf>

## C15.5

**(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?**

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity-related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Education & awareness



## C15.6

**(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?**

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	Other, please specify We complete the GRI survey, which lists company sites on or near biodiverse areas, the potential impacts of these facilities, how we restore biodiversity, and lists threatened and endangered species that may be affected by our operations.

## C15.7

**(C15.7) Have you published information about your organization’s response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	AEP 2023 Corporate Sustainability Report  <sup>1</sup>
In voluntary sustainability report or other voluntary communications	Impacts on biodiversity	2023 GRI Report  <sup>2</sup>

 <sup>1</sup>FINAL 2023 CSR July 2023.pdf

 <sup>2</sup>2023-GRI-Report.pdf

## C16. Signoff

### C-FI

**(C-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.**

None

### C16.1

**(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

	Job title	Corresponding job category
Row 1	Vice President-Environmental Services	Other C-Suite Officer

## SC. Supply chain module

### SC0.0

**(SC0.0) If you would like to do so, please provide a separate introduction to this module.**

Not at this time

### SC0.1

**(SC0.1) What is your company's annual revenue for the stated reporting period?**

	Annual Revenue
Row 1	19,640,000,000

## SC1.1

**(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.**

---

**Requesting member**

International Paper Company

**Scope of emissions**

Scope 1

**Scope 2 accounting method**

**Scope 3 category(ies)**

**Allocation level**

Company wide

**Allocation level detail**

**Emissions in metric tonnes of CO<sub>2</sub>e**

379,640

**Uncertainty ( $\pm\%$ )**

10

**Major sources of emissions**

Utility scale electric generating units

**Verified**

No

**Allocation method**

Allocation based on the number of units purchased

**Market value or quantity of goods/services supplied to the requesting member**

744,176

**Unit for market value or quantity of goods/services supplied**

Megawatt hours (MWh)

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**

Emissions intensity rates based on AEP's EEI Customer report portal.  
<https://www.eei.org/Pages/CO2Emissions.aspx>. AEP Tx intensity rate is estimated using the EPA power-profiler eGRID region rate for ERCT.

---

**Requesting member**

U.S. General Services Administration - OMB ICR #3090-0319

**Scope of emissions**

Scope 1

**Scope 2 accounting method**

**Scope 3 category(ies)**

**Allocation level**

Company wide

**Allocation level detail**

**Emissions in metric tonnes of CO<sub>2</sub>e**

26,620

**Uncertainty (±%)**

10

**Major sources of emissions**

Utility scale electric generating units

**Verified**

No

**Allocation method**

Allocation based on the number of units purchased

**Market value or quantity of goods/services supplied to the requesting member**

57,613

**Unit for market value or quantity of goods/services supplied**

Megawatt hours (MWh)

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**

Emissions intensity rates based on AEP's EEI Customer report portal.  
<https://www.eei.org/Pages/CO2Emissions.aspx>. AEP Tx intensity rate is estimated using the EPA power-profiler eGRID region rate for ERCT.

## SC1.2

**(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).**

Values were derived using AEP's EEI Customer report portal. Link:

<https://www.eei.org/issuesand-policy/national-corporate-customers/co2-emiss>

## SC1.3

**(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?**

Allocation challenges	Please explain what would help you overcome these challenges
Managing the different emission factors of diverse and numerous geographies makes calculating total footprint difficult	Customers would have to have their specific electricity usage in particular relevant geographies.

## SC1.4

**(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?**

Yes

### SC1.4a

**(SC1.4a) Describe how you plan to develop your capabilities.**

AEP is part of an industry initiative to provide GHG emissions and electricity mix data to customers through the Edison Electric Institute. <https://www.eei.org/issues-and-policy/national-corporate-customers/co2-emission>

We also complete an annual EcoVadis survey and receive an annual updated score and scorecard. this can be requested for download here:

<https://aepsustainability.com/performance/EcoVadis-request>

## SC2.1

**(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.**

---

**Requesting member**

International Paper Company

**Group type of project**

New product or service

**Type of project**

New product or service that has a lower upstream emissions footprint

**Emissions targeted**

Actions that would reduce both our own and our customers' emissions

**Estimated timeframe for carbon reductions to be realized**

1-3 years

**Estimated lifetime CO2e savings**

**Estimated payback**

**Details of proposal**

AEP is interested in partnering with customers on renewable energy projects as feasible

---

**Requesting member**

U.S. General Services Administration - OMB ICR #3090-0319

**Group type of project**

New product or service

**Type of project**

New product or service that has a lower upstream emissions footprint

**Emissions targeted**

Actions that would reduce both our own and our customers' emissions

**Estimated timeframe for carbon reductions to be realized**

1-3 years

**Estimated lifetime CO2e savings**

**Estimated payback**

**Details of proposal**

AEP is interested in partnering with customers on renewable energy projects as feasible.

## SC2.2

**(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?**

No

## SC4.1

**(SC4.1) Are you providing product level data for your organization's goods or services?**

No, I am not providing data

## Submit your response

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

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

	<b>I understand that my response will be shared with all requesting stakeholders</b>	<b>Response permission</b>
Please select your submission options	Yes	Public

**Please confirm below**

I have read and accept the applicable Terms